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 NOs. GU0020141, GU0020087, GU0020222, GU0020273

In compliance with the provisions of the Clean Water Act ("CWA") (Public Law 92-500, as amended, 33 U.S.C. 1251 et seq.), the following discharger is authorized to discharge from the identified facilities at the outfall location(s) specified below, in accordance with the effluent limits, monitoring requirements, and other conditions set forth in these permits. These permits authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

Discharger Name	Guam Waterworks Authority
Discharger Address	Ste 200, GBNPSB, 688 Route 15 Mangilao, GU 96913-6203

Permit Number	**GU0020141**			
Facility Name	Northern District Sewage Treatment Plant			
Facility Location Address	Route 34, Harmon Annex Dededo, GU 96912			
Facility Rating	Major			
Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
001	Domestic Wastewater	13˚ 33' 8.34" N	144˚ 48' 25.98" E	Philippine Sea

Permit Number	**GU0020087**			
Facility Name	Agaña/Hagåtña Sewage Treatment Plant			
Facility Location Address	Marine Corps Drive/ Route 1 Hagåtña, GU 96932			
Facility Rating	Major			
Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
002	Domestic Wastewater	13˚ 29' 13.5" N	144˚ 44' 51.36" E	Philippine Sea

Permit Number	**GU0020222**			
Facility Name	Agat-Santa Rita Wastewater Treatment Plant			
Facility Location Address	Route 2A, Tipalao Agat, GU 96928			
Facility Rating	Major			
Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
003	Domestic Wastewater	13˚ 24' 48" N	144˚ 38' 30" E	Philippine Sea

Permit Number	**GU0020273**			
Facility Name	Umatac-Merizo Wastewater Treatment Plant			
Facility Location Address	Route 2 Merizo, GU 96915			
Facility Rating	Minor			
Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
004	Domestic Wastewater	13˚ 17' 8.5" N	144˚ 39' 57.5" E	Toguan River
004A	Domestic Wastewater	13˚ 17' 11" N	144˚ 39' 49" E	Toguan River

These permits were issued on:	
These permits shall become effective on:	
These permits shall expire at midnight on:	

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

Signed this _____ day of _____, <2019>, for the Regional Administrator.

_____
Tomás Torres, Director
Water Division

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Part I. GU0020141: Northern District Sewage Treatment Plant

A. Authorization

Effluent Limits – Outfall Number 001
The discharger is authorized to discharge domestic wastewater in compliance with the effluent limits and monitoring requirements specified in Table 1. The discharger shall monitor both the effluent and influent at each facility to evaluate compliance.

B. Effluent Limits and Monitoring Requirements

Table 1. Effluent Limits and Monitoring Requirements for Outfall 001 (Northern District)

Parameter[2]	Maximum Allowable Discharge Limits Concentration and Loading				Monitoring Requirements[3]	
	Average Monthly	Average Weekly	Maximum Daily	Units	Frequency	Sample Type[4]
Flow rate	12	—	[1]	MGD	Continuous	Metered
Temperature	[1]	—	[1]	˚C	Weekly	Grab
Biochemical oxygen demand (5-day)	30	45	-	mg/L	Weekly	Composite
	3,002	4,504	-	lbs/day		
	Average monthly percent removal shall not be less than 85%. [5]			%		
Total suspended solids	30	45	-	mg/L	Weekly	Composite
	3,002	4,504	-	lbs/day		
	Average monthly percent removal shall not be less than 85%. [5]			%		
pH	Within 6.5 and 8.5 at all times.			S.U.	Weekly	Grab
Oil and grease, total recoverable	10	—	15	mg/L	Weekly	Grab
Enterococci[6]	35	—	104	CFU/ 100mL	Weekly	Grab
Chlorine, Total Residual (TRC)[7]	1.5	—	2.46	mg/L	Weekly	Grab
Ammonia (as N)	[1]	—	[1]	mg/L	Quarterly	Composite
Nitrate-nitrogen	30.2	—	—	mg/L	Quarterly	Composite
Orthophosphate (PO_4-P)	8.0	—	—	mg/L	Quarterly	Composite
Copper	3.1	—	4.8	µg/L	Quarterly	Composite
Zinc	86	—	95	µg/L	Quarterly	Composite
Chronic Whole Effluent Toxicity[8]	Pass[8]			Pass/ Fail	Annually	Composite

Priority Pollutant Scan[9]	–	–	[1]	µg/L	Annually	Composite

(1) No effluent limits are set at this time but monitoring and reporting is required.
(2) All limitations for metals are applied as total recoverable.

(3) At least one sample per year must be taken concurrent with annual whole effluent toxicity monitoring. Monitoring must include a sufficiently sensitive analytical method. See section V.C. for specific requirements.

(4) All composite samples are 24-hour composite samples, unless the discharge is less than 24 hours, in which case the samples shall be taken at regular intervals for the duration of the discharge.

(5) Both the influent and the effluent shall be monitored. BOD_5 and TSS percent removal shall be calculated based on differences in concentration between the influent and effluent.

(6) Enterococcus effluent limitation units are set as 30-day geometric mean, in lieu of average monthly, and instantaneous maximum, in lieu of maximum daily.

(7) Total Residual Chlorine effluent limitation and effluent monitoring requirement is effective upon implementation of a disinfection system using chlorination; the permittee is required to notify EPA and Guam EPA 30 days prior to operation of a disinfection system.

(8) All chronic WET tests must be "Pass", and no test may be "Fail". "Pass" constitutes a rejection of the null hypothesis. See Part V.F. for specific WET requirements.

(9) See Attachment F for list of priority pollutants. For most current listing of all priority toxic pollutants see 40 CFR Part 423, Appendix A. Priority pollutant scan shall be conducted once during the fourth year of the five-year permit cycle and should be concurrent with Whole Effluent Toxicity test.

C. Receiving Water Monitoring

The discharger shall conduct quarterly receiving water quality monitoring at the locations specified in Table 2 for the parameters listed in Table 3. Monitoring locations have been established at both the edge of the mixing zone and a control location. Monitoring at each location shall include at least one surface, one mid-depth, and one bottom grab. All samples shall be water column samples; surface and bottom grabs shall be within two meters of the surface and sea floor, respectively.

Table 2. Receiving Water Monitoring Locations for Northern District

Notation	Description	Location
001-MZ	Edge of Mixing Zone	390-400 feet northwest of center of diffuser
001-AC	Ambient Control Station	Between 2,000 and 4,000 feet from discharge

Table 3. Receiving Water Monitoring Requirements for Northern District

Pollutant	Units	Frequency	Locations	Sample Type
Nitrate	mg/L	Quarterly	001-MZ, 001-AC	Depth Composite[1]

Pollutant	Units	Frequency	Locations	Sample Type
Orthophosphate	mg/L	Quarterly	001-MZ, 001-AC	Depth Composite
Zinc	µg/L	Quarterly	001-MZ, 001-AC	Depth Composite
Copper	µg/L	Quarterly	001-MZ, 001-AC	Depth Composite

(1) For purposes of this table, "depth composite" means an equal combination of grab samples from the three depths specified above (surface, mid-depth, and bottom)

Although no receiving water limitations exists, receiving water monitoring is used to consider future dilution credits and mixing. In addition to the pollutants listed in Table 6, EPA recommends the permittee monitor for any pollutants that are likely to receive limitations in future permits.

D. General Conditions for GWA Wastewater Facilities

The discharger shall comply with Part V. of this document describing general conditions applicable to all GWA wastewater facilities.

Part II. GU0020087: Agaña/Hagåtña Sewage Treatment Plant

A. Authorization

Effluent Limits – Outfall Number 002
The discharger is authorized to discharge domestic wastewater in compliance with the effluent limits and monitoring requirements specified in Table 4. The discharger shall monitor both the effluent and influent at each facility to evaluate compliance.

B. Effluent Limits and Monitoring Requirements

Table 4. Effluent Limits and Monitoring Requirements for Outfall 002 (Agaña/Hagåtña)

Parameter[2]	Maximum Allowable Discharge Limits Concentration and Loading				Monitoring Requirements[3]	
	Average Monthly	Average Weekly	Maximum Daily	Units	Frequency	Sample Type[4]
Flow rate	12	—	[1]	MGD	Continuous	Metered
Temperature	[1]	—	[1]	˚C	Weekly	Grab
Biochemical oxygen demand (5-day)	30	45	-	mg/L	Weekly	24 hr Composite
	3,002	4,504	-	lbs/day		
	Average monthly percent removal shall not be less than 85%. [5]			%		
Total suspended solids	30	45	-	mg/L	Weekly	24 hr Composite
	3,002	4,504	-	lbs/day		
	Average monthly percent removal shall not be less than 85%. [5]			%		
pH	Within 6.5 and 8.5 at all times.			S.U.	Weekly	Grab
Oil and grease, total recoverable	10	—	15	mg/L	Weekly	Grab
Enterococci[6]	35	—	104	CFU/ 100mL	Weekly	Grab
Chlorine, Total Residual (TRC)[7]	0.75	—	1.23	mg/L	Weekly	Grab
Ammonia (as N)	[1]	—	[1]	mg/L	Quarterly	Composite
Nitrate-nitrogen	15.2	—	—	mg/L	Quarterly	Composite
Orthophosphate (PO_4-P)	4.0	—	—	mg/L	Quarterly	Composite
Copper	3.1	—	4.8	µg/L	Quarterly	Composite
Silver	—	—	2.3	µg/L	Quarterly	Composite
Chronic Whole Effluent Toxicity[8]	Pass[8]			Pass/ Fail	Annually	Composite
Priority Pollutant Scan[9]	—	—	[1]	µg/L	Annually	Composite

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

(2) All limitations for metals are applied as total recoverable.

(3) At least one sample per year must be taken concurrent with annual whole effluent toxicity monitoring. Monitoring must include a sufficiently sensitive analytical method. See section V.C. for specific requirements.

(4) All composite samples are 24-hour composite samples, unless the discharge is less than 24 hours, in which case the samples shall be taken at regular intervals for the duration of the discharge.

(5) Both the influent and the effluent shall be monitored. BOD_5 and TSS percent removal shall be calculated based on differences in concentration between the influent and effluent.

(6) Enterococcus effluent limitation units are set as 30-day geometric mean, in lieu of average monthly, and instantaneous maximum, in lieu of maximum daily.

(7) Total Residual Chlorine effluent limitation and effluent monitoring requirement is effective upon implementation of a disinfection system using chlorination; the permittee is required to notify EPA and Guam EPA 30 days prior to operation of a disinfection system.

(8) All chronic WET tests must be "Pass", and no test may be "Fail". "Pass" constitutes a rejection of the null hypothesis. See Part V.F. for specific WET requirements.

(9) See Attachment F for list of priority pollutants. For most current listing of all priority toxic pollutants see 40 CFR Part 423, Appendix A. Priority pollutant scan shall be conducted once during the fourth year of the five-year permit cycle and should be concurrent with Whole Effluent Toxicity test.

C. Receiving Water Monitoring

The discharger shall conduct quarterly receiving water quality monitoring at the locations specified in Table 5 for the parameters listed in Table 6. Monitoring locations have been established at both the edge of mixing and a control location for each outfall. Monitoring at each location shall include at least one surface, one mid-depth, and one bottom grab. All samples shall be water column samples; surface and bottom grabs shall be within two meters of the surface and sea floor, respectively.

Table 5. Receiving Water Monitoring Locations for Agaña/Hagåtña

Notation	Description	Location
002-MZ	Edge of Mixing Zone	140 feet south of discharge
002-AC	Ambient Control Station	At least 1,000 feet from discharge, within Agaña Bay

Table 6. Receiving Water Monitoring Requirements for Agaña/Hagåtña

Pollutant	Units	Frequency	Locations	Sample Type
Nitrate	mg/L	Quarterly	002-MZ, 002-AC	Depth Composite(1)
Orthophosphate	mg/L	Quarterly	002-MZ, 002-AC	Depth Composite
Zinc	µg/L	Quarterly	002-MZ, 002-AC	Depth Composite
Copper	µg/L	Quarterly	002-MZ, 002-AC	Depth Composite

(1) For purposes of this table, "depth composite" means an equal combination of grab samples from the three depths specified above (surface, mid-depth, and bottom)

Although no receiving water limitations exists, receiving water monitoring is used to consider future dilution credits and mixing. In addition to the pollutants listed in Table 6, EPA recommends the permittee monitor for any pollutants that are likely to receive limitations in future permits.

D. General Conditions for GWA Wastewater Facilities

The discharger shall comply with Part V. of this document describing general conditions applicable to all GWA wastewater facilities.

Part III. GU0020222: Agat-Santa Rita Sewage Treatment Plant

A. Authorization

Effluent Limits – Outfall Number 003
The discharger is authorized to discharge domestic wastewater in compliance with the effluent limits and monitoring requirements specified in Table 7. The discharger shall monitor both the effluent and influent at each facility to evaluate compliance.

B. Effluent Limits and Monitoring Requirements

Table 7. Effluent Limits and Monitoring Requirements for Outfall 003 (Agat-Santa Rita)

Parameter[2]	Maximum Allowable Discharge Limits Concentration and Loading				Monitoring Requirements[3]	
	Average Monthly	Average Weekly	Maximum Daily	Units	Frequency	Sample Type[4]
Flow rate	1.6	—	[1]	MGD	Continuous	Metered
Temperature	[1]	—	[1]	˚C	Weekly	Grab
Biochemical oxygen demand (5-day)	30	45	-	mg/L	Weekly	Composite
	400	600		lbs/day		
	Average monthly percent removal shall not be less than 85%. [5]			%		
Total suspended solids	30	45	-	mg/L	Weekly	Composite
	400	600		lbs/day		
	Average monthly percent removal shall not be less than 85%. [5]			%		
pH	Within 6.5 and 8.5 at all times.			S.U.	Weekly	Grab
Oil and grease, total recoverable	10	—	15	mg/L	Monthly	Grab
Enterococci[6]	35	—	104	CFU/ 100mL	Monthly	Grab
Chlorine, Total Residual (TRC)[7]	[1]	—	[1]	mg/L	Weekly	Grab
Ammonia (as N)	[1]	—	[1]	mg/L	Quarterly	Composite
Nitrate-nitrogen	28.5	—	[1]	mg/L	Quarterly	Composite
Orthophosphate (PO_4-P)	6.3	—	[1]	mg/L	Quarterly	Composite
Copper	—	—	197	µg/L	Quarterly	Composite
Nickel	1,284	—	3,378	µg/L	Quarterly	Composite
Zinc	45.8	—	95.0	µg/L	Quarterly	Composite
Aluminum	—	—	8,457	µg/L	Quarterly	Composite
Arsenic	36	—	69	µg/L	Quarterly	Composite
Chlordane	.0022	—	.09	µg/L	Annually	Composite

Dieldrin	.00014	—	.71	µg/L	Annually	Composite
Chronic Whole Effluent Toxicity(8)	Pass(8)			Pass/ Fail	Annually	Composite
Priority Pollutant Scan(9)	—	—	(1)	µg/L	Annually	Composite

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

(2) All limitations for metals are applied as total recoverable.

(3) At least one sample per year must be taken concurrent with annual whole effluent toxicity monitoring. Monitoring must include a sufficiently sensitive analytical method. See section V.C. for specific requirements.

(4) All composite samples are 24-hour composite samples, unless the discharge is less than 24 hours, in which case the samples shall be taken at regular intervals for the duration of the discharge.

(5) Both the influent and the effluent shall be monitored. BOD_5 and TSS percent removal shall be calculated based on differences in concentration between the influent and effluent.

(6) Enterococcus effluent limitation units are set as 30-day geometric mean, in lieu of average monthly, and instantaneous maximum, in lieu of maximum daily.

(7) Total Residual Chlorine effluent monitoring requirement is effective upon implementation of a disinfection system using chlorination; the permittee is required to notify EPA and Guam EPA 30 days prior to operation of a disinfection system.

(8) All chronic WET tests must be "Pass", and no test may be "Fail". "Pass" constitutes a rejection of the null hypothesis. See Part V.F. for specific WET requirements.

(9) See Attachment F for list of priority pollutants. For most current listing of all priority toxic pollutants see 40 CFR Part 423, Appendix A. Priority pollutant scan shall be conducted once during the fourth year of the five-year permit cycle and should be concurrent with Whole Effluent Toxicity test.

C. Receiving Water Monitoring

The discharger shall conduct quarterly receiving water quality monitoring at the locations specified in Table 8 for the parameters listed in Table 9. Monitoring locations have been established at both the edge of mixing and a control location for each outfall. Monitoring at each location shall include at least one surface, one mid-depth, and one bottom grab. All samples shall be water column samples; surface and bottom grabs shall be within two meters of the surface and sea floor, respectively. Receiving water sampling may be conducted in conjunction with the U.S. Navy in compliance with their NPDES permit for Apra Harbor (GU0110019).

Table 8. Receiving Water Monitoring Locations for Agat-Santa Rita

Notation	Description	Location
003-MZ	Edge of Mixing Zone	120-130 feet southeast of discharge
003-AC	Ambient Control Station	At least 1,000 feet from discharge, within Tipalao Bay

Table 9. Receiving Water Monitoring Requirements for Agat-Santa Rita

Pollutant	Units	Frequency	Locations	Sample Type
Nitrate	mg/L	Quarterly	003-MZ, 003-AC	Depth Composite(1)
Orthophosphate	mg/L	Quarterly	003-MZ, 003-AC	Depth Composite
Zinc	µg/L	Quarterly	003-MZ, 003-AC	Depth Composite
Copper	µg/L	Quarterly	003-MZ, 003-AC	Depth Composite
Nickel	µg/L	Quarterly	003-MZ, 003-AC	Depth Composite
Arsenic	µg/L	Quarterly	003-MZ, 003-AC	Depth Composite
Aluminum	µg/L	Quarterly	003-MZ, 003-AC	Depth Composite

(1) For purposes of this table, "depth composite" means an equal combination of grab samples from the three depths specified above (surface, mid-depth, and bottom)

Although no receiving water limitations exists, receiving water monitoring is used to consider future dilution credits and mixing. In addition to the pollutants listed in Table 9, EPA recommends the permittee monitor for any pollutants that are likely to receive limitations in future permits.

D. General Conditions for GWA Wastewater Facilities

The discharger shall comply with Part V. of this document describing general conditions applicable to all GWA wastewater facilities.

Part IV. GU0020273: Umatac-Merizo Sewage Treatment Plant

A. Authorization

Effluent Limits – Outfall Number 004 and Internal Compliance Monitoring Point 004A
The discharger is authorized to discharge domestic wastewater in compliance with the effluent limits and monitoring requirements specified in Table 10. The discharger shall monitor both the effluent and influent at each facility to evaluate compliance.

Outfall 004 is located after all treatment has occurred, but prior to discharge entering the Toguan River. Outfall 004A is an internal monitoring and compliance point located after the Waste Stabilization Pond Treatment System and disinfection, but prior to Wetland Treatment System.

The discharge of effluent from outfall 004 is prohibited during dry weather. For the purposes of this prohibition, dry weather conditions are when Toguan River flow is less than 1.5 cubic feet per second ("cfs"). Discharge from internal compliance monitoring point 004A is not impacted by this prohibition.

B. Effluent Limits and Monitoring Requirements

Table 10. Effluent Limits and Monitoring Requirements for Outfall 004 (Umatac-Merizo)

Parameter	Maximum Allowable Discharge Limits Concentration and Loading				Monitoring Requirements[3]	
	Average Monthly	Average Weekly	Maximum Daily	Units	Frequency	Sample Type[4]
Flow Rate	.39	–	[1]	MGD	Continuous	Metered
River Flow[10]	–	–	1.5[11]	cfs	Continuous	Metered
Temperature	–	–	[1]	˚C	Weekly	Grab
Chlorine, Total Residual[7]	6.1	–	12	µg/L	Weekly	Grab
Dissolved Oxygen	–	–	[1]	mg/L	Monthly	Grab
Ammonia (as N)	[1]	–	[1]	mg/L	Quarterly	Composite
Ammonia Impact Ratio[11]	–	–	7.0	Ratio	Quarterly	Composite
Nitrate-nitrogen (as N)	4.6	–	–	mg/L	Quarterly	Composite
Orthophosphate	0.7	–	–	mg/L	Quarterly	Composite
Chronic Whole Effluent Toxicity[8]	Pass[8]			Pass/ Fail	Once/ permit term	Composite
Priority Pollutant Scan[9]	–	–	[1]	µg/L	Once/ permit term	Composite

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

(2) *Not Applicable*

(3) At least one sample over the course of the permit term must be taken concurrent with whole effluent toxicity monitoring. Monitoring must include a sufficiently sensitive analytical method. See section V.C. for specific requirements.

(4) Composites shall be taken over the course of a single discharge. All composite samples are 24-hour composite samples, unless the discharge is less than 24 hours, in which case the samples shall be taken at regular intervals for the duration of the discharge.

(5) *Not Applicable*

(6) *Not Applicable*

(7) Total Residual Chlorine effluent limitation and effluent monitoring requirement is effective upon implementation of a disinfection system using chlorination; the permittee is required to notify EPA and Guam EPA 30 days prior to operation of a disinfection system.

(8) All chronic WET tests must be "Pass", and no test may be "Fail". "Pass" constitutes a rejection of the null hypothesis. Whole Effluent Toxicity test for Umatac-Merizo shall be conducted once during the fourth year of the five-year permit cycle. See Part V.F. for specific WET requirements.

(9) See Attachment F for list of priority pollutants. For most current listing of all priority toxic pollutants see 40 CFR Part 423, Appendix A. Priority pollutant scan shall be conducted once during the fourth year of the five-year permit cycle and should be concurrent with Whole Effluent Toxicity test.

(10) Effluent limit for flow represented as a minimum. Monitoring for river flow shall be conducted in-stream. Reporting of river flow is required to ensure compliance with dry weather discharge prohibition. River data shall be collected up to 1,000 feet upstream of the discharge point.

(11) The Ammonia Impact Ratio (AIR) is calculated as the ratio of the ammonia value in the effluent and the applicable ammonia standard from section 5103.C.3. in the Guam WQS multiplied by the dilution factor. See Attachment D for a sample log to help calculate and record the AIR values and Attachment E for pH-dependent, dilution-adjusted water quality objectives. The AIR is the ammonia effluent limit and must be reported in the DMRs in addition to the ammonia and pH values. Monitoring for pH and ammonia must be conducted concurrently in order for the AIR to be calculated properly.

Table 11. Effluent Limits and Monitoring Requirements for Outfall 004A (Umatac-Merizo Internal Compliance Monitoring Point)

Parameter[2]	Maximum Allowable Discharge Limits Concentration and Loading				Monitoring Requirements[3]	
	Average Monthly	Average Weekly	Maximum Daily	Units	Frequency	Sample Type[4]
Biochemical oxygen demand (5-day)	45	65	—	mg/L	Weekly	Composite
	146	211	—	lbs/day		
	Average monthly shall not be less than 65 percent removal. [5]			%		
Total suspended solids	45	65	—	mg/L	Weekly	Composite
	146	211	—	lbs/day		
	Average monthly shall not be less than 65 percent removal. [5]			%		
pH[11]	Within 6.5 and 8.5 at all times.			S.U.	Weekly	Grab
Enterococcus[6][12]	35	—	108	CFU/ 100mL	Monthly	Grab
Oil and grease, total recoverable	10	—	15	mg/L	Quarterly	Grab

(1) *Not Applicable*

(2) *Not Applicable*

(3) At least one sample over the course of the permit term must be taken concurrent with whole effluent toxicity monitoring for Outfall 004. Monitoring must include a sufficiently sensitive analytical method. See section V.C. for specific requirements.

(4) Composites shall be taken over the course of a single discharge. All composite samples are 24-hour composite samples, unless the discharge is less than 24 hours, in which case the samples shall be taken at regular intervals for the duration of the discharge.

(5) Both the influent and the effluent shall be monitored. BOD_5 and TSS percent removal shall be calculated based on differences in concentration between the influent and effluent.

(6) Enterococcus effluent limitation units are set as 30-day geometric mean, in lieu of average monthly, and instantaneous maximum, in lieu of maximum daily.

C. Receiving Water Monitoring

The discharger shall conduct quarterly receiving water quality monitoring at the locations specified in Table 11 for the parameters listed in Table 12. Monitoring locations have been established at both the edge of mixing and a control location for each outfall.

Table 12. Receiving Water Monitoring Locations for Umatac-Merizo

Notation	Description	Location
004-MZ	Edge of Mixing Zone	30-34 feet downstream of discharge to Toguan River
004-AC	Ambient Control Station	Up to 50 feet upstream of discharge to Toguan River.

Table 13. Receiving Water Monitoring Requirements for Umatac-Merizo

Pollutant	Units	Frequency	Locations	Sample Type
Nitrate	mg/L	Quarterly	004-MZ, 004-AC	Grab
Orthophosphate	mg/L	Quarterly	004-MZ, 004-AC	Grab

Although no receiving water limitations exists, receiving water monitoring is used to consider future dilution credits and mixing. In addition to the pollutants listed in Table 6, EPA recommends the permittee monitor for any pollutants that are likely to receive limitations in future permits.

D. Best Management Practices for the Protection of the Mariana Common Moorhen

The permittee shall implement the following Best Management Practices (BMPs) in order to avoid or minimize effects to the Mariana common moorhen:

1. A biological monitor shall conduct Mariana common moorhen and nest surveys at the proposed project site prior to project initiation.

2. Any documented nest or broods within the project vicinity shall be reported to Fish and Wildlife Service within 48 hours.

3. A 100-foot (30 meter) buffer shall be established and maintained around all active nests and/or broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration shall occur within this buffer.

4. The Fish and Wildlife Service shall be notified immediately prior to project initiation and provided with the results of pre-construction waterbird surveys.

5. A biological monitor(s) shall be present on site during all construction or earth moving activities to ensure that Mariana common moorhen and nests are not adversely impacted.

6. If a Mariana common moorhen is observed within the project site, or flies into the site while activities are occuring, the biological monitor shall halt all activities within 100 foot (30 meters) of the individual(s). Work shall not resume until the listed waterbird(s) leave the area of their own accord.

7. All on-site personnel shall receive instruction regarding ESA-listed species and what to do when listed species are present within the project area.

8. A litter control program shall be implemented at the project site. All equipment, materials, debris, and vegetation clippings shall be removed upon completion of work.

9. A post-construction report shall be submitted to Fish and Wildlife Service within 30 days of the completion of the project. The report shall include the results of Mariana common moorhen surveys, the location and outcome of documented nests, and any other relevant information.

10. For the long-term maintenance of the project site, the above listed BMPs (1-9) shall continue to be implemented.

E. General Conditions for GWA Wastewater Facilities

The discharger shall comply with Part V. of this document describing general conditions applicable to all GWA wastewater facilities.

Part V. GENERAL CONDITIONS APPLICABLE TO ALL GWA WASTEWATER FACILITIES

A. General Requirements

1. The permittee shall ensure diffusers are installed, operated, and maintained as specified in the permit application and consistent with the dilution assumptions made in the fact sheet mixing zone calculations.

2. The discharge of pollutants at any point other than the outfall numbers specifically authorized in these permits is prohibited.

3. The discharge of toxic substances, including, but not limited to, pesticides, herbicides, heavy metals, and organic chemicals, in toxic amounts outside of the approved mixing zone is prohibited.

4. Except as otherwise authorized through the effluent limitation tables above, the discharge shall not cause the following conditions in the receiving water outside of the approved mixing zone:

    a. Visible floating materials, grease, oil, scum, foam and other floating material which degrades water quality or use;

    b. Visible turbidity, deposits, or otherwise adversely affect aquatic life;

    c. Objectionable color, odor or taste;

    d. Conditions that are toxic or harmful to humans, animals, plants, or aquatic life;

    e. Growth of undesirable aquatic life;

    f. Temperature to deviate more than 1.0 degree Centigrade from ambient conditions;

    g. Turbidity to exceed 1.0 NTU over ambient conditions;

    h. Concentration of dissolved oxygen to be less than 75% of saturation.

5. The discharge of radioactive wastes and contaminated radioactive materials is prohibited.

B. Sampling

1. All samples shall be representative of the volume and quality of effluent discharged over the sampling and reporting period. The Permittee shall identify the effluent sampling location used for each discharge.

2. Samples shall be taken at the following locations:

a. Representative influent samples shall be taken after the last addition to the collection system and prior to inplant return flow and the first treatment process, where representative samples can be obtained.

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

3. For intermittent discharges, the permittee shall monitor on the first day of discharge. The permittee is not required to monitor more than the minimum frequency required in the effluent limitation tables, above. During periods of no discharge, the permittee is not required to monitor neither the influent nor the effluent.

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 this permit, the permittee shall utilize 40 CFR 136 test methods with Method Detection Levels "MDLs" and Minimum Levels "MLs" that are lower than the effluent limits in this permit. For parameters without an effluent limit, the permittee must use an analytical method at or below the level of the applicable water quality criterion for the measured pollutant or the amount of the pollutant is high enough that the method detects and quantifies the level of pollutant in the discharge. If all MDLs or MLs are higher than these effluent limits or criteria concentrations, then the permittee shall utilize the test method with the lowest MDL or ML. In this context, the permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is equal to or less than the ML. Influent and effluent analyses for metals shall measure "total recoverable metal", except as provided under 40 CFR 122.45(c).

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

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

   b. The preparation procedure used by the laboratory,

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

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

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

   f. The laboratory's lowest calibration standard.

   As part of each DMR submittal, the permittee shall notify EPA of any changes to the laboratory's test methods, MDLs, MLs, or calibration standards. If there are any

changes to the laboratory's test methods, MDLs, MLs, or calibration standards, these changes shall be summarized in an attachment to the subsequent DMR submittal.

3. The permittee shall develop a Quality Assurance ("QA") Manual for the field collection and laboratory analysis of samples. The purpose of the QA Manual is to assist in planning for the collection and analysis of samples and explaining data anomalies if they occur. The QA Manual shall be developed (or updated) within 90 days of permit issuance. At a minimum, the QA Manual shall include the following:

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

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

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

    d. Discussion of how the permittee will perform data review, report results, and resolve data quality issues and identify limits on the use of data.

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

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

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

        The *maximum value*, if the maximum value of all analytical results is greater than or equal to the ML; or

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

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

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

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

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

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

7. The permittee shall electronically submit Discharge Monitoring Reports and Biosolids/Sewage Sludge Reports using NetDMR (http://www.epa.gov/netdmr) and NeT (http://www.epa.gov/compliance/national-pollutant-discharge-elimination-system-npdes-electronic-reporting-tool-net-fact), respectively.

8. DMRs shall be reported quarterly for all outfalls. DMRs shall be submitted by the 28th day of the month following the previous reporting period. For example, the three DMR forms for January, February, and March are due on April 28th. Annual and quarterly monitoring must be conducted starting in the first complete quarter or calendar year following permit issuance. Reporting for annual monitoring is due on January 28th of the following year. A DMR must be submitted for the reporting period even if there was not any discharge. If there is no discharge from the facility during the reporting period, the permittee shall submit a DMR indicating no discharge as required.

9. The permittee shall submit either electronic or paper Discharge Monitoring Report to Guam EPA. Electronic reports may be sent to Maricar Queznon (Maricar.Queznon@epa.guam.gov), or the most appropriate Guam EPA official, while paper DMR forms shall be mailed to:

   Administrator
   Guam EPA
   P.O. Box 22439 GMF
   Barrigada, GU 9692

D. Permit Reopener(s)

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

2. In accordance with 40 CFR 122.44(c), EPA may promptly modify or revoke and reissue any permit issued to a treatment works treating domestic sewage (including "sludge only facilities") to incorporate any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the CWA, if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

E. Twenty-four Hour Reporting of Noncompliance

1. The permittee shall report any noncompliance which may endanger human health or the environment. The permittee is required to provide an oral report by directly speaking with an EPA and Guam EPA staff person within 24 hours from the time the permittee becomes aware of the noncompliance. If the permittee is unsuccessful in reaching a staff person within 24 hours from the time the permittee becomes aware of the non-compliance, the permittee shall provide notification by 9 a.m. Chamorro Standard Time (CST) on the first business day following the noncompliance. The permittee shall notify EPA and Guam EPA at the following telephone numbers:

   U.S. Environmental Protection Agency
   Wastewater Enforcement Section (ENF-3-1)
   (415) 947-4179
   (415) 972-3208

   Guam Environmental Protection Agency
   Administrator
   (671) 300 4759
   (671) 300-4781

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

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

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

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

3. EPA may waive the written report on a case-by-case basis for reports required under paragraph E.2, if the oral report has been received within 24 hours.

F. Chronic Whole Effluent Toxicity (WET) Requirements

1. Monitoring Frequency

   The permittee shall conduct annual chronic toxicity tests on 24-hour composite effluent samples for outfalls 001, 002, and 003 and once in the permit term for outfall 004 in the fourth year of the permit term.

2. Marine and Estuarine Species and Test Methods [Northern District (001), Agaña/Hagåtña (002), and Agat-Santa Rita (003)]

   The permittee shall use the most sensitive species is the fish, invertebrate, or alga species which demonstrates the largest percent effect level at the Instream Waste Concentration (IWC), where: IWC percent effect level = [(Control mean response − IWC mean response) ÷ Control mean response] × 100.

   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) 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.

   Chronic toxicity test samples shall be collected for each point of discharge at the designated NPDES sampling station for the effluent (i.e., downstream from the last treatment process and any in-plant return flows where a representative effluent sample can be obtained).

   The permittee shall conduct static non-renewal toxicity tests with the purple sea urchin, *Strongylocentrotus purpuratus*.

3. Freshwater Species and Test Methods [Umatac-Merizo (004)]

   The permittee shall use the most sensitive species is the fish, invertebrate, or alga species which demonstrates the largest percent effect level at the Instream Waste Concentration (IWC), where: IWC percent effect level = [(Control mean response − IWC mean response) ÷ Control mean response] × 100.

   Species and short-term test methods for estimating the chronic toxicity of NPDES effluents are found in the fourth edition of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR Part 136).

   The permittee shall conduct static renewal toxicity tests with the fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1000.0); the daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.01); and the green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).

4. Chronic WET Permit Limit

   There is a chronic toxicity effluent limit for all four outfalls. For these discharges, the determination of "Pass" or "Fail" from a single-effluent concentration chronic toxicity test at the IWC is determined using the Test of Significant Toxicity (TST) approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-003, 2010). For any one chronic toxicity test, the chronic WET permit limit that must be met is rejection of the null hypothesis (H_o):

   IWC mean response ≤ 0.75 × Control mean response.

   A test result that rejects this 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. 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. If a test result is reported as "Fail", then the permittee shall follow Section 6 (Accelerated Toxicity Testing and TRE/TIE Process) of Part V.F..

   The IWC for each outfall is listed in the table below:

Table 14: In-Stream Waste Concentration by Facility

Facility	Dilution Ratio	IWC (% Effluent)
Northern District	200:1	0.5
Agaña/Hagåtña	100:1	1.0
Agat-Santa Rita	45:1	2.2
Umatac-Merizo	6:1	14

5. Quality Assurance

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

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

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

   d. Effluent dilution water and control water for Umatac-Merizo should be standard synthetic dilution water, as described in the test methods manual *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002). 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. 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).

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

h. 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.

i. pH drift during a toxicity test may contribute to artifactual toxicity when pH-dependent toxicants (e.g., ammonia, metals) are present in the effluent. To determine whether or not pH drift is contributing to artifactual toxicity, the permittee shall conduct three sets of side-by-side toxicity tests in which the pH of one treatment is controlled at the pH of the effluent while the pH of the other treatment is not controlled, as described in Section 11.3.6.1 of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002). Toxicity is confirmed to be artifactual and due to pH drift when no toxicity above the chronic WET permit limit or trigger is observed in the treatments controlled at the pH of the effluent. Upon this confirmation and following written approval by the permitting authority, the permittee may use the procedures outlined in Section 11.3.6.2 of the chronic freshwater test methods manual to control effluent sample pH during the toxicity test.

6. Initial Investigation TRE Work Plan

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

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

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

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

7. Accelerated Toxicity Testing and TRE/TIE Process

a. If a chronic WET test returns a "fail" result 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 "failed" test result. If the additional toxicity test does not exceed the chronic WET permit limit or trigger, then the permittee may return to the regular testing frequency.

b. If the chronic WET test returns a "fail" result 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 a "failed" test result. If none of the additional toxicity tests return a "fail" result then the permittee may return to the regular testing frequency.

c. If one of the additional toxicity tests (in paragraphs 6.a or 6.b) returns a "fail" result, then, within 14 days of receipt of this test result, the permittee shall initiate a TRE using, according to the type of treatment facility, EPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002, 1999) or EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989). In conjunction, the permittee shall develop and implement a Detailed TRE Work Plan which shall include the following: further actions undertaken by the permittee to investigate, identify, and correct the causes of toxicity; actions the permittee will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and a schedule for these actions.

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

8. Reporting of Chronic Toxicity Monitoring Results

   a. The permittee shall report on the DMR for the month in which the toxicity test was conducted: "Pass" or "Fail" (based on the Welch's t-test result) and the calculated "percent mean response at IWC", where:

      percent mean response at IWC = ((Control mean response – IWC mean response) ÷ Control mean response)) × 100

i. 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.

ii. The permittee shall notify the permitting authority in writing within 14 days of receiving the "failed" chronic WET test result. 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.

9. 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.

G. Biosolids

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

1. General Requirements

a. All biosolids generated by the permittee shall be used or disposed of in compliance with the applicable portions of:

(1) 40 CFR 503 - for biosolids that are land applied, placed in a surface disposal site (dedicated land disposal site, monofill, or sludge-only parcel at a municipal landfill), or incinerated;

(2) 40 CFR 258 - for biosolids disposed of in a municipal solid waste landfill (with other material);

(3) 40 CFR 257 - for all biosolids use and disposal practices not covered under 40 CFR 258 or 503.

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

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

b. Duty to mitigate: The permittee shall take all reasonable steps to prevent or minimize any biosolids use or disposal which has a likelihood of adversely affecting human health or the environment.

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

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

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

f. The permittee shall assure that haulers transporting biosolids off site for treatment, storage, use, or disposal take all necessary measures to keep the biosolids contained. All haulers must have spill clean-up procedures. Trucks hauling biosolids that are not classified as Class A, as defined at 40 CFR 503.32(a), shall be cleaned as necessary after loading and after unloading so as to have no biosolids on the exterior of the truck body or wheels. Trucks hauling biosolids that are not Class A shall be tarped. Trucks hauling biosolids that are not Class A may not be used for hauling food or feed crops after unloading the biosolids, unless the permittee submits, for EPA approval, a hauling description of how trucks will be thoroughly cleaned prior to adding food or feed.

g. If biosolids are stored over two years from the time they are generated, then the permittee must ensure compliance with all surface disposal requirements under 40 CFR 503, Subpart C, or must submit a written notification to EPA and Guam EPA with the information under 40 CFR 503.20(b) demonstrating the need for longer temporary storage. During temporary storage (of any length of time) for biosolids that are not Class A, whether on the facility site or off-site, adequate procedures must be taken to restrict public access and access by domestic animals.

h. Any biosolids treatment, disposal, or storage site shall have facilities adequate to: divert surface runoff from adjacent areas, protect the site boundaries from erosion, and prevent any conditions that would cause drainage from the materials at the site to escape from the site. Adequate protection is defined as protection from at least a 100-year storm event and from the highest tidal stage that may occur.

2. Inspection and Entry

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

a. Enter upon all premises where biosolids produced by the permittee are treated, stored, used, or disposed of, either by the permittee or another party to whom the permittee transfers the biosolids for treatment, storage, use, or disposal;

b. Have access to and copy any records that must be kept under the conditions of this permit or 40 CFR 503, by the permittee or another party to whom the permittee transfers the biosolids for further treatment, storage, use, or disposal; and

c. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations used in biosolids treatment, storage, use, or disposal by the permittee or another party to whom the permittee transfers the biosolids for treatment, use, or disposal.

3. Monitoring

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

b. The constituents in paragraph 3.a shall be monitored at the following frequency, based on the volume of sewage solids generated per year:

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

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

c. Class 1 facilities (facilities with pretreatment programs or other facilities designated as Class 1 by the Regional Administrator) and Federal facilities with >5 mgd influent flow shall sample biosolids twice per year for pollutants listed under CWA section 307(a), using best practicable detection limits.

4. Landfill Disposal

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

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

5. Notification and Reporting

a. The permittee, either directly or through contractual arrangements with their biosolids management contractors, shall comply with the following notification requirements:

(1) Notification of noncompliance: The permittee shall notify EPA and Guam EPA of any noncompliance within 24 hours of becoming aware of the noncompliance, if the noncompliance may seriously endanger health or the environment. For other instances of noncompliance, the permittee shall notify EPA and Guam EPA, in writing, within five working days of becoming aware of the noncompliance. The permittee shall require their biosolids management contractors to notify EPA and Guam EPA of any noncompliance within these same timeframes.

b. The permittee shall submit an annual biosolids report to the EPA Region 9 Biosolids Coordinator and Guam EPA by February 19 of each year through CDX NeT for the period covering the previous calendar year, in accordance with Section .V.C.8., General Monitoring and Reporting, of this permit. This report shall include:

(1) The amount of biosolids generated that year and the amount of biosolids accumulated from previous years, in dry metric tons.

(2) Results of all pollutant monitoring required in the Monitoring section, above, reported on a 100% dry weight basis.

(3) Demonstrations and certifications of pathogen reduction methods and vector attraction reduction methods, as required in 40 CFR 503.17 and 503.27.

(4) Names, mailing addresses, and street addresses of persons who received biosolids for storage, further treatment, or disposal in a municipal waste landfill, or for other use or disposal methods not covered above, and the tonnages delivered to each.

H. Pretreatment

1. Within one year after permit issuance, the discharger shall submit for review a written description of the pretreatment program. The written description of the pretreatment program shall consist of the following chapters:

   a. *Chapter 1* – Organization and Multi-jurisdiction Implementation
   This chapter shall describe the overall program structure as well as contain descriptions of the treatment plants, collection systems, reclaim systems, and the service area (including political boundaries).

   b. *Chapter 2* – Legal Authority
   This chapter shall contain a revised sewer use Guam Administrative Rules Title 28 ("GAR 28") revisions and all multi-jurisdictional agreements. The sewer use GAR 28 revisions shall be submitted as a final draft ready for adoption and implementation pending approval of the local limits by EPA.

   c. *Chapter 3* – Local Limits
   This chapter shall contain the technical basis for the local limits. This shall include the analyses necessary to determine the maximum headworks loadings for both wastewater treatment plants and the maximum pollutant levels protective of the collection system, as well as the method of allocating allowable loadings to the users, a schedule of public hearings and outreach, and the GAR 28 revision procedures. The local limits can be numerical concentrations, loading limits, prohibitions or control strategies.

   d. *Chapter 4* – Identification of Non-domestic Users
   This chapter shall contain the procedures used in the initial industrial user survey as well as the procedures to be used for on-going updates. This chapter shall also include the current inventory of industrial users, by non-domestic sewer connection, and of the zero-discharging categorical industrial users who comply with their Federal standards by not discharging process wastewaters.

   The inventory shall indicate the following for each industrial user and zero-discharging categorical industrial user:

   1) Whether it qualifies as a significant industrial user;

   2) The average and peak flow rates;

   3) The SIC code;

   4) The pretreatment-in-place; and

5) The local permit status.

e. *Chapter 5* – Permits and Fact Sheets

This chapter shall describe the permitting procedures and include a fact sheet and final draft permit for each significant industrial user to be issued upon approval of the local limits and GAR 28 revisions by EPA. The fact sheets must indicate the following for each significant industrial user and zero-discharging categorical industrial user:

1) The industry name, address, owner or plant manager;

2) The permit expiration date (not to exceed five years in duration);

3) A description of the facility including the products made or services provided, building names, the process in each building, and when current operations began;

4) The identification of each sewer connection;

5) A description of the contributing waste streams that comprise each identified non-domestic discharge into the sewers;

6) The pretreatment-in-place for each identified non-domestic discharge to the sewers;

7) The classification by Federal point source category and the reasons justifying this classification;

8) The applicable Federal categorical pretreatment standards (adjusted if necessary to account for dilution), supporting production data (if necessary), and the compliance sampling point(s) where the standards apply;

9) The pollutants of concern and the compliance sampling point(s) where the local limits apply;

10) A site map indicating the locations of all compliance sampling point(s), sewer connections, and sewer laterals;

11) The sampling frequency by regulated pollutant for each compliance sampling point, and the supporting statistical rationale, to ensure that the sampling is representative of the wastewater discharge variability over the reporting period; and

12) The sampling protocol by regulated pollutant for each compliance sampling point to ensure that the samples collected to determine compliance with Federal standards are representative of the sampling day's discharge.

f. *Chapter 6* – Compliance Monitoring

This chapter shall describe the industrial user self-monitoring program and the discharger's oversight monitoring program. The compliance monitoring program must ensure that all sampling is representative over the reporting period and that each sample collected to determine compliance with Federal standards is representative of the sampling day's discharge. The compliance monitoring program must also set analytical detection limits that are sufficiently below Federal standards and local limits to allow the determination of non-compliance.

g. *Chapter 7* – Enforcement

This chapter shall establish the enforcement response plan to be used to address, at a minimum, each of the following types of violations:

1) Isolated and chronic violations of permit effluent limits;

2) Violations of permit effluent limits that result in any adverse impacts upon the treatment works such as pass-through, interference, sludge contamination, sewer line degradation, explosive or inflammability risks, or worker health and safety risks;

3) Failure to self-monitor or report;

4) The bypassing of pretreatment necessary to comply with permit effluent limits;

5) Dilution as a substitute for treatment necessary to comply with Federal categorical pretreatment standards;

6) The bypassing of compliance sampling or the tampering with sampling equipment; and

7) Willful or negligent violations.

h. *Chapter 8* – Resources

This chapter shall cover the budget, staffing, and equipment needs of the pretreatment program.

i. *Chapter 9* – Public Participation and Confidentiality

This chapter shall describe the administrative procedures required under 40 CFR 403.8(f)(1)(vii) and 403.8(f)(2)(vii).

2. 60 days after receiving approval of its GAR 28 revisions and local limits, the discharger shall adopt and implement its GAR 28 revisions.

3. 180 days after receiving approval of its GAR 28 revisions and local limits, the discharger shall issue all pending permits to its significant industrial users.

4. Within six months after permit issuance, the discharger shall submit a progress report that outlines the actions that have been completed in preparing for submission the written description of the pretreatment program as required in *Chapter 5* above.

5. All reports submitted pursuant to this permit shall be signed by an authorized signatory and shall include the following self-certifying statement:

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

6. All reports shall be submitted to:

   Regional Pretreatment Coordinator
   EPA Region IX
   NPDES Permits Office (WTR-2-3)
   75 Hawthorne Street
   San Francisco, CA 94105-3901

I. Fats, Oils, and Grease (FOG) Program

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

1. GAR 28 requirements.

   The permittee shall ensure GAR 28 requirements are in place to control FOG. At a minimum, the GAR 28 requirements shall specify:

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

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

2. Baseline Assessment.

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

3. Food Service Establishment Database within priority areas.

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

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

The permittee shall update the database annually.

4. Outreach Program

    a. The permittee shall conduct an outreach program to FSEs, restaurant associations, grease haulers, grease recyclers, and any municipal agencies that are responsibilities for controlling FOG. The outreach materials should include, at a minimum:

        i. Acceptable FOG handling and disposal practices;
        ii. Required operation and maintenance of grease traps;
        iii. FOG disposal and/or recycling methods; and
        iv. Instructions on how to properly operate and maintain grease traps and interceptors.

    b. The permittee shall conduct an outreach program to all residential customers explaining the proper disposal of oil and greases and the negative impacts from dumping grease down the drain. Outreach shall consist of, at a minimum:

        i. Leaflet materials with water bills and/or sewer bills which describe measures to control and properly dispose of FOG wastes;
        ii. Doorhangers distributed to all residences within 1,000 feet of any identified SSO;
        iii. Materials on GWA's website; and
        iv. Public service announcement or other methods of outreach to specific communities, especially priority and hotspot areas previously identified.

5. Inspection Program

    The permittee shall maintain an inspection program to evaluate, track and enforce its GAR 28 revisions to control FOG. The inspection program shall, at a minimum, include:

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

6. Annual Report

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

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

J. Sanitary Sewer Overflows

1. A Sanitary Sewer Overflow (SSO) is an overflow, spill, release, or diversion of wastewater from a sanitary sewer collection system that occurs prior to a treatment plant. Sanitary sewer overflows include a) overflows or releases of wastewater that reach waters of the US, b) overflows or releases of wastewater that do not reach waters of the US, and c) wastewater backups into buildings that are caused by blockages or flow conditions in a sanitary sewer other a building lateral. SSOs are generally caused by high volumes of infiltration and inflow (I/I), pipe blockages, pipe breaks, power failure, and insufficient system capacity.

2. All Sanitary Sewer Overflows are prohibited.

3. The permittee shall identify all SSOs. Concurrent with DMR submittal, the permittee shall submit to R9NPDES@epa.gov:

   a. The cause of the SSO;

   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 providing a location;

   f. Date(s) and time(s) of SSO;

   g. The ultimate destination of the overflow, 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 SSOs.

The permittee shall refer to Part V.E (Twenty-four hour reporting on noncompliance) of this document which contains information about reporting any noncompliance that may endanger human health or the environment. Part V.E. applies to SSOs. Submittal or reporting of any of this information does not provide relief from any subsequent enforcement actions for unpermitted discharges to waters of the United States.

K. Asset Management

The permittee shall maintain an asset management program to cover all treatment plants and collection systems. The permittee shall:

1. Utilize asset management and/or work order management software. The software shall:

    a. Inventory all critical assets valued over $5,000 into a single database. Assets may include, but are not limited to, sewer lines, manholes, outfalls, pump stations, force mains, catch basins, and wastewater treatment facility assets. Each entry shall include:

        (1) Name and identification number.
        (2) Location (GPS coordinate or equivalent identifier).
        (3) Current performance/condition.
        (4) Purchase and installation date.
        (5) Purchase price.
        (6) Replacement cost.
        (7) Quantitative consequence of failure.
        (8) Quantitative likelihood of failure.

    b. Automate work order production and tracking.

    c. Prioritize system maintenance and rehabilitation projects.

2. Create or update and submit to EPA an Asset Management Plan ("AMP") within one year of permit issuance. The components of the AMP shall include:

    a. **Rehabilitation and Replacement Plan**. The plan shall identify and prioritize upcoming asset rehabilitation and replacement projects costing greater than $5,000 and outline a proposed schedule for completion of each project.

    b. **Maintenance Plan**. The plan shall identify individual or categories of maintenance activities and frequency with which they are performed. The plan shall estimate ongoing and projected cost of maintenance activities.

c. **System Map**. A sewer collection system map shall incorporate assets from the asset management inventory. The map shall be color-coded to identify maintenance and rehabilitation priorities.

d. **Funding**. The plan shall create an accounting of current and projected funding sources, relevant expenses and financial reserves. Expenses may include operational, administrative, interest, or capital expenses. Funding sources may include federal, state, local or private grants, loans, or bonds, as well as connection and user fees.

e. **System Projections**. Evaluate growth projections of population and service area and potential vulnerabilities resulting from climate change over the next 30 years.

L. 401 Water Quality Certification

The permittee shall comply with all requirements set forth in Guam EPA's 401 Water Quality Certification issued on XX, 201X.

Part VI. STANDARD CONDITIONS

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

A. All NPDES Permits

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

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

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

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

   b. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation. The CWA provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who *knowingly* violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of note more than

$250,000 or imprisonment of not more than 15 years, or both. In the case of second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, such as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

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

2. Duty to reapply; at 40 CFR 122.41(b).

   If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. Any permittee with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director.

3. Need to halt or reduce activity not a defense; at 40 CFR 122.41(c).

   It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to mitigate; at 40 CFR 122.41(d).

   The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Proper operation and maintenance; at 40 CFR 122.41(e).

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

6. Permit actions; at 40 CFR 122.41(f).

   This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

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

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

8. Duty to provide information; at 40 CFR 122.41(h).

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

9. Inspection and entry; at 40 CFR 122.41(i).

   The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

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

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

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

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

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

    a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

    b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for

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

c. Records of monitoring information shall include:

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

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

(3) The date(s) analyses were performed

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

(5) The analytical techniques or methods used; and

(6) The results of such analyses.

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

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

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

a. All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22.) All permit applications shall be signed as follows:

(1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which

govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, an such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or

disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

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

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

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

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

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

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

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

d. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices. As of December 21, 2016 all reports and forms submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section

and 40 CFR 3 (including, in all cases, subpart D to part 3), 40 CFR 122.22, and 40 CFR 127.

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

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

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

f. Twenty-four hour reporting.

(1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A report shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times), and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combine sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR 3 (including, in all cases, subpart D to part 3), 40 CFR 122.22, and 40 CFR part 127.

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

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

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

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

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

g. Other noncompliance. The permittee shall report all instances of noncompliance not reported under 40 CFR 122.41(l)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section.

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

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

a. Definitions.

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

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

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

c. Notice.

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

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

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

d. Prohibition of bypass.

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

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

(ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and

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

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

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

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent cause by operational error, improperly

designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

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

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

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

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

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

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

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

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

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

16. Minor modifications of permits; at 40 CFR 122.63.

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

a. Correct typographical errors;

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

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

d. Allow for a change in ownership or operational control of a facility where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the Director.

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

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

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

17. Termination of permits; at 40 CFR 122.64.

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

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

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

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

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

18. Availability of Reports; pursuant to CWA section 308

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

19. Removed Substances; pursuant to CWA section 301

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

20. Severability; pursuant to CWA section 512

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

21. Civil and Criminal Liability; pursuant to CWA section 309

    Except as provided in permit conditions on "Bypass" and "Upset", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

22. Oil and Hazardous Substances Liability; pursuant to CWA section 311

    Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA.

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

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

B. Specific Categories of NPDES Permits

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

1. Publicly owned treatment works; at 40 CFR 122.42(b).
    a. All POTWs must provide adequate notice to the Director of the following:

(1) 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

(2) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

(3) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

b. The following condition has been established by EPA Region 9 to enforce applicable requirements of the Resource Conservation and Recovery Act. Publicly owned treatment works may not receive hazardous waste by truck, rail, or dedicated pipe except as provided under 40 CFR 270. Hazardous wastes are defined at 40 CFR 261 and include any mixture containing any waste listed under 40 CFR 261.31 through 261-33. The Domestic Sewage Exclusion (40 CFR 261.4) applies only to wastes mixed with domestic sewage in a sewer leading to a publicly owned treatment works and not to mixtures of hazardous wastes and sewage or septage delivered to the treatment plant by truck.

Attachment A: Definitions

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

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

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

4. A "composite" sample means a time-proportioned mixture of not less than eight discrete aliquots obtained at equal time intervals (e.g., 24-hour composite means a minimum of eight samples collected every three hours). The volume of each aliquot shall be directly

proportional to the discharge flow rate at the time of sampling, but not less than 100 ml. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.

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

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

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

8. A "grab" sample is a single sample collected at a particular time and place that represents the composition of the discharge only at that time and place. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.

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

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

calculate the ML.) At this point in the calculation, a different procedure is used for metals, than non-metals:

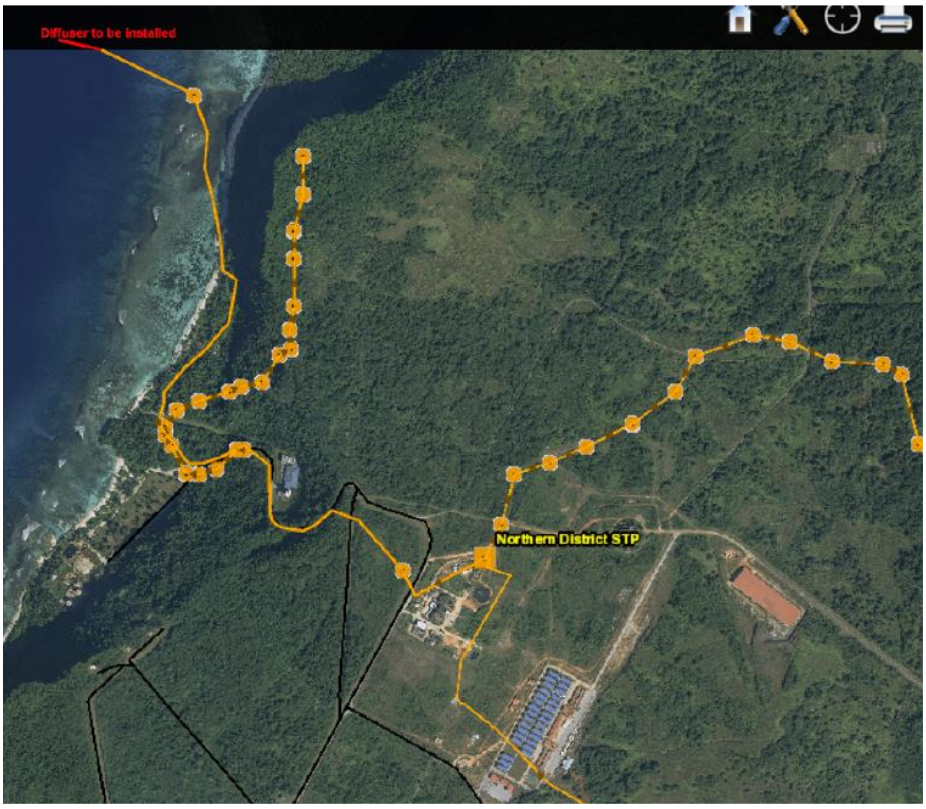
a. For metals, due to laboratory calibration practices, calculated MLs may be rounded to the nearest whole number.

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

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

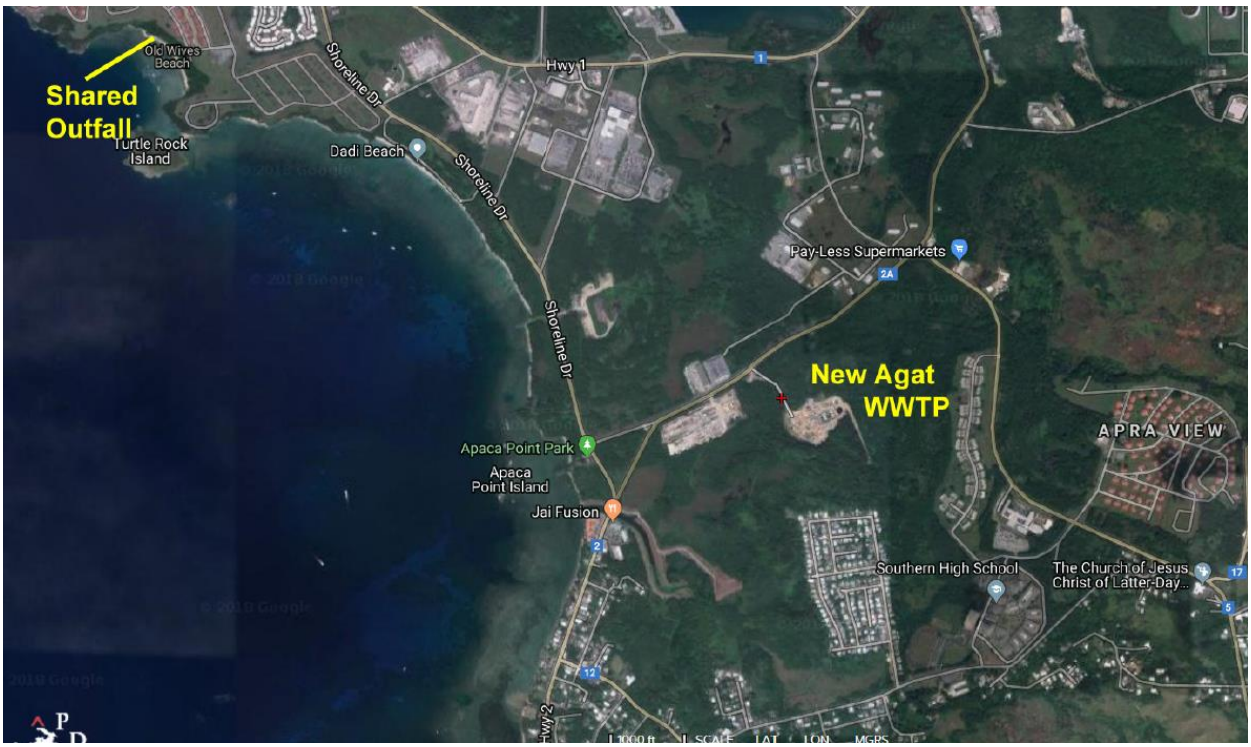
12. A "NODI(Q)" means that the concentration of the pollutant in a sample is detected but not quantified. NODI(Q) is reported when a sample result is greater than or equal to the laboratory's MDL, but less than the ML.

Attachment B: Location Maps



Northern District (GU0020141)

Agaña/Hagåtña (GU0020087)



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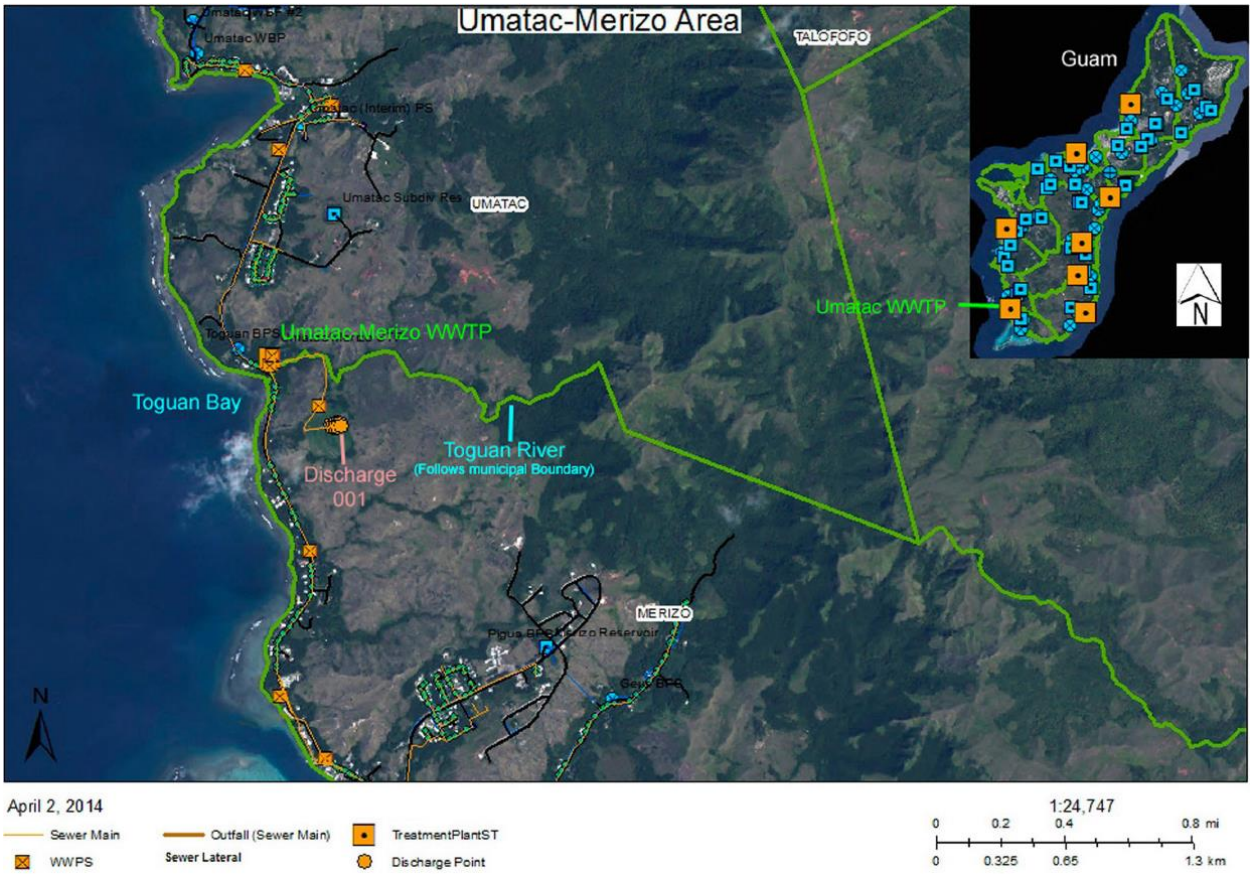
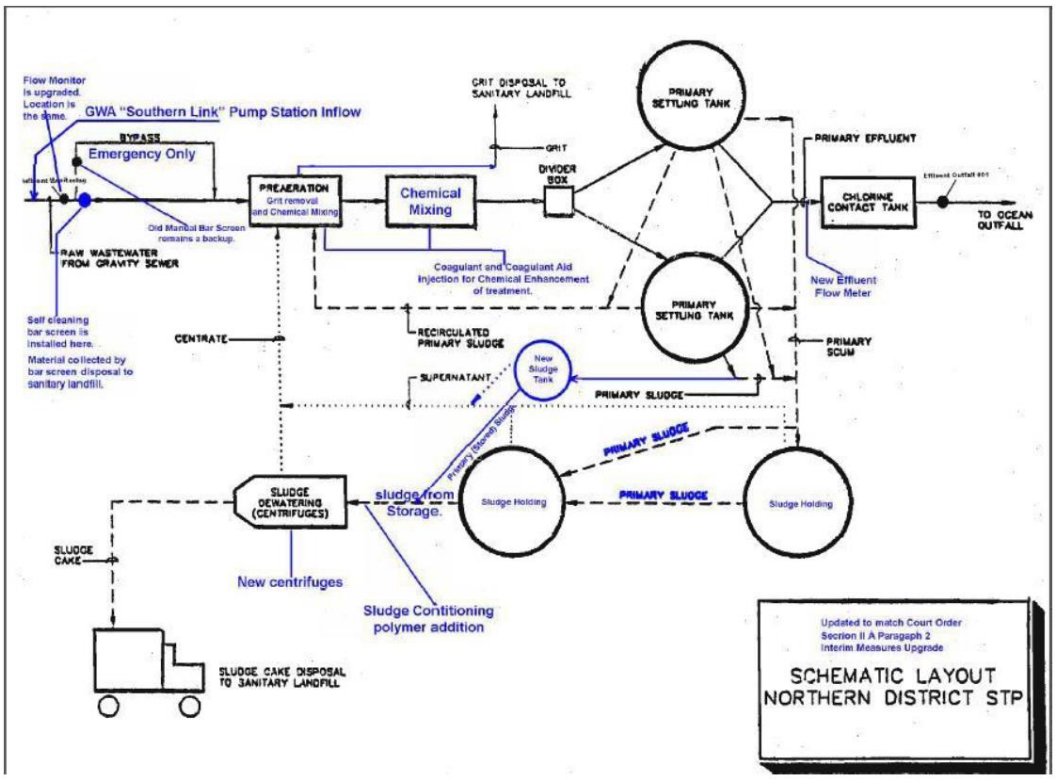


Umatac-Merizo (GU0020273)

Attachment C: Wastewater Flow Schematics



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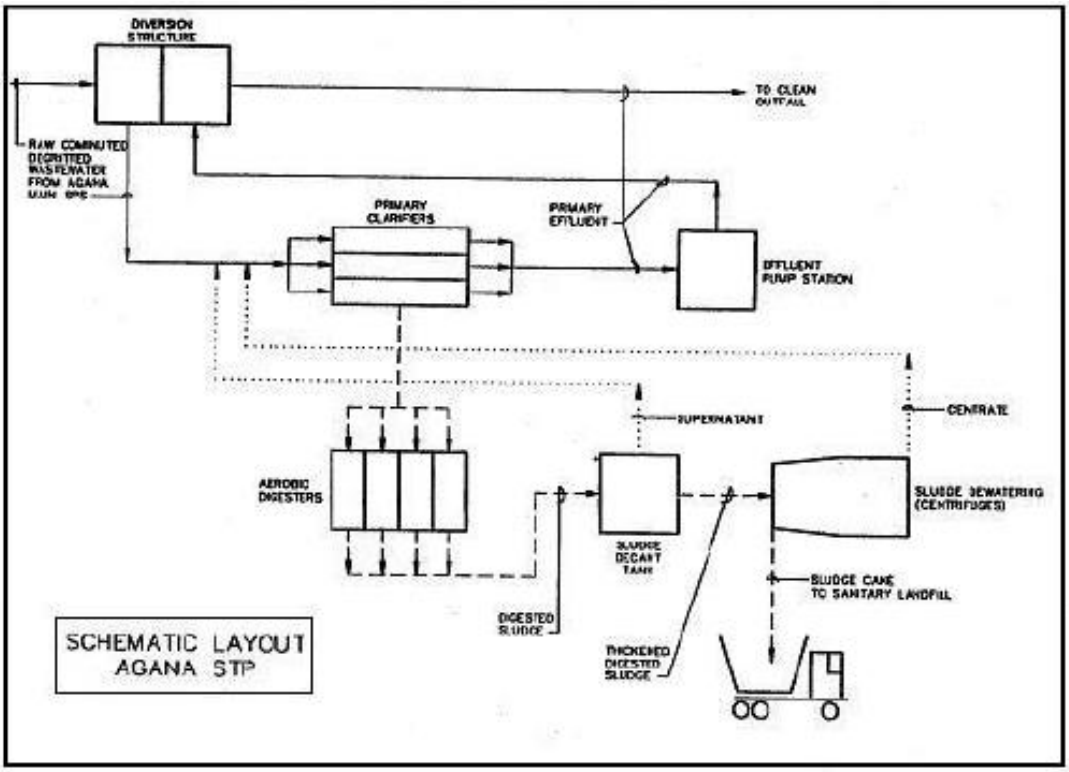
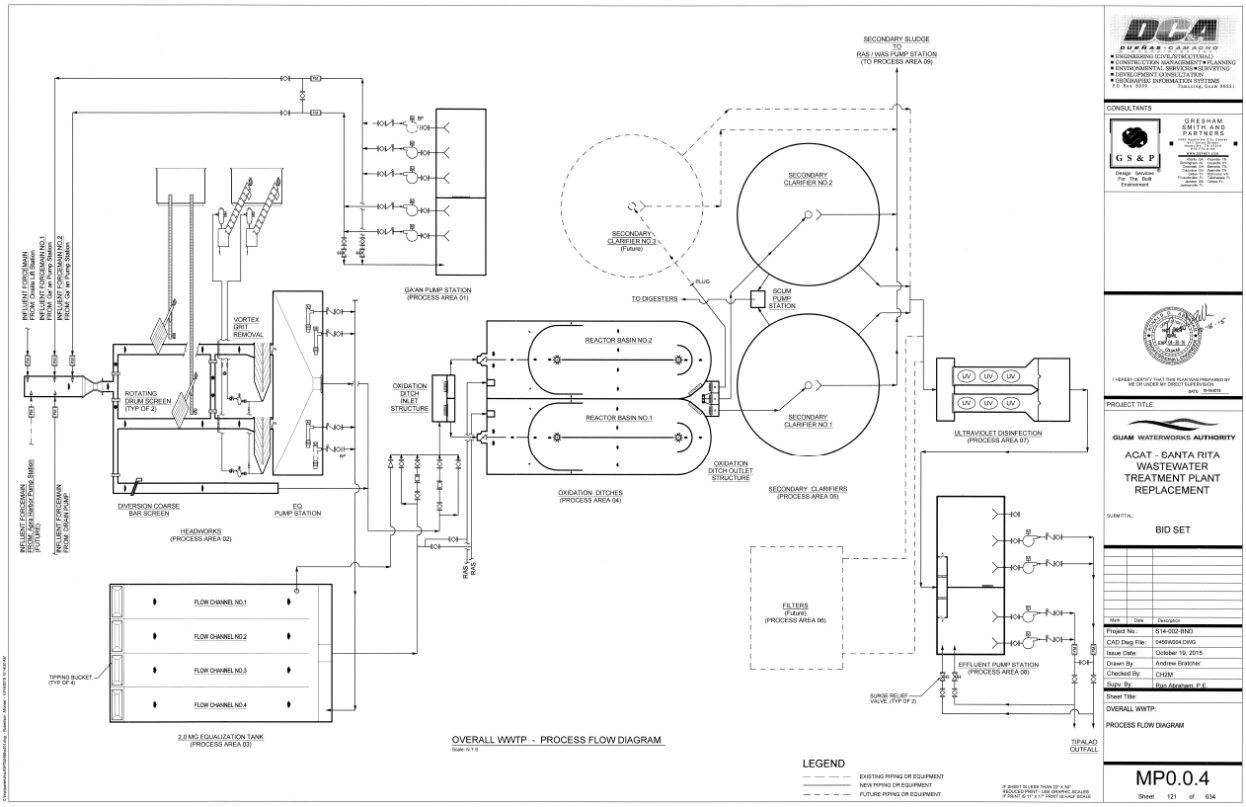
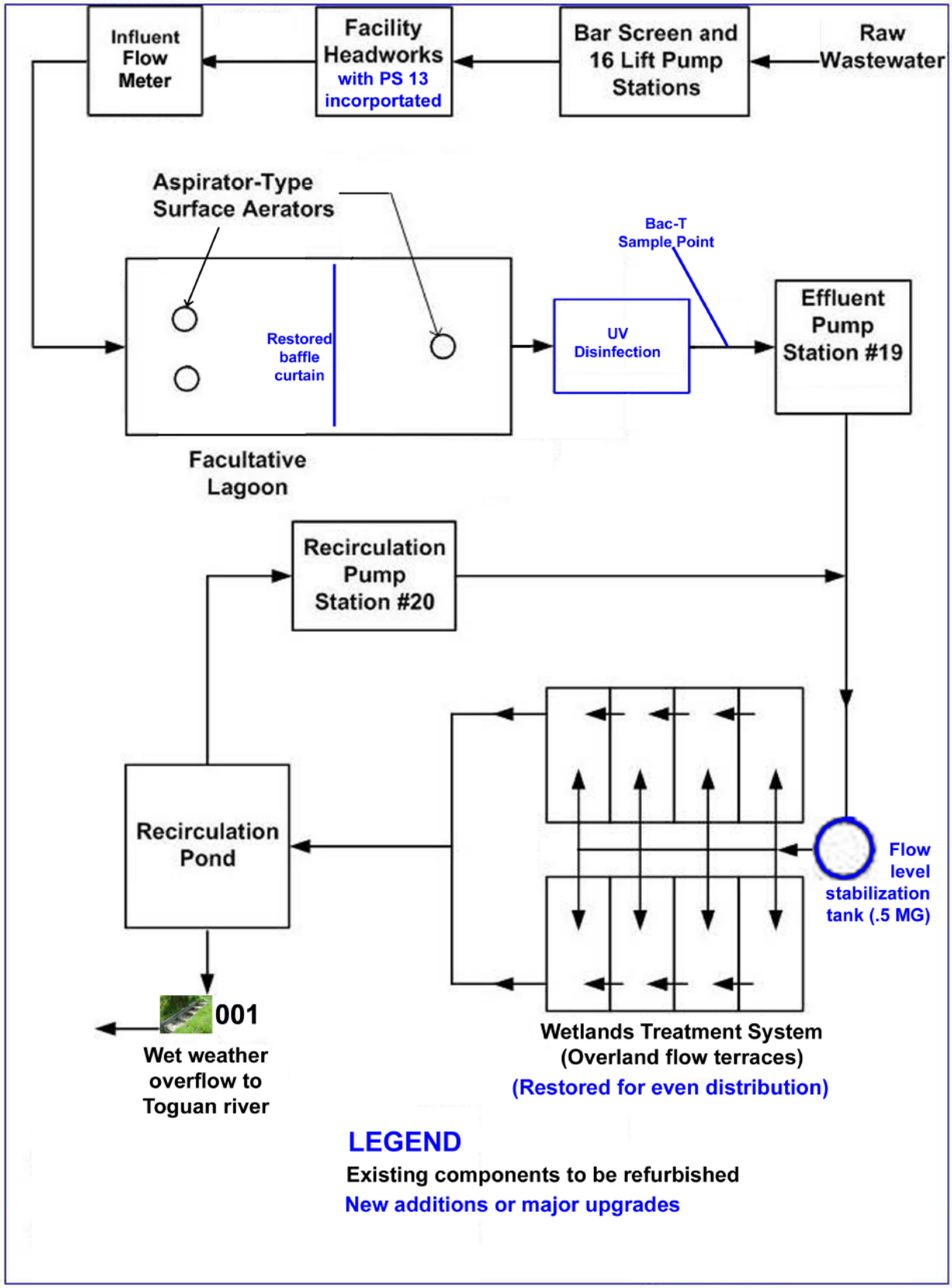


Agaña/Hagåtña



Agat-Santa Rita

Umatac-Merizo STP Schematic Flow Diagram (CO II(A)(15-16) Upgrade



Attachment D: Ammonia Data Log

A	B	C	D	E
Date of Sample	Ammonia Concentration in Effluent (mg/L N)	Effluent pH (s.u.)	Ammonia Objective. (From Attachment E)	Ammonia Impact Ratio (AIR) **(Column B /Column D)**

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

Attachment E. pH-Dependent Ammonia (as N) Objectives.

pH	Objective
6.5	3.48
6.6	3.43
6.7	3.36
6.8	3.29
6.9	3.19
7	3.08
7.1	2.96
7.2	2.81
7.3	2.65
7.4	2.47
7.5	2.28
7.6	2.08
7.7	1.87
7.8	1.66
7.9	1.46
8	1.27
8.1	1.09
8.2	0.94
8.3	0.80
8.4	0.67
8.5	0.57

Attachment F: List of Priority Pollutants

Priority Pollutants are a set of chemical pollutants for which EPA has developed analytical methods. The permittee shall test for all priority pollutants in: *40 CFR Part 423, Appendix A.* For reference, the 126 priority pollutants at time of issuance include:

1. Acenaphthene
2. Acrolein
3. Acrylonitrile
4. Benzene
5. Benzidine
6. Carbon tetrachloride
7. Chlorobenzene
8. 1,2,4-trichlorobenzene
9. Hexachlorobenzene
10. 1,2-dichloroethane
11. 1,1,1-trichloreothane
12. Hexachloroethane
13. 1,1-dichloroethane
14. 1,1,2-trichloroethane
15. 1,1,2,2-tetrachloroethane
16. Chloroethane
~~17. (Removed)~~
18. Bis(2-chloroethyl) ether
19. 2-chloroethyl vinyl ethers
20. 2-chloronaphthalene
21. 2,4,6-trichlorophenol
22. Parachlorometa cresol
23. Chloroform
24. 2-chlorophenol
25. 1,2-dichlorobenzene
26. 1,3-dichlorobenzene
27. 1,4-dichlorobenzene
28. 3,3-dichlorobenzidine
29. 1,1-dichloroethylene
30. 1,2-trans-dichloroethylene
31. 2,4-dichlorophenol
32. 1,2-dichloropropane
33. 1,3-dichloropropylene
34. 2,4-dimethylphenol
35. 2,4-dinitrotoluene
36. 2,6-dinitrotoluene
37. 1,2-diphenylhydrazine
38. Ethylbenzene
39. Fluoranthene
40. 4-chlorophenyl phenyl ether
41. 4-bromophenyl phenyl ether
42. Bis(2-chloroisopropyl) ether
43. Bis(2-chloroethoxy) methane
44. Methylene chloride
45. Methyl chloride
46. Methyl bromide
47. Bromoform
48. Dichlorobromomethane
~~49. (Removed)~~
~~50. (Removed)~~
51. Chlorodibromomethane
52. Hexachlorobutadiene
53. Hexachlorocyclopentadiene
54. Isophorone
55. Naphthalene
56. Nitrobenzene
57. 2-nitrophenol
58. 4-nitrophenol
59. 2,4-dinitrophenol
60. 4,6-dinitro-o-cresol
61. N-nitrosodimethylamine
62. N-nitrosodiphenylamine
63. N-nitrosodi-n-propylamine
64. Pentachlorophenol
65. Phenol
66. Bis(2-ethylhexyl) phthalate
67. Butyl benzyl phthalate
68. Di-N-Butyl Phthalate
69. Di-n-octyl phthalate
70. Diethyl Phthalate
71. Dimethyl phthalate
72. Benzo(a) anthracene
73. Benzo(a) pyrene
74. Benzo(b) fluoranthene
75. Benzo(k) fluoranthene
76. Chrysene

77. Acenaphthylene
78. Anthracene
79. Benzo(ghi) perylene
80. Fluorene
81. Phenanthrene
82. Dibenzo(,h) anthracene
83. Indeno (1,2,3-cd) pyrene
84. Pyrene
85. Tetrachloroethylene
86. Toluene
87. Trichloroethylene
88. Vinyl chloride
89. Aldrin
90. Dieldrin
91. Chlordane
92. 4,4-DDT
93. 4,4-DDE
94. 4,4-DDD
95. Alpha-endosulfan
96. Beta-endosulfan
97. Endosulfan sulfate
98. Endrin
99. Endrin aldehyde
100. Heptachlor
101. Heptachlor epoxide
102. Alpha-BHC
103. Beta-BHC
104. Gamma-BHC
105. Delta-BHC
106. PCB-1242 (Arochlor 1242)
107. PCB-1254 (Arochlor 1254)
108. PCB-1221 (Arochlor 1221)
109. PCB-1232 (Arochlor 1232)
110. PCB-1248 (Arochlor 1248)
111. PCB-1260 (Arochlor 1260)
112. PCB-1016 (Arochlor 1016)
113. Toxaphene
114. Antimony
115. Arsenic
116. Asbestos
117. Beryllium
118. Cadmium
119. Chromium
120. Copper
121. Cyanide, Total
122. Lead
123. Mercury
124. Nickel
125. Selenium
126. Silver
127. Thallium
128. Zinc
129. 2,3,7,8-TCDD