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

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

NPDES PERMIT NO. GU0020141

In compliance with the provisions of the Clean Water Act, as amended ("CWA") (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 and in the attached EPA Region 9 "Standard Federal NPDES Permit Conditions," dated June 3, 2002 :

Discharger Name	Guam Waterworks Authority
Discharger Address	P.O. Box 3010
	Hagatna, Guam 96910
Facility Name	Northern District Sewage Treatment Plant
Facility Location Address	Route 34
	Harmon Annex, GU 96912

Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
001	Secondary Treated Domestic Wastewater	N 13° 33' 8.34"	E 144° 48' 25.98"	Philippine Sea

This permit was issued on:	4/10/2013
This permit shall become effective on:	6/01/2013
This permit shall expire at midnight on:	5/31/2018
In accordance with 40 CFR 122.21(d), the discharger shall submit a new application for a permit at least 180 days before the expiration date of this permit	

Signed this 10th day of April, 2013, for the Regional Administrator.

// Nancy Woo, Acting 4/10/13//
John Kemmerer, Acting Director
Water Division

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I. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Effluent Limits and Monitoring Requirements

1. The permittee is authorized to discharge treated wastewater in compliance with the effluent limits and monitoring requirements specified below. The discharge of pollutants at any point other than the outfall specifically authorized in this permit is prohibited.

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

Parameter	Maximum Allowable Discharge Limits Concentration and Loading				Monitoring Requirements	
	Average Monthly	Average Weekly	Maximum Daily	Units	Frequency	Sample Type
Flow rate	12	(1)	(1)	MGD	Continuous	Metered
Biochemical Oxygen Demand (5-day)	30	45	--	mg/L	Weekly	24 hr Composite
	3002	6760	--	lbs/day		
	The average monthly percent removal shall not be less than 85 percent. (2)			%		
Total Suspended Solids	30	45	–	mg/L	Weekly	24 hr Composite
	3002	6760	–	lbs/day		
	The average monthly percent removal shall not be less than 85 percent. (2)			%		
pH (hydrogen ion)	Within 6.5 and 8.5 at all times.			pH units	Weekly	Discrete
Settleable solids	1	–	2	mL/L	Weekly	Discrete
Oil and grease, total recoverable	10	–	15	mg/L	Weekly	Discrete
Enterococcus(3)	35(3)	–	104(3)	CFU/ 100mL	Weekly	Discrete
Chlorine, total residual (TRC)	1.5	–	2.46	mg/L	Weekly	Discrete
Temperature	(1)	–	(1)	˚C	Weekly	Discrete
Ammonia	(1)	–	(1)	mg/L	Yearly (5)	24 hr Composite
Chronic toxicity (4)	(1)	–	(1)	Pass/Fail	Yearly (5)	24 hr Composite
Priority Pollutant Scan	(1)	–	(1)	–	Yearly (5)	24 hr Composite
Ambient Monitoring	(1)	–	(1)	–	Quarterly	Discrete

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

(2) Both the influent and the effluent shall be monitored for Biochemical Oxygen Demand (5-day) and Total Suspended Solids. The arithmetic mean of the concentrations of effluent samples collected in a calendar month shall not exceed 15 percent of the arithmetic mean of the influent samples collected in the same calendar month. (e.g., must achieve 85% removal rates).

(3) Average monthly *Enterococcus* effluent monitoring shall be reported as a 30-day geometric mean. Maximum daily *Enterococcus* effluent monitoring shall be reported as the highest instantaneous maximum (The maximum of any single sample shall not exceed 104 CFU/ 100mL).

(4) See section II.D for specific requirements on Whole Effluent Toxicity. 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. EPA has granted an extension to the Permittee for the holding time due to logistical issues. The extended holding time shall not exceed 72 hours.

(5) Yearly monitoring shall be completed by January 31 each year.

2. Pursuant to Guam water quality standards, the discharge shall[1]:

   a. Be free from substances, conditions or combinations that cause visible floating materials, debris, oil, grease, scum, foam, and other floating material which degrade water quality or use;

   b. Be free from substances, conditions or combinations that produce visible turbidity, settle to form deposits or otherwise adversely affect aquatic life;

   c. Be free from substances, conditions or combinations that produce objectionable color, odor, or taste, directly, or by chemical or biological action;

   d. Be free from substances, conditions or combinations that injure or are toxic or harmful to humans, animals, plants or aquatic life;

   e. Be free from substances, conditions or combinations that induce the growth of undesirable aquatic life;

   f. Not cause the pH in the receiving water to be outside the range of 6.5 to 8.5 standard units;

   g. Not cause orthophosphate concentrations in the receiving water to exceed 0.05 mg/L;

   h. Not cause nitrate-nitrogen concentrations to exceed 0.2 mg/L;

   i. Not cause ammonia concentration to exceed 0.02 mg/L;

   j. Not cause the concentration of dissolved oxygen in the receiving water to be less than 75% of saturation;

   k. Not cause alterations of the marine environment that would alter the salinity of marine waters of Guam more than +10% of the ambient conditions, except when due to natural conditions;

   l. Not cause total non-filterable suspended matter at any point to be increased more than 10% from ambient at any time, and the total concentration should not exceed 20 mg/L, except when due to natural conditions;

   m. Not contain any radioactive waste or contaminated radioactive materials from research facilities;

   n. Not cause the temperature in the receiving water to deviate more than 1.0 degree Centigrade (1.8 degree Fahrenheit) from ambient conditions;

[1] The permit incorporates an initial dilution rate of 200:1. Narrative receiving water quality standards apply after initial dilution has occurred.

o. Not cause the concentration of oil or petroleum products in the receiving waters to cause a visible film, or sheen, or result in visible discoloration of the surface with a corresponding oil or petroleum product odor, damage to fish or invertebrates, or an oil deposit on the shore or bottom;

p. Not cause concentrations of toxic substances in the receiving water that produce detrimental physiological, acute, or chronic responses in human, plant, animal or aquatic life;

q. Not cause concentrations of toxic substances in the receiving waters that produce contamination in harvestable aquatic life to the extent that it causes detrimental physiological, acute or chronic responses in humans or protected wildlife, when consumed;

r. Not cause concentrations of toxic substances in the receiving waters that result in the survival of aquatic life subject to the discharge to be less than that for the same water body in areas unaffected by the discharge; and

s. Whenever natural concentrations of any toxic substance occurs and exceeds the limits established in Part I of the Permit, this greater concentration shall constitute the limit, provided that this natural concentration was not directly affected by human-induced causes.

*B. Ambient Monitorin*g

The permittee shall conduct receiving water monitoring in coastal waters near the outfall at receiving water monitoring stations and frequencies as specified in Tables 2 and 3 below. At the discretion of the permittee, ambient monitoring is not required if ocean conditions prevent safely obtaining representative samples. In such instances, the permittee shall report "N/A - sample could not be obtained due to environmental conditions".

Once per quarter, the permittee shall monitor all stations, including mid depth and bottom depth where applicable, for enterocci, ammonia, Total Kjeldahl nitrogen, orthophosphate, nitrate, turbidity, temperature, salinity, pH, and dissolved oxygen in addition to visual monitoring at all stations.

After two years of ambient monitoring, the permittee may request a modification to the permit to reduce monitoring, if the ambient monitoring demonstrates no negative impact to receiving waters surrounding the discharge.

Table 2 – Northern District Receiving Water Monitoring Locations

Station Name	**Description**
Shoreline A (A-sur)	0.4 km Northeast of Station C. Surface sample at shoreline.
Shoreline B (B-sur)	NCS beach. Surface sample at shoreline.
Offshore C (C-sur) (C-mid) (C-bot)	Outfall effluent boil. Surface, Mid (50 ft) depth and bottom (100 ft) depth
Offshore D (D-sur) (D-mid) (D-bot)	100m South of Station C. Surface, Mid (50 ft) depth, and bottom (100 ft) depth.
Offshore E (E-sur) (E-mid) (E-bot)	1000m Northeast of Station C. Surface, Mid (50 ft) depth, and bottom (100 ft) depth

Table 3 - Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Frequency
Oily sheen; Color; Odor; Presence of floating materials; Clarity/turbidity; Weather; Sampling time; Tide conditions.	Narrative	Visual. Surface only.	Quarterly
Total Kjeldahl Nitrogen	mg/L	Grab Sample.	Quarterly
Ammonia	mg/L	Grab Sample.	Quarterly
Orthophosphate	mg/L	Grab Sample.	Quarterly
Nitrate	mg/L	Grab Sample.	Quarterly
Enterococci	mg/L	Grab Sample.	Quarterly
Turbidity	NTU	Grab Sample.	Quarterly
Temperature	Degrees	Grab Sample.	Quarterly
Salinity	mg/L	Grab Sample.	Quarterly
pH	Std. Units	Grab Sample.	Quarterly
Dissolved Oxygen	mg/L	Grab Sample.	Quarterly

Part II. MONITORING AND REPORTING

A. Sample locations

Samples taken in compliance with the monitoring requirements specified in Part I, Section A, above, shall be taken at the following location(s):

1. Influent samples shall be taken after the last addition to the collection system, prior to treatment and prior to any process return flows.

2. Effluent samples shall be taken downstream from the last treatment process.

B. Twenty-four Hour Reporting of Noncompliance

1. The permittee shall report any noncompliance which may endanger human health or the environment. This information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances to all of the following:

   U.S. Environmental Protection Agency
   Pacific Islands Office : (415) 972-3769
   EPA Enforcement Division: (415) 972-3577

   Guam EPA
   (671) 475-1658

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

3. The following noncompliance events must also be reported within 24 hours:

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

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

C. General Monitoring and Reporting

1. All monitoring shall be conducted in accordance with 40 CFR 136 test methods, unless otherwise specified in this permit. For influent and effluent analyses required in Table 1 of this permit, the permittee shall use 40 CFR 136 test methods with Method Detection Limits (MDLs) and Minimum Levels (MLs) that are lower than the effluent limits in Table 1 of this permit and the water quality criteria concentrations in the National Recommended Water Quality Criteria[2]. If all MDLs or MLs are higher than these effluent limits or criteria concentrations, then the permittee shall use the test method with the lowest MDL or ML available. If all published MDLs are higher than the effluent limitations (or applicable criteria concentrations), the permittee shall

[2] http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm

utilize the EPA-approved analytical method with the lowest published MDL. The permittee is not required to use "ultra low methods" unless specifically required by the permit.

2. The permittee shall ensure that the laboratory uses 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).

3. As an attachment to the first Discharge Monitoring Report ("DMR"), the permittee shall submit for all parameters with monitoring requirements specified in Table 1 of this permit:

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

   b. The preparation procedure used by the laboratory;

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

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

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

   f. The laboratory's lowest calibration standard.

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

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

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

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

   c. Identification of the laboratory used to analyze the samples; provisions for any proficiency demonstration that will be required by the laboratory before or after contract award such as passing a performance evaluation sample; analytical

method to be used; MDL and ML to be reported; required QC results to be reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and corrective actions to be taken in response to problems identified during QC checks; and

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

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

6. Samples collected during each month of the reporting period must be reported on DMR 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), "No Discharge No Data Information" 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)*.

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. Influent and effluent monitoring results are to be reported on EPA Form 3320-1, a pre-printed DMR provided by the EPA Region 9 DMR Coordinator for NPDES. A DMR form must be submitted for the reporting period even if there was not any discharge. DMR forms shall be submitted by the 28th day of the month following the previous quarterly reporting period. For example, the three DMR forms for January, February, and March are due on April 28th. Duplicate signed copies of these, and all other reports required herein, shall be submitted to EPA and Guam EPA at the following addresses, unless otherwise specified in this permit:

   U.S. EPA Region 9
   Enforcement Division DMR (ENF-4-1)
   75 Hawthorne Street
   San Francisco, CA 94105

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

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

D. 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. EPA is granting an extension to the Permittee for an extension 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 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 0.5 percent effluent for chronic toxicity testing. This is based on the amount of dilution determined available in the receiving water.

   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 (H_o):

   IWC (0.5 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 *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* referenced above. 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 EPA.

   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 *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* , 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

5. Initial Investigation TRE Work Plan

This plan shall include steps the permittee intends to follow if toxicity is measured above the WET permit limit or trigger and should include the following, at minimum:

a. A description of the investigation and evaluation techniques that will 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 will conduct the TIEs (i.e., an in-house expert or outside contractor).

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 the following 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).

6. Accelerated Toxicity Testing and TRE/TIE Process

a. If the 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 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.

7. If one of the additional toxicity tests (in paragraphs 6.a or 6.b) exceeds the 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).

8. 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.

9. Reporting of Toxicity Monitoring Results

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

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

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

10. Permit Reopener for Chronic Toxicity

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

Part III. Special Conditions

A. Reporting of Capacity Attainment and Planning

If the average dry-weather waste flow for any month either equals or exceeds 90 percent of the annual dry weather design capacity of the waste treatment and/or disposal facilities, the permittee shall file a written report with EPA within ninety (90) days. The permittee's senior administrative officer shall sign a letter which transmits that report and certifies that the policy-making body is adequately informed about it. The report shall include:

1. Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for the day.

2. The permittee's best estimate of when the average daily dry weather flow rate will equal or exceed the design capacity of the facilities.

3. The permittee's intended schedule for the studies, design, and other steps needed to provide additional capacity for the waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present facilities.

B. 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 U.S.; b) overflows or releases of wastewater that do not reach waters of the U.S.; and c) wastewater backups into buildings that are caused by blockages or flow conditions in a sanitary sewer other than 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. SSO 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.

C. Pretreatment

1. Revise Ordinance: GWA shall review and revise any existing pretreatment ordinance for consistency with 40 CFR Part 403. GWA shall submit to EPA for review and approval this revised pretreatment ordinance to develop, implement, and enforce Section 403. [3] The objectives of this ordinance are:

- To prevent the introduction of pollutants into the Publicly Owned Treatment Works (POTW) that will interfere with its operation;
- To prevent the introduction of pollutants into the POTW that will pass through the POTW, inadequately treated, into receiving waters, or otherwise be incompatible with the POTW;
- To protect both POTW personnel who may be affected by wastewater and sludge in the course of their employment and the general public;
- To promote reuse and recycling of industrial wastewater and sludge from the POTW;
- To enable GWA to comply with its NPDES permit conditions, sludge use and disposal requirements, and any other Federal or State laws to which the POTW is subject.

2. Notifications required for New Pollutants and Substantial Changes: The permittee must provide notice to U.S. EPA within 30 days when the permittee becomes aware of the following:

a) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 and 306 of the CWA if it were directly discharging those pollutants; and

b) 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 this permit.

[3] EPA recommends consultation with EPA's Model Pretreatment Ordinance (EPA 833-B-06-002), available at http://cfpub.epa.gov/npdes/docs.cfm?view=allprog&program_id=3&sort=name

c) 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.

D. Fats Oils and Grease (FOG) Program

As part of its pretreatment ordinance, GWA shall submit to EPA for review and approval a comprehensive FOG Program to develop, implement, and enforce grease control measures.[4] At a minimum, GWA shall incorporate the following:

1. Ordinance

   GWA shall review existing ordinances for FOG control and adopt or revise as necessary a municipal ordinance 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

   GWA shall conduct a baseline assessment of all known SSOs over the past 10 years 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 Baseline Assessment shall be completed within two years of permit issuance.

   GWA shall supplement the Baseline Assessment by TV/video inspection of sewer mains. The areas where sewer lines are found to contain visible accumulation 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, GWA shall implement a targeted strategy to identify, inspect, and monitor the establishments discharging FOG to the sewer system.

3. Food Service Establishment (FSE) Database within priority areas

   GWA shall identify and 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;

[4] EPA recommends consultation with California's Guide for Developing and Implementing a Fats, Oils, and Grease (FOG) Control Program for Food Service Establishments September 2004. http://www.calfog.org/docs/ProgDevGuide.pdf.

hospitals; convalescent homes; factory or school kitchens; catering kitchens; bakeries; grocery stores with food preparation, food packaging, meat cutting, and meat 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, & manager,
b. property owner, address, 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 & capacity,
h. current FOG disposal method,
i. name of contracted grease hauler,
j. interceptor cleaning frequency,
k. dates of GWA Inspections,
l. results of GWA Inspections,
m. history of compliance,
n. outreach program,
o. other information as necessary.

GWA shall update the database yearly.

4. Outreach Program

a. GWA shall establish an outreach program to Food Service Establishments, 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 grease interceptors.

b. GWA shall establish 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 that GWA will distribute to all residences within 1000 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

GWA shall develop 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. Inspections may be coordinated with Health Department Inspections.
b. a standardized 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, Re-inspection Fees, Violations, Cost Recovery for GWA- provided clean-ups and/or termination of water/wastewater service.

6. Annual report

GWA shall provide an annual report to EPA that shall at a minimum consist of the following:

a. copy of updated FSE database;
b. a description of SSOs or sewage clogging and area prioritization;
c. summary of outreach performed;
d. summary of inspection results;
e. a discussion of the budget and staffing levels for the previous and current years; and
f. 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.

E. Permit Reopener

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.

The effluent limitations contained in this permit are based on the presumption that the permittee will install the multi-port outfall diffuser as the permittee has stated in the permit application. EPA conducted reasonable potential based on the presumed mixing zone that will be achieved by the diffuser. If the permittee has not installed the diffuser, EPA may reopen this permit to reassess the presence of effluent toxicity

or the reasonable potential for the discharge to cause or contribute to exceedances of water quality standards based upon new data. EPA may reopen the permit at this time to establish new effluent limits based on a re-evaluation of the mixing zone.

Part IV 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.

   b. 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 itself uses or disposes of the biosolids, 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.

   c. 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.

   d. No biosolids shall be allowed to enter wetlands or other waters of the United States.

   e. Biosolids treatment, storage, use, or disposal shall not contaminate groundwater.

   f. Biosolids treatment, storage, use, or disposal shall not create a nuisance such as objectionable odors or flies.

   g. 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.

h. 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.

i. 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. Land Application

For biosolids that are land-applied:

a. There shall be adequate screening at the treatment plant headworks and/or at the biosolids treatment units to ensure that all pieces of metal, plastic, glass, and other inert objects with a diameter greater than 3/8" are removed.

b. The permittee shall track and keep records of the operational parameters used to achieve the Vector Attraction Reduction requirements in 40 CFR 503.33(b).

c. Biosolids shall be monitored for: arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium, zinc at the frequency specified "Biosolids Monitoring Frequency", below. Additionally, Class 1 facilities (facilities with pretreatment programs or designated as Class 1 by the Regional Administrator) and Federal facilities with >5 mgd influent flow shall also sample biosolids once per year for pollutants listed under CWA section 307(a). 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."

d. Prior to land application, the permittee shall demonstrate that biosolids meet Class A or Class B pathogen reduction levels using one of the alternatives listed under 40 CFR 503.32.

e. If pathogen reduction is demonstrated by testing for fecal coliform and/or other pathogens, then samples must be drawn at the frequency described in "Biosolids Monitoring Frequency", below. If Class B pathogen reduction levels are demonstrated using fecal coliform, then at least seven grab samples must be drawn during each sampling event and a geometric mean calculated from these seven samples.

   The following sample holding times between sample collection and sample analysis shall not be exceeded: fecal coliform - 24 hours when cooled to 4 ˚C if composted, mesophillically digested, or aerobically digested, 6 hours otherwise; Salmonella sp. - 24 hours when cooled to 4 ˚C; enteric viruses - 2 weeks when frozen; helminth ova - one month when cooled to 4 ˚C.

f. If pathogen reduction is demonstrated using a Process to Significantly/Further Reduce Pathogens, then the permittee shall maintain daily records of the operating parameters used to achieve this reduction.

4. Surface Disposal

For biosolids that are placed in a surface disposal site (dedicated land disposal site or monofill, or sludge-only parcel at a municipal landfill):

a. A qualified groundwater scientist shall develop a groundwater monitoring program for the site, or shall certify that the placement of biosolids on the site will not contaminate an aquifer.

b. The permittee shall track and keep records of the operational parameters used to achieve the Vector Attraction Reduction requirements in 40 CFR 503.33(b).

c. No food crop, feed crop, or fiber crop may be grown on a surface disposal site, unless approved by US EPA.

d. If the surface disposal site is unlined, biosolids shall be monitored for: arsenic, chromium, and nickel at the frequency specified "Biosolids Monitoring Frequency", below. If the surface disposal unit is lined, no monitoring is required. Additionally, Class 1 facilities (facilities with pretreatment programs or designated as Class 1 by the Regional Administrator) and Federal facilities with >5 mgd influent flow shall also sample biosolids once per year for pollutants listed under CWA section 307(a). 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."

e. The permittee shall demonstrate that the biosolids meet Class B pathogen reduction levels using one of the alternatives listed under 40 CFR 503.32 or shall ensure that the site is covered at the end of each operating day.

f. If pathogen reduction is demonstrated by testing for fecal coliform and/or other pathogens, then samples must be drawn at the frequency described in "Biosolids Monitoring Frequency", below. If Class B pathogen reduction levels are demonstrated using fecal coliform, then at least seven grab samples must be drawn during each sampling event and a geometric mean calculated from these seven samples.

   The following sample holding times between sample collection and sample analysis shall not be exceeded: fecal coliform - 24 hours when cooled to 4 ˚C if composted, mesophillically digested, or aerobically digested, 6 hours otherwise; Salmonella sp. - 24 hours when cooled to 4 ˚C; enteric viruses - 2 weeks when frozen; helminth ova - one month when cooled to 4 ˚C.

g. If pathogen reduction is demonstrated using a Process to Significantly/Further Reduce Pathogens, then the permittee shall maintain daily records of the operating parameters used to achieve this reduction.

5. Municipal Solid Waste Landfill Disposal

For biosolids placed in a municipal solid waste landfill:

a. Biosolids shall be tested by the Paint Filter Liquids Test (Method Number 9095 in SW-846) at frequency described in "Biosolids Monitoring Frequency", below, to demonstrate that there are no free liquids.

b. Biosolids shall be tested by the Toxicity characteristic leaching procedure (TCLP) Test (Method 6010B) once during the first year after issuance of this permit.

c. Class 1 facilities (facilities with pretreatment programs or designated as Class 1 by the Regional Administrator) and Federal facilities with >5 mgd influent flow shall also sample biosolids once per year for pollutants listed under CWA section 307(a). 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."

6. Biosolids Monitoring Frequency

Monitoring shall be conducted at the following frequency, based on the volume of biosolids 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.

7. Notification and Reporting

a. The permittee, either directly or through contractual arrangements with its 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 of becoming aware of the circumstances, 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 circumstances. The permittee shall require its biosolids management contractors to notify EPA and Guam EPA of any noncompliance within these same timeframes.

(2) Interstate notification: If biosolids are shipped to another State, Tribal Lands, or Territory, then the permittee shall send a 60-day prior notice of the shipment to permitting authorities in the receiving State, Tribal Lands, or Territory, and EPA Region 9.

(3) Land Application: Prior to sending biosolids (other than composted biosolids) to a new or previously unreported site, the permittee shall notify EPA and Guam EPA. The notification shall include: a description and topographic map of the proposed site(s), names and addresses of the applier and site owner, and a list of any state or local permits which must be obtained. The plan shall include a description of the crops or vegetation to be grown, proposed loading rates, and determination of agronomic rates.

Land Application: If any biosolids within a given monitoring period do not meet the pollutant limits for metals under 40 CFR 503.13, then the permittee (or its contractor) must notify EPA and determine the cumulative metals loading to date at that site, as required in 40 CFR 503.12.

Land Application: The permittee shall notify the applier of 40 CFR 503 requirements that are applicable to the applier, including applier certification that management practices, site restrictions, and vector attraction reduction requirements have been met. The permittee shall require the applier to certify at the end of 38 months following the application of Class B biosolids, that the harvesting restrictions in effect for up to 38 months have been met.

(4) Surface Disposal: Prior to disposal at a new or previously unreported site, the permittee shall notify EPA and Guam EPA. The notice shall include: a description and topographic map of the proposed site, depth to groundwater, whether the site is lined or unlined, site operator, site owner, and any State, Territory or local permits. The notice shall describe procedures for ensuring restricted public access and grazing restrictions for three years following site closure. The notice shall include a groundwater monitoring plan, or a description of why groundwater monitoring is not required.

b. The permittee shall submit an annual biosolids 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. 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) For Land Application and Surface Disposal: Demonstrations and certifications of pathogen reduction methods and vector attraction reduction methods, as required in 40 CFR 503.17 and 503.27.

(4) For Land Application Sites, the following information must be submitted by the permittee, unless the permittee requires its biosolids management contractors to report this information directly to the EPA Region 9 Biosolids Coordinator:

The locations of land application sites used that calendar year (with field names and numbers), size of each field applied to, applier, and site owner; the volumes applied to each field (in wet tons and dry metric tons), nitrogen applied, and calculated plant available nitrogen; the crop planted, date of planting, and date of harvesting; for biosolids exceeding 40 CFR 503.13 Table 3 pollutant concentrations, the locations of sites where applied and cumulative metals loading at that site to date; certifications of management practices in 40 CFR 503.14 and certifications of site restrictions in 40 CFR 503.17(b)(6).

(5) For Surface Disposal Sites: The locations of sites, site operator, site owner, and size of parcel on which disposed; the results of any required groundwater monitoring; certifications of management practices in 40 CFR 503.24; and for closed sites, the date of site closure and certifications of management practices for the three years following site closure.

(6) For Municipal Solid Waste Landfill disposal sites: Names, mailing addresses, and street addresses of persons who received biosolids for disposal in a municipal waste landfill, or, and the tonnages delivered to each.

(7) For other use or disposal methods not covered above, the following information must be submitted by the permittee: Names, mailing addresses, and street addresses of persons who received biosolids for storage, further treatment, or disposal, and the tonnages delivered to each.

(8) For temporary storage of biosolids on-site, GWA shall report how long the biosolids have been stored at the facility, if greater than 2 years.

(9) All reports shall be submitted to:

Regional Biosolids Coordinator
U.S. Environmental Protection Agency
Region 9

CWA Compliance Office (WTR-7)
75 Hawthorne Street
San Francisco, CA 94105-3901

Guam EPA
17-3304 Mariner Avenue
Tiyan, Guam 96913

ATTACHMENTS

Attachment A: Definitions

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.

"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.

"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.

"Daily maximum allowable effluent limitation" means the highest allowable "daily discharge.

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

"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.

"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.

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

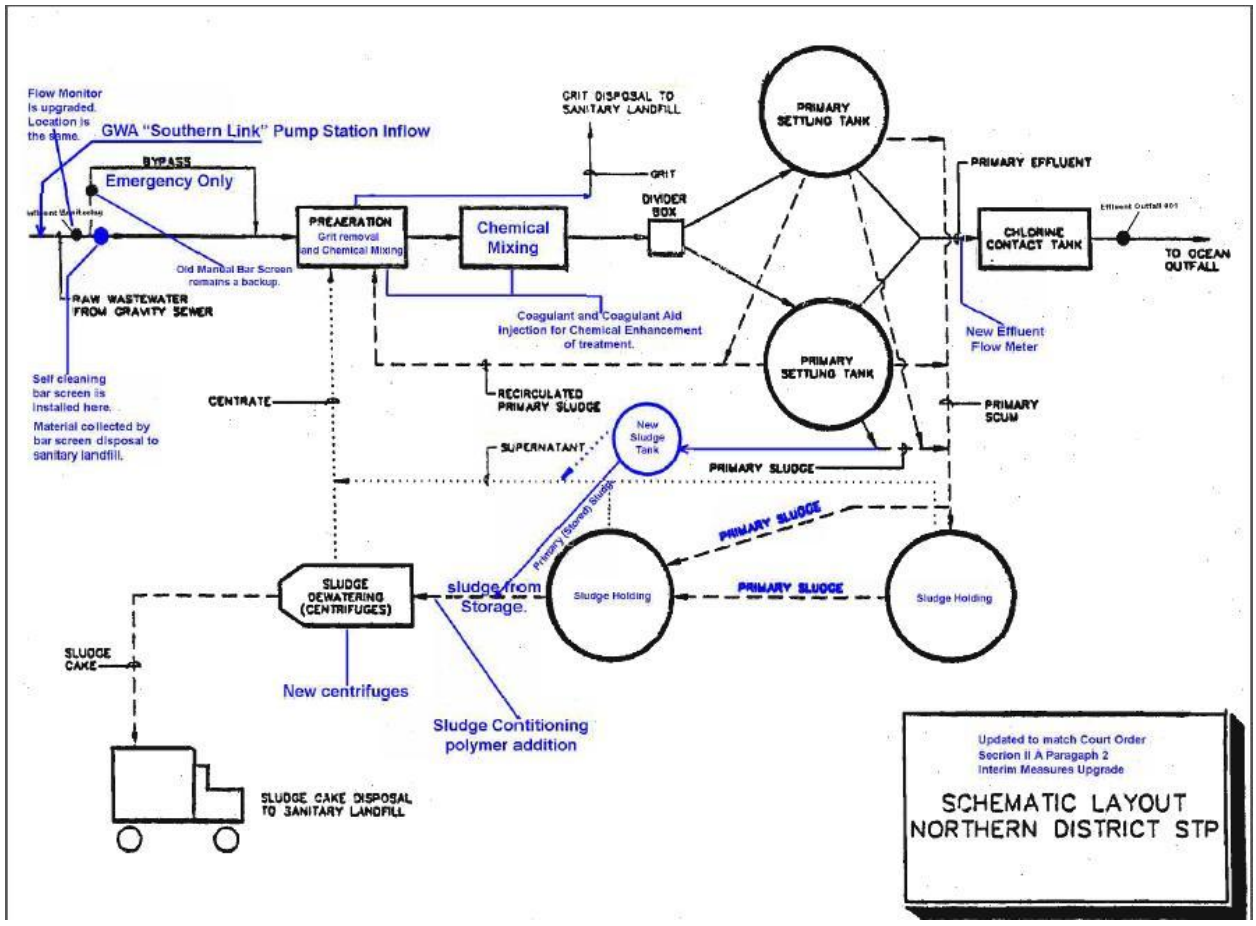
a. For metals, due to laboratory calibration practices, calculated MLs may be rounded to the nearest whole number.

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

"NODI(B)" No Discharge No Data Information 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.

"NODI(Q)" No Discharge No Data Information means that the concentration of the pollutant in a sample is detected but not quantified. NODI(Q) is reported when a sample result is greater than or equal to the laboratory's MDL, but less than the ML.

Attachment B: Existing Process Flow Diagram (does not represent new secondary treatment facility to be built)



Attachment C: Standard NPDES Conditions

Attached

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

CWA STANDARDS AND PERMITS OFFICE (WTR-5)

STANDARD FEDERAL NPDES PERMIT CONDITIONS

Updated as of June 3, 2002

Reference: CFR 40 Parts 100 to 135, July 1, 2001
