

AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 *et seq.*, the "Act"),

Commonwealth Utilities Corporation  
P.O. Box 1220  
Saipan, MP 96950

is authorized to discharge treated wastewater from the Sadog Tasi Wastewater Treatment Plant through the Saipan Lagoon Outfall (Discharge Serial No. 001), located off of Garapan, Saipan, Commonwealth of the Northern Mariana Islands,

Latitude:        15E 13' 35" N  
Longitude:      145E 43' 40" E

to Class A marine receiving waters in Tanapag Harbor of the Philippine Sea, in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein, and in the attached USEPA Region 9 *Standard Federal NPDES Permit Conditions*, dated June 3, 2002.

This permit shall become effective on July 1, 2008.

This permit and the authorization to discharge shall expire at midnight, June 30, 2013.

Signed this 26<sup>th</sup> day of June, 2008 .

For the Regional Administrator

/s/

Alexis Strauss, Director  
Water Division

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**SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

Based upon an average daily design flow of 0.21 m<sup>3</sup>/sec (4.8 MGD), the permittee is authorized to discharge from Discharge Serial Number 001 treated domestic wastewater.

1. During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee shall not discharge to receiving waters, except from Discharge Serial No. 001 as specified below.
2. The influent samples shall be taken after the last addition to the collection system and prior to any in-plant return flows and the first treatment process, where representative samples of the influent can be obtained. The effluent samples shall be taken after any in-plant return flows and the last treatment process and prior to mixing with the receiving waters, where representative samples of the effluent can be obtained.
3. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Maximum Discharge Limitations Unless Otherwise Noted						Monitoring Requirements	
	Mass Limits (lbs/day)			Concentration Limits				
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Monitoring Frequency	Sample Type
Flow (m <sup>3</sup> /day)	n/a <sup>1</sup>	n/a	n/a	-- <sup>2</sup>	-- <sup>2</sup>	-- <sup>2</sup>	Continuous	Continuous
Biochemical Oxygen Demand (5-day) <sup>3,4</sup>	1,201	1,801	n/a	30 mg/L	45 mg/L	n/a	3 days/week	8-hour composite
Total Suspended Solids <sup>3,4</sup>	1,201	1,801	n/a	30 mg/L	45 mg/L	n/a	3 days/week	8-hour composite

<sup>1</sup> n/a = not applicable

<sup>2</sup> Monitoring and reporting required. No limitation is set at this time.

<sup>3</sup> Discharge limitation is based on federal secondary treatment standards in accordance with 40 CFR 133.102. Mass emission rate limitation is calculated using an average daily design flow of 0.21 m<sup>3</sup>/sec (4.8 MGD).

<sup>4</sup> Both the influent and the effluent shall be monitored. The arithmetic mean of both BOD<sub>5</sub> and TSS values, by concentration, for effluent samples collected over a calendar month shall not exceed 15 percent of the arithmetic mean, by concentration, for influent samples collected at approximately the same times during the same period.

Effluent Characteristic	Maximum Discharge Limitations Unless Otherwise Noted						Monitoring Requirements	
	Mass Limits (lbs/day)			Concentration Limits				
	Monthly Average	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Monitoring Frequency	Sample Type
Settleable Solids	n/a	n/a	n/a	1 ml/L	n/a	2 ml/L	Once/day	Discrete
Oil and grease	-- <sup>2</sup>	n/a	-- <sup>2</sup>	-- <sup>2</sup>	n/a	-- <sup>2</sup>	Quarterly <sup>5</sup>	Discrete
Whole Effluent Toxicity (P) or (F) <sup>6</sup>	n/a	n/a	0.26	n/a	n/a	Pass <sup>6</sup>	Semi-Annually	24-hour Composite
Enterococci <sup>7</sup>	n/a	n/a	n/a	2,230 CFU/100 mL	n/a	4,474 CFU/100 mL	Weekly	Discrete
Total Chlorine Residual <sup>8</sup>	0.25	n/a	0.50	6.2 µg/l	n/a	12.4 µg/l	3 days/week	Discrete
pH <sup>9</sup>	Not more than 0.5 units from a value of 8.1.						3 days/week	Discrete
	Maximum Discharge Limitations Unless Otherwise Noted						Monitoring Requirements	

<sup>5</sup> January - March; April - June; July - September; and October - December.

<sup>6</sup> See Part D (Whole Effluent Testing Monitoring Requirements) of this permit for explanation of requirements.

<sup>7</sup> Concentration limitation is based on applicable *CNMI Water Quality Standards* and 40 CFR 122.44(d). Analyze using Method 1600, *Membrane Filter Test Method for Enterococci in Water* (EPA 821-R097-004, May 1997)

<sup>8</sup> Upon initiation and throughout the duration of effluent chlorination, the permittee shall monitor total chlorine residual. Concentration limitation is based on best professional judgment, applicable CNMI water Quality standards, USEPA water quality criteria, and 40 CFR 122.44(d), and is calculated in accordance with *Technical Support Document for Water Quality-based Toxics Control* (EPA/505/2-90-001, March 1991). Mass emission rate limitation is calculated using an average daily design flow of 0.21 m<sup>3</sup>/sec (4.8 MGD). Contact time following chlorination and prior to effluent discharge shall not be less than 15 minutes.

<sup>9</sup> Concentration limitation is based on applicable *CNMI Water Quality Standards* and 40 CFR 122.44(d).

Effluent Characteristic	Mass Limits (lbs/day)			Concentration Limits			Monitoring Frequency	Sample Type
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily		
Nitrate-Nitrogen <sup>10</sup>	760	n/a	1,600	19 mg/l	n/a	39 mg/l	Quarterly	24-hour Composite
Total Nitrogen <sup>10</sup>	1,200	n/a	2,300	29 mg/l	n/a	58 mg/l	Quarterly	24-hour Composite
Orthophosphate <sup>10</sup>	80	n/a	200	2 mg/l	n/a	4 mg/l	Quarterly	24-hour Composite
Total Phosphorous <sup>10</sup>	80	n/a	200	2 mg/l	n/a	4 mg/l	Quarterly	24-hour Composite
Unionized Ammonia <sup>10</sup>	30	n/a	80	0.8 mg/l	n/a	2 mg/l	Quarterly	24-hour Composite
Copper <sup>11</sup>	0.1	n/a	0.2	2.4 µg/l	n/a	4.8 µg/l	Quarterly	24-hour Composite
Nickel <sup>11</sup>	0.3	n/a	0.5	6.7 µg/l	n/a	13.4 µg/l	Quarterly	24-hour Composite

<sup>10</sup> Concentration limitation is based on applicable *CNMI Water Quality Standards* with approved mixing zone and 40 CFR 122.44(d), and is calculated in accordance with *Technical Support Document for Water Quality-based Toxics Control* (EPA/505/2-90-001, March 1991). Mass emission rate limitation is calculated using an average daily design flow of 0.21 m<sup>3</sup>/sec (4.8 MGD).

<sup>11</sup> Concentration limitation is based on applicable *CNMI Water Quality Standards* and 40 CFR 122.44(d), and is calculated in accordance with *Technical Support Document for Water Quality-based Toxics Control* (EPA/505/2-90-001, March 1991). Mass emission rate limitation is calculated using an average daily design flow of 0.21 m<sup>3</sup>/sec (4.8 MGD).

Effluent Characteristic	Maximum Discharge Limitations Unless Otherwise Noted						Monitoring Requirements	
	Mass Limits (lbs/day)			Concentration Limits				
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Monitoring Frequency	Sample Type
Silver <sup>11</sup>	0.04	n/a	0.08	0.9 µg/l	n/a	1.9 µg/l	Quarterly	24-hour Composite
Zinc <sup>11</sup>	1.8	n/a	3.8	45µg/l	n/a	90 µg/l	Quarterly	24-hour Composite
Other Priority Toxic Pollutants (excluding asbestos) <sup>12</sup>	-- <sup>2</sup>	n/a	-- <sup>2</sup>	-- <sup>2</sup>	n/a	-- <sup>2</sup>	Oct 2007/ Oct 2010	-- <sup>12</sup>

<sup>12</sup>

Priority toxic pollutants (excluding asbestos) are listed in 40 CFR 131.36(b)(1). The permittee shall collect *24-hour composite samples* for metals, 2,3,7,8-TCDD (dioxin), pesticides, base-neutral extractables, and acid-extractables. The permittee shall collect *discrete samples* for cyanide, total phenolic compounds and volatile organics.

**SECTION B. GENERAL DISCHARGE SPECIFICATIONS AND PROHIBITIONS**

1. The discharge shall be free from:
  - (a) Materials that will settle to form objectionable sludge or bottom deposits.
  - (b) Floating debris, oil, grease, scum, or other floating materials.
  - (c) Substances in amounts sufficient to produce taste or odor in the water or detectable off flavor in the flesh of fish, or in amounts sufficient to produce objectionable odor, turbidity, or other conditions in the receiving waters.
  - (d) High temperatures; biocides; pathogenic organisms; toxic, corrosive, or other deleterious substances at levels or in combinations sufficient to be toxic or harmful to human health or aquatic life, or in amounts sufficient to interfere with any beneficial use of the water.
  - (e) Substances or conditions or combinations thereof in concentrations which produce undesirable aquatic life.
  - (f) Toxic pollutants in concentrations that are lethal to, or that produce detrimental physiological responses in human, plant, or animal life. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species and/or significant alterations in population or community ecology or receiving water biota.
  
2. Radioactive Materials

The discharge of radioactive materials at any level into the receiving waters is strictly prohibited.
  
3. The discharge shall not cause:
  - (a) The health and life history characteristics of aquatic organisms in receiving waters to differ substantially from those for the same receiving waters in areas unaffected by the discharge. Also, the discharge shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life in the receiving waters.
  - (b) The concentration of dissolved oxygen in the receiving waters to be less than 75% saturation

- (c) The concentrations of total filterable suspended solids in the receiving waters to be increased from ambient conditions at any time, or to exceed 40 mg/L except when due to natural conditions.
- (d) The salinity of the receiving waters to be altered more than 10% of the ambient conditions, or more than that which would otherwise adversely affect the sedimentary patterns and indigenous biota, except when due to natural causes.
- (e) The temperature of the receiving waters to vary by more than 1.0EC from ambient conditions.
- (f) The turbidity at any point in the receiving waters, as measured by nephelometric turbidity units (NTU), to exceed 1.0 NTU over ambient conditions except when due to natural conditions.

### **SECTION C. PERMIT REOPENER**

Should any of the monitoring indicate that the discharge causes, has the reasonable potential to cause, or contributes to excursions above water quality criteria, the permit may be reopened for the imposition of water quality based limits and/or whole effluent toxicity limits. Also, this permit may be modified, in accordance with the requirements set forth at 40 CFR Parts 122.44 and 124.14, to include appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information, or to implement any EPA-approved new CNMI water quality standards, address ESA-related issues, or new information concerning total residual chlorine.

### **SECTION D. WHOLE EFFLUENT TOXICITY MONITORING REQUIREMENTS**

The permittee shall conduct semi-annual acute toxicity tests on composite effluent samples. Each year, the permittee shall conduct this routine toxicity testing at a different time of the year from the previous years. Samples shall be collected for each point of discharge at the designated NPDES sampling station for the effluent. During years 1, 3, and 5 of the permit, a split of each sample shall be analyzed for all other monitored parameters at the minimum frequency of analysis specified by the effluent monitoring program.

#### **1. Freshwater Species and Test Methods**

The species and short-term test methods for estimating the acute toxicity of NPDES effluents are found in the fifth edition of *Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms* (EPA-821-R-02-012, October 2002; Table IA, 40 CFR Part 136) (“Acute Toxicity TMM”)



Manual. The permittee shall conduct 48-hour static non-renewal toxicity tests with the freshwater amphipod, *Hyalella azteca* (Test Method 2021.0).

2. Acute Toxicity Effluent Limit

For this discharge, the acute toxicity effluent limit is: “No significant difference in survival in the 100% effluent concentration compared to survival in the control, at a significance level of 0.05.” In accordance with Section 11.3 of the Acute Toxicity TMM, a single-concentration test result meeting this effluent limit is reported as “Pass” (or P) while a single-concentration test result not meeting this effluent limit is reported as “Fail” (or F). This permit requires additional toxicity testing if the acute toxicity effluent limit is violated.

3. Quality Assurance

- (a) Quality assurance, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified below.
- (b) The permittee shall attempt to ensure total holding time from collection of the last portion of the composite sample until arrival at the laboratory of not more than 36 hours. Should longer than a 36-hour holding time be anticipated, the permittee shall petition USEPA Region 9 (CED-6) for an extension of the holding time (see Section 8.5.4. of the Acute Toxicity TMM).
- (c) The acute instream waste concentration (IWC) for this discharge is 100% effluent. At minimum, a 100% effluent concentration and a control shall be tested. A minimum of 4 replicate chambers per concentration and 5 organisms per test chamber are required.
- (d) Effluent dilution water and control water should be standard synthetic dilution water, as described in the test methods manual. If the dilution water is different from test organism culture water, then a second control using culture water shall also be used.
- (e) If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.)
- (f) If either the reference toxicant or effluent toxicity tests do not meet all the test acceptability criteria in the test methods manual, then the permittee must 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 USEPA Region 9 (WTR-5).
- (h) Where total ammonia concentrations in the effluent are  $>$  or  $=$  5mg/L, toxicity may be contributed by unionized ammonia. pH drift during the toxicity test may contribute to artificial toxicity when ammonia or other pH-dependent toxicants (e.g., metals) are present. Following data review and written approval by USEPA Region 9 (WTR-5), if sample toxicity is confirmed to be artificial and due to pH drift, then the permittee may use the approved procedures to control sample pH during the toxicity test.

4. Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan

Within 90 days of the permit effective date, the permittee shall prepare and submit an initial investigation toxicity reduction evaluation (TRE) workplan (approximately 1-2 pages) to USEPA Region 9 for review. This workplan shall describe steps which the permittee intends to follow in the event that toxicity (as defined above) is detected, and should include at minimum:

- (a) A description of the investigation and evaluation techniques that would be used to identify potential causes/sources of toxicity, effluent variability, treatment system efficiency;
- (b) A description of the facility's method of maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in operation of the facility;
- (c) If a toxicity identification evaluation (TIE) is necessary, who (*e.g.*, contract laboratory, *etc.*) will conduct the TIE.

5. Additional (Accelerated) Toxicity Testing and TRE/TIE Process

- (a) If the acute toxicity effluent limit 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 test shall begin within 14 days of receipt of the test results exceeding the acute toxicity effluent limit. If the additional toxicity test does not exceed the acute toxicity effluent limit, then the permittee may return to their regular testing frequency.
- (b) If the acute toxicity effluent limit 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 test results exceeding the acute toxicity effluent limit. If none of the

additional toxicity tests exceed the acute toxicity effluent limit, then the permittee may return to their regular testing frequency.

- (c) If one of the additional toxicity tests in above paragraphs 5(a) or 5(b) exceeds the acute toxicity effluent limit, then, within 14 days of receipt of this result, the permittee shall initiate a TRE using the same species and test method and, as guidance, USEPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA 833-B-99-002, August 1999). In conjunction, the permittee shall develop and implement a Detailed TRE Workplan which shall include: further actions undertaken by the permittee to investigate, identify, and correct the causes of toxicity; actions the permittee will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and a schedule for these actions.
- (d) The permittee may institute a Toxicity Identification Evaluation (TIE) as part of a TRE to identify the causes of toxicity, using as guidance USEPA manuals: *Methods for Aquatic Toxicity Identification Evaluations, Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, February 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity* (EPA/600/R-92/080, September 1993); and *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, September 1993).

#### 6. Reporting of Acute Toxicity Monitoring Results

- (a) A full laboratory report for all toxicity testing shall be submitted as an attachment to the DMR for the month in which the toxicity test was conducted and shall also include: the toxicity test results reported according to the test methods manual chapter on report preparation and test review; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with toxicity test(s); and progress reports on TRE/TIE investigations.
- (b) The permittee shall notify USEPA Region 9 in writing within 14 days of exceedance of the acute toxicity effluent limit. 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.

#### 7. Toxicity Reopener

This permit may be modified in accordance with the requirements set forth at 40 CFR 122 and 124, to include appropriate conditions or limitations to address

demonstrated effluent toxicity based on newly available information, or to implement any USEPA Region 9-approved new CNMI water quality standards applicable to effluent toxicity.

## SECTION E. 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. *8-hour Composite sample* means a combination of eight equal individual portions taken at equal time intervals over any 8-hour period that reasonably represents the calendar day. The volume of each individual portion shall be directly proportional to the discharge flow rate at the time of sampling.
4. *24-hour Composite sample* means a combination of eight individual portions taken at equal time intervals over any 24-hour period that reasonably represents the calendar day. The volume of each individual portion shall be directly proportional to the discharge flow rate at the time of sampling.
5. *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. *Discrete sample* means any individual sample collected in less than 15 minutes. The sampling period shall coincide with the period of maximum discharge flow.
7. *Maximum daily discharge limitation* means the highest allowable “daily discharge.”
8. *Method Detection Limit (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 the specific laboratory method listed in 40 CFR Part 136. The procedure for determination of a laboratory MDL is in 40 CFR Part 136, Appendix B.

9. *Minimum Level (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 by a specific analytical procedure, assuming that all of the method-specified 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). Published method-specific MLs are contained in 40 CFR Part 136, Appendix A, and must be utilized if available. 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 an MDL are available under 40 CFR Part 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 for non-metals:
- (a) For metals, due to laboratory calibration practices, calculated MLs may be rounded to the nearest whole number.
  - (b) For non-metals, because analytical instruments are generally calibrated using the ML as the lowest calibration standard, the calculated ML is then rounded to the nearest multiple of (1, 2, or 5) x 10 to nth power, where n is zero or an integer. (For example if an MDL is 2.5 ug/L, then the calculated ML is  $2.5 \text{ ug/L} \times 3.18 = 7.95 \text{ ug/L}$ . The multiple of (1, 2, or 5) x 10 to nth power nearest to 7.95 is  $1 \times 10^1 = 10 \text{ ug/L}$ , so the calculated ML, rounded to the nearest whole number is 10 ug/L.)
10. *NODI(Q)* means data are below the Minimum Level (or interim Minimum Level).
11. *NODI(B)* means data are below the Method Detection Limit.

## **SECTION F. PRETREATMENT REQUIREMENTS**

1. Within 180 days of the effective date of this permit, the permittee shall submit for USEPA Region 9 and CNMI DEQ approval a description of the permittee's education programs designed to minimize the entrance of non-industrial toxic pollutants/pesticides and hazardous industrial wastes into the Sadog Tasi WWTP. These programs shall be implemented by the permittee no later than 90 days following approval by USEPA Region 9 and CNMI DEQ. Copies of all education materials from the period covering the previous calendar year shall be submitted with the monthly DMRs by April 28th to USEPA Region 9 and CNMI DEQ.

2. Within 180 days of the effective date of this permit, the permittee shall develop and implement a source control program to identify and control industrial source discharges into the Sadog Tasi WWTP collection system and discharge. The programs shall include:
  - (a) A survey to identify industrial users/sources; and
  - (b) A schedule for the development and implementation of control programs and mechanisms based on the survey, to the extent practicable, for identified sources.

#### **SECTION G. BIOSOLIDS LIMITATIONS AND MONITORING REQUIREMENTS**

1. The permittee shall submit a report 60 days prior to disposal of biosolids. The report shall include:
  - (a) A map showing biosolids handling facilities (e.g. digesters, lagoons, drying beds, incinerators, location of land application and surface disposal sites).
  - (b) The quantity of biosolids produced in dry metric tons.
  - (c) The treatment applied to biosolids including process parameters. For example, if the biosolids is digested, report the average temperature and retention time of the digester. If drying beds are used, report depth of application and drying time. If composting is used, report the temperature achieved and duration. Also report dewatering methods and percent biosolids of final reports.
  - (d) Disposal methods (e.g., 50% to landfill, 40% land applied, 10% sold as commercial product). Report the names and locations of all facilities receiving waste.
  - (e) If biosolids are to be land-applied, analyses shall be conducted and submitted for Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Molybdenum, Zinc, and Selenium, and for organic-N, ammonium-N, and nitrate-N. The analyses shall be performed using the methods in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846) and test results shall be expressed in milligram (mg) pollutant per kilogram (kg) biosolids on a 100% dry weight basis.
  - (f) If biosolids are placed in a surface disposal site, analyses shall be submitted for Arsenic, Chromium, and Nickel. A groundwater monitoring plan shall be submitted or a certification from a groundwater scientist that there is no potential for groundwater contamination.

2. The permittee shall comply with all standards for biosolids use and disposal established under Section 405(d) of the Clean Water Act, including existing standards under 40 CFR Parts 257, 258 and 503.
3. Reports for biosolids monitoring shall be submitted to:

Regional Biosolids Coordinator  
 US EPA (WTR-7)  
 75 Hawthorne Street  
 San Francisco, CA 94105-3901

## SECTION H. RECEIVING WATER MONITORING REQUIREMENTS AND CONDITIONS

1. The permittee shall conduct the following receiving water monitoring program (*i.e.*, water column monitoring) in Class A marine receiving waters in Tanapag Harbor (named Puerto Rico Industrial) of the Philippine Sea. The permittee shall verify all station locations (latitude and longitude) and submit this information with a map showing the locations of these stations in the first quarterly receiving water monitoring report.

(a) Water Column Monitoring Stations

Station Name	Location	Region	Site	Comments
ZID-1	49 feet <b>seaward</b> from the terminus of the Saipan Lagoon Outfall, on the axis of the outfall/diffuser system	1	n/a	n/a
ZID-2	49 feet <b>shoreward</b> from the terminus of the Saipan Lagoon Outfall, on the axis of the outfall/diffuser system	1	n/a	n/a
N. Puerto Rico Dump Beach	n/a	1	11.1	n/a

(b) Water Column Monitoring

Receiving Water Characteristic	Units	Site	Monitoring Frequency	Sample Type/ Sampling Depths *
Fecal coliform	CFU/100 mL	ZID-1, ZID-2, 11.1	Weekly	Grab
Enterococci	CFU/100 mL	"	"	"
pH	units	"	"	"
Total Nitrogen	mg/L	"	"	"
Total Phosphorous	mg/L	"	"	"
Dissolved Oxygen	mg/L	"	"	"
Turbidity	NTU	"	"	Nephelometer
Chlorophyll a	µg/l	"	"	Grab
* For grab samples, the sampling depth profile at each station is 0.5 m and 5 m below the surface. Samples shall be collected and analyzed according to <i>Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods</i> (EPA 430/9-86-004), or as directed by CNMI DEQ.				

2. The permittee shall submit quarterly water column monitoring reports to USEPA Region 9 and CNMI DEQ by the 28th of April, July, October, and January for each period covering the previous three calendar months. These reports shall include:
- (a) A description of climatic and receiving water characteristics at the time of sampling (*e.g.*, weather observations, floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling, tide height, *etc.*).
  - (b) A description of the sample collection and preservation procedures used in the receiving water monitoring program.
  - (c) A description of sample stations, including differences unique to each station (*e.g.*, station location, sediment grain size, distribution of bottom sediments, rocks, shell litter, calcareous worm tubes, *etc.*)
  - (d) A description of the specific method used for laboratory analysis.
  - (e) An in-depth discussion of the results of the receiving water monitoring program with regard to compliance with this permit and Section 403(c) of the Clean Water Act. All tabulations and computations shall be explained.



3. At the direction of USEPA Region 9 and CNMI DEQ, the permittee shall submit for USEPA Region 9 and CNMI DEQ approval a revised water quality monitoring program and/or a sediment quality, biological resources, and/or human health risk monitoring program; *CWA Section 403: Procedural and Monitoring Guidance* (EPA 842-B-94-003, 1994) should be consulted in conjunction with development of the monitoring program.

## SECTION I. GENERAL MONITORING AND REPORTING REQUIREMENTS

1. The results of all monitoring shall be submitted in such a format as to allow direct comparison with effluent limitations and permit requirements. Monitoring results shall be reported on monthly Discharge Monitoring Report (DMR) forms (EPA No. 3320-1), to the extent that the results reported may be entered on the forms. Monthly DMR forms shall be submitted quarterly on the 28<sup>th</sup> day of the month following the previous quarterly reporting period; for example, the three monthly DMR forms for the reporting period January through March shall be submitted by April 28<sup>th</sup>. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the USEPA Region 9 and the CNMI DEQ, at the following addresses:

USEPA Region 9	CNMI Division of Environmental Quality
Pacific Islands Office (CED-6)	P.O. Box 501304
75 Hawthorne Street	Gualo Rai Center
San Francisco, CA 94105-3901	Saipan, MP 96950
Telephone: (415) 972-3769	Telephone: (670) 664-8500

2. For effluent analyses, the permittee shall utilize an analytical method with a published Method Detection Limit (MDL) (as defined in Section B. of this permit) that is lower than the effluent limitations (or lower than the applicable numeric water quality criteria in the CNMI water quality standards). If all published MDLs are higher than the effluent limitations or water quality criteria, then the permittee shall utilize the analytical method with the lowest published MDL. The permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is equal to or less than the minimum level (ML); (as defined in Section E. of this permit). Effluent analyses for metals shall measure "total recoverable metal", except as provided under 40 CFR 122.45(c).
3. For samples collected during each monthly reporting period, report on the monthly DMR form:
  - (a) The *maximum value*, if the maximum value is greater than the ML or *NODI (Q)*, if the maximum value is greater than or equal to the

laboratory's MDL, but less than the ML or *NODI (B)*, if the maximum value is less than the laboratory's MDL, and

- (b) 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)*, if more than one sample is collected during the monthly reporting period.
4. As an attachment to each monthly DMR form, the permittee shall report for all parameters with monitoring requirements specified under Section A of this permit the following: the analytical method number or title, preparation and analytical procedure utilized by the laboratory, published MDL, and ML; the laboratory's MDL, the standard deviation (S) from the laboratory's MDL study; and the number of replicate analyses (n) used to compute the laboratory's MDL.
  5. 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 and description of project management including the roles and responsibilities of 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/QC samples; preservatives and holding times for the samples 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 USEPA Region 9 and CNMI DEQ, and how the permittee will resolve data quality issues and identify limits on use of the data.

6. 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 USEPA Region 9 or CNMI DEQ upon request. The permittee shall review its QA Manual annually and revise it, as appropriate.
7. 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 receipt condition, holding time, and preservation.

#### **SECTION J. TWENTY-FOUR HOUR REPORTING OF NONCOMPLIANCE**

1. The permittee shall inform CNMI DEQ of all bypasses to the collection and treatment system, including all sanitary sewer overflows (SSOs), immediately (within one hour) upon knowledge of the bypass/SSO. Additionally the permittee shall provide a written report summarizing all bypasses/SSOs to CNMI DEQ and USEPA Region 9 on or before the 15<sup>th</sup> day of each month, for the previous calendar month. This report shall include, the date, time, and location of all bypasses/SSOs, a brief description of the cause of each bypass/SSO, and corrective actions taken by the permittee.
2. In accordance with 40 CFR 122.41(1)(6), the permittee shall report any noncompliance which may endanger health or the environment. Any notification shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances to USEPA Region 9 and CNMI DEQ at the following telephone persons or their offices:

Michael Lee  
 USEPA Region 9  
 Pacific Islands Office (CED-6)  
 75 Hawthorne Street  
 San Francisco, CA 94105-3901  
 Telephone: (415) 972-3769

Frank M. Rabauliman  
 CNMI DEQ  
 P.O. Box 501304  
 Gualo Rai Center  
 Saipan, MP 96950  
 Telephone: (670) 664-8500

3. If the permittee is unsuccessful in contacting the person(s) above, the permittee shall report by 9 a.m. on the first business day following the noncompliance.

4. A written submission shall also be provided within five (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 dates and times, and, if the noncompliance has not been corrected, the time it is expected to continue; and steps or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
5. In accordance with Section 12 of the CNMI Water Quality Standards, the permittee shall allow the Director (or his authorized representative) prompt access to the Sadog Tasi WWTP and appurtenances for the purpose of inspecting the premises for compliance with the terms of the water quality certification. The inspection may be made without advance notice to the permittee, with good purpose, at the discretion of the Director, but shall be made at reasonable times, unless an emergency dictates otherwise.