NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DRAFT PERMIT FACT SHEET
December 2024

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Facility Location:	Managaha Island Wastewater Treatment Plant Saipan, MP 96950
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NPDES Permit No.:	MP0020371

I. STATUS OF PERMIT

The Commonwealth of the Northern Mariana Islands (CNMI), Department of Public Lands (DPL) ("the "permittee") has applied for the renewal of their National Pollutant Discharge Elimination System (NPDES) permit to authorize the discharge of treated effluent from the Managaha Island wastewater treatment plant (WWTP) to a nearby leach field distribution box located 150 feet inward of the north shoreline of Managaha Island. From the leach field, the effluent discharge flows through a septage system and into a matrix comprised of beach sand and saltwater, which is connected to the Class AA marine waters of the Tanapag Harbor in CNMI. Given the relatively short distance from the leach field to the shoreline of Managaha Island and the relative porosity and permeability of beach sand, the discharge requires a NPDES permit. This permittee has been classified as a minor discharger.

A complete application was submitted on March 7, 2024. EPA Region IX has developed this permit and fact sheet pursuant to Section 402 of the Clean Water Act (CWA), which requires point source dischargers to control the amount of pollutants that are discharged to waters of the United States through obtaining a NPDES permit.

The permittee is currently discharging under NPDES Permit No. MP0020371 issued on April 22, 2019. EPA issued a permit modification on August 11, 2021 to transfer ownership to DPL from a previous contractor. Pursuant to 40 CFR § 122.6, the terms of the existing permit are administratively extended until the issuance of a new permit.

II. SIGNIFICANT CHANGES TO PREVIOUS PERMIT

Permit Condition	Previous Permit (2019 – 2024)	Re-issued permit (2025 – 2030)	Reason for change
Narrative effluent limitations in Part I.A.3 of permit	Required	Updated	Changes included as part of 2021 revision of CNMI water quality standards (WQS).
Turbidity effluent monitoring	No monitoring	Monthly monitoring	Application of reuse provisions for wastewater to protect public health.
Total filterable suspended solids effluent limit	No effluent limit	Water quality-based effluent limitation	Application of the CNMI WQS for total filterable suspended solids in Class AA marine waters (Section 65-130-420).
Total residual chlorine effluent monitoring	Quarterly monitoring	Monthly monitoring	CNMI BECQ's inspection notes dated May 23, 2024 indicate potential issues with chlorine residual in the effluent; therefore, monitoring frequency was increased.
Cyanide effluent limit and effluent monitoring	No effluent limit; quarterly monitoring	Effluent limit; monthly monitoring	Reasonable potential analysis showed that the discharge has a reasonable potential to cause or contribute to an exceedance of applicable water quality standards (EPA's National Recommended Water Quality Criteria).
Enterococci effluent monitoring	Quarterly monitoring	Monthly monitoring	Reasonable potential analysis showed that the discharge has a reasonable potential to cause or contribute to an exceedance of CNMI WQS. Concerns raised from CNMI BECQ that bacteria has been a concern in the area.
Copper and nickel effluent limits	No effluent limit	Effluent limit	Reasonable potential analysis showed that the discharge has a reasonable potential to cause or contribute to an exceedance of applicable water quality standards (EPA's National Recommended Water Quality Criteria).

Permit Condition	Previous Permit (2019 – 2024)	Re-issued permit (2025 – 2030)	Reason for change
Arsenic effluent limit and effluent monitoring	No effluent limit; no monitoring	Effluent limit; quarterly monitoring	Reasonable potential analysis showed that the discharge has a reasonable potential to cause or contribute to an exceedance of CNMI WQS.
Manganese, selenium, and zinc effluent limits and effluent monitoring	No effluent limit; no monitoring	Effluent limit; yearly monitoring	Reasonable potential analysis showed that the discharge has a reasonable potential to cause or contribute to an exceedance of applicable water quality standards (EPA's National Recommended Water Quality Criteria).
Nitrate-nitrogen, total nitrogen, total phosphorus, unionized ammonia, and orthophosphate effluent monitoring	No monitoring	Quarterly monitoring	Application of the CNMI WQS for nitrate-nitrogen, total nitrogen, total phosphorus, unionized ammonia, and orthophosphate in Class AA marine waters (Section 65-130-410).
Reclaimed water requirements	No reclaimed water requirements	Reclaimed water requirements	Application of reuse provisions for wastewater to protect public health.
Chronic toxicity effluent limits and Whole Effluent Toxicity (WET) testing	Not required	Required	Used to assess the aggregate toxic effect from all pollutants present in the facility's effluent.
Receiving water visual monitoring for oily sheen, foam, scum, discoloration, and floating debris	No visual monitoring	Monthly visual monitoring	Application of the CNMI WQS for all waters (Sections 65-130-305 and 65-130-445).
Receiving water monitoring for dissolved oxygen and temperature	No receiving water monitoring	Quarterly receiving water monitoring	Application of the CNMI WQS for all waters (Sections 65-130-415 and 65-130-430).
Receiving water monitoring for nitrate-nitrogen, total nitrogen, total phosphorus, and unionized ammonia	Required	Moved to effluent monitoring	Effluent monitoring established at Outfall 001 to obtain more accurate information regarding the facility's discharge of nutrients.
General Reporting	Required	Updated	Electronic reporting required via EPA's CDX system.
Best Management Practices	Not required	Required	Application of requirements in Section 304(e) of the

Permit Condition	Previous Permit (2019 – 2024)	Re-issued permit (2025 – 2030)	Reason for change
			CWA and 40 CFR § 122.44(k).
Biosolids requirements	Included by reference to the CWA and applicable parts of 40 CFR	Updated and written out in the permit	Permittee is able to refer to permit conditions for biosolids requirements.
Sanitary sewer overflow (SSO) requirements	Not required	Required	Prohibition of SSOs for the protection of public health and the environment; reporting required if SSOs occur.
Effluent characterization and source identification study	Not required	Required	Identifying sources for parameters found in the priority pollutant scan which are atypical for wastewater.
Best Management Practices for seagoing vessels	Not required	Required	Included to minimize water contamination and effects to habitat and listed species from receiving water monitoring activities and transportation of biosolids.
Asset Management Program	Required	Updated	Include climate change-related impacts, as the facility is vulnerable to the effects of climate change, such as sea-level rise.
Capacity attainment requirement	Not required	Required	Notification for if average dry weather flow for any month exceeds 90 percent of the annual dry weather design capacity; report due to EPA within 90 days.

III. GENERAL DESCRIPTION OF FACILITY

The permittee is responsible for managing the Managaha Island WWTP, which is owned by CNMI. Prior to the COVID-19 pandemic, the tourist day-use islet offered a variety of water sports including scuba diving, snorkeling, parasailing, banana boating and fishing, as well as beaches, picnic spots, a food area, public restrooms, and gift shops. During the pandemic, tourism shut down at Managaha Island resulting in few visitors or related tourist activity; operations at the Managaha Island WWTP continued under DPL management, but only to keep the equipment running since no sewage flow was expected. DPL contracts with a concessioner who is responsible for operating Managaha WWTP, and that concessioner contracted an operator consultant and operations contractor to assist with facility management. The operations contractor for DPL performs the operations and maintenance of the facility.

Managaha Island WWTP receives only domestic sewage with a design flow of 5,000 gallons per day (0.005 million gallons per day, or "MGD"). Prior to the COVID-19 pandemic, the WWTF served a tourist population ranging from 800 to 2,000 (average of 1,400) per day. A vast majority of the tourists stayed about five hours, with the first boat arrival at 9:30AM and departure before 4:00PM. During the pandemic, there were virtually no visitors at Managaha Island. Tourism has picked up since the pandemic with approximately 10,000 visitors per month, though concession activities remain minimal. Marine sport operators mainly pick up and drop off tourists from the pier for parasailing, banana boat rides, and other activities in the lagoon.

When concessions are open, all kitchen wastes are removed from the island. Cleaning of the public toilets involves a minimum of disinfectant products and is generally conducted by daily washdowns with reverse osmosis water. There is sufficient storage within the existing septic tanks to control any harmful chemicals.

Managaha Island had an old treatment facility and septic tanks in existence in the early 1990s. In 2007, the facility installed a small-scale Japanese Johkasou system made of fiberglass reinforced plastic (FRP) and added refuse piping, sampling points, and additional rainwater catchment capacity. Treatment consists of influent flow equalization-denitrification, membrane separation aerated activated sludge with flocculation, nitrification, settling, and UV disinfection. The plant provides advanced secondary treatment capable of achieving up to 95% removal efficiencies for biochemical oxygen demand (BOD5) and total suspended solids (TSS).

Some of the treated wastewater at Managaha Island WWTP is recycled using a reverse osmosis system and used at the facility as non-potable water. Based on current operations, the facility is not likely to discharge until tourism returns to a level similar to before the COVID-19 pandemic.

Sludge is dewatered, thickened, and stored for hauling off-site. Approximately every one to two (1-2) weeks, the sludge holding tank is pumped and solids are taken by boat to the Commonwealth Utilities Corporation's Sadog Tasi WWTP (NPDES Permit No. MP0020010). The operations contractor for DPL handles the storage of the sludge into a holding tank. A waste disposal company then transfers the sludge into plastic drums for transport to Sadog Tasi WWTP. The sludge is received at the digestor tank of Sadog Tasi WWTP. Sadog Tasi WWTP disposes of their dewatered sludge at a municipal landfill.

IV. DESCRIPTION OF RECEIVING WATER

CNMI Department of Environmental Quality ("BECQ") has two classifications (AA and A) for marine waters. The coastal and oceanic waters surrounding Saipan and nearby Tanapag Harbor in the vicinity of the plant discharge outfall are classified as a Class AA marine receiving waterbody, according to *CNMI Water Quality Standards, 2021 Revision*[1]. Class AA coastal and oceanic waters are protected for their natural pristine state as nearly as possible with an absolute minimum of pollution or alteration of water quality from any human-related source or actions.

[1] The CNMI Water Quality Standards, 2021 Revision can be found at the following link: https://www.deq.gov.mp/assets/permits-and-regulations-applications/t65_130_2021_water_quality_standards.pdf

The uses to be protected in this class of waters are to support the propagation of aquatic life; fish and shellfish consumption; conservation of coral reefs and wilderness areas; oceanographic research; aesthetic enjoyment; and primary contact recreation in and on the water without risk to human health.

During facility operations, the permitted discharge to the leach field hereby designated as Discharge Outfall No. 001 to Class AA receiving marine waters of Saipan, as follows:

Discharge No.	Latitude	Longitude	Description
001	15° 14' 31.1" N	145° 42' 44.7" E	Discharge flows from a leach field distribution box into beach sand and saltwater connected to the marine waters by Tanapag Harbor of the Philippine Sea.

The 2022 CNMI 305(b) and 303(d) Water Quality Assessment and Integrated Report identifies Managaha (waterbody segment 23) as impaired for low pH, phosphate (PO_4), and nitrate (NO_3) (CNMI BECQ, 2022). TMDLs have not yet been developed for these parameters.

CNMI BECQ performs monitoring of its surface waters to assess water quality and determine if criteria and beneficial uses are being met. On May 8, 2024, CNMI BECQ provided EPA with monitoring results collected from sampling sites around Managaha Island. Sites 5 and 6 were the closest sampling sites to the discharge point for Managaha Island WWTP. The results were collected generally on a weekly basis and EPA evaluated the data between 2014 and 2024 (until April 2024). *Enterococci* geometric mean values exceeded CMNI WQS (35 MPN/100 mL) on 11 occasions, 10 of which were from the years 2014 to 2016 and the remaining occasion was in 2024. *Enterococci* single sample maximum values exceeded CNMI WQS (130 MPN/100 mL) on six occasions, five of which were from the years 2014 to 2016 and the remaining occasion was in 2024. pH values showed an excursion of CNMI WQS (7.6 to 8.6 S.U.) on four occasions, all of which were from the years 2015 to 2018. Phosphate (PO_4) values were not captured as frequently, which most data values between the year 2018 and 2023; during this time, the CNMI WQS (0.025 mg/L) was exceeded twice (once in 2020 and once in 2021). Overall, the data shows that ambient conditions nearby the discharge point at Managaha Island WWTP have been improving over the years and have not presented concern in more recent years.

V. DESCRIPTION OF DISCHARGE

The Managaha Island WWTP provides secondary treatment of domestic wastewater and discharges at an average flow rate of 0.005 MGD. The previous permit contained numeric effluent limitations for BOD5, total suspended solids (TSS), pH, enterococcus, and total residual chlorine.

According to the most recent inspection conducted on July 20, 2021, the permittee failed to submit the required Discharge Monitoring Report (DMR) data from May 2020 onward due to lack of an operator. During this time, the facility was either not in operation or was not discharging. Under the new operator consultant and operations contractor, DPL will now resume submitting DMRs in compliance with this permit.

Table 1 shows data related to discharge from Outfall 001 based on permittee's NPDES renewal application and supplemental data as well as data reported on discharge monitoring reports. The data in Table 1 namely reflects the facility's discharge from January 2014 through March 2020, since the permittee did not submit monitoring data following the island's lack of operations due to the COVID-19 pandemic and prior to the application submittal for this permit term. Some additional detections were also included from the permittee's priority pollutant scan submittal in Year 5 of the previous permit term (sample date April 22, 2024). More information is available on Enforcement and Compliance History Online (ECHO) at https://echo.epa.gov/detailed-facility-report?fid=110064619104&ej_type=sup&ej_compare=US (Search FRS ID: 110064619104).

Pollutants believed to be absent or never detected in the effluent are not included. While operating from 2018 to 2021, the facility has typically achieved approximately 98 to 99% reduction in BOD, and has consistently demonstrated BOD effluent concentrations below 5 mg/L. The facility exhibited one month of non-compliance in July 2019, slightly exceeding its weekly average limit of 30 mg/L with a result of 34 mg/L. For TSS in the same three years, the facility has typically achieved approximately 98% reduction, and has consistently demonstrated results well below effluent limitations, with an average effluent concentration of 2 mg/L. In March 2020, the facility reported an excursion of the pH range of 7.6-8.6 SU with a result of 7.4 SU. The DMR data from January 2014 through March 2020, along with the priority pollutant scan from Year 5, show detections that have reasonable potential to cause or contribute to an excursion of water quality standards for the following parameters: arsenic, total residual chlorine, copper (total recoverable), cyanide (total as CN and total recoverable), nickel (total recoverable), manganese (total recoverable), selenium (total recoverable), zinc (total recoverable), and *Enterococci*.

Previous inspection reports, including from the July 2021 inspection and another one from January 24, 2014, indicated that water taps on Managaha Island lack adequate signage to indicate non-potable water from reused treated wastewater. DPL has since installed signage in several languages to inform visitors not to drink from the non-potable water taps/spigots.

Table 1. Effluent Data for Outfall 001 from January 2014 through March 2020, along with Priority Pollutant Scan (Sample Date April 22, 2024).

Parameter	Units[1]	2019-2024 Permit Effluent Limitations			Effluent Data			
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly	Highest Average Weekly	Highest Maximum Daily	Number of Samples
Flow Rate	MGD	[2]	--	[2]	[3]	--	[3]	
Biochemical Oxygen Demand; 5-day (BOD_5)	mg/L	30	45	--	34	--	--	146
	lbs/day	1.3	1.9	--	--	--	--	
	Percent Removal	85 % (minimum)[4]			86.5% (minimum)			

Parameter	Units[1]	2019-2024 Permit Effluent Limitations			Effluent Data			
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly	Highest Average Weekly	Highest Maximum Daily	Number of Samples
Total Suspended Solids (TSS)	mg/L	30	45	--	12	--	--	146
	lbs/day	1.3	1.9	--	--	--	--	
	Percent Removal	85 % (minimum)[4]			67% (minimum)			
Enterococci	MPN/ 100mL	35	--	130	--	--	19.5	23
Total Residual Chlorine	µg/L	7.5	--	13	--	--	5	3
Temperature	deg °C	--	--	--	--	--	33	11
Copper, Total Recoverable	µg/L	[2]	--	[2]	--	--	6	1
Cyanide, Total (as CN)	µg/L	[2]	--	[2]	--	--	38	1
Nickel, Total Recoverable	µg/L	[2]	--	[2]	--	--	5.2	1
Arsenic, Total Recoverable	µg/L	--	--	--	--	--	5.1	1
Chromium, Hexavalent (as Cr)	µg/L	--	--	--	--	--	0.22	1
Chromium, Trivalent (as Cr)	µg/L	--	--	--	--	--	0.518	1
Barium, Total Recoverable	µg/L	--	--	--	--	--	6.8	1
Manganese, Total Recoverable	µg/L	--	--	--	--	--	39	1
Selenium, Total Recoverable	µg/L	--	--	--	--	--	5.5	1
Zinc, Total Recoverable	µg/L	--	--	--	--	--	43	1

Parameter	Units[1]	2019-2024 Permit Effluent Limitations			Effluent Data			
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly	Highest Average Weekly	Highest Maximum Daily	Number of Samples
pH	Standard Units	Between 7.6 and 8.6 at all times			7.4 – 8.1 (min-max)			
Priority Pollutant Scan	--	--			[5]			--

(1) Mass based limits calculated using 0.005 MGD flow.
(2) No effluent limits were established, but monitoring and reporting were required.
(3) Permittee reported both monthly average flow and daily maximum flow as 0.005 MGD in the DMR data. This was a reporting error.
(4) Both the influent and the effluent shall be monitored. The arithmetic mean of the BOD_5 values or of the TSS values, by concentration, for effluent samples collected over a calendar month shall not exceed 15 percent of the arithmetic mean, by concentration, for influent samples collected at approximately the same times during the same period (i.e. 85 percent BOD_5 removal; 85 percent TSS removal).
(5) A priority pollutant scan was not completed in Year 4 of the previous permit. The permittee submitted a priority pollutant scan in Year 5 while the permit was administratively extended.

VI. DETERMINATION OF NUMERICAL EFFLUENT LIMITATIONS

EPA has developed effluent limitations and monitoring requirements in the permit based on an evaluation of the technology used to treat the pollutant (i.e., "technology-based effluent limits") and the water quality standards applicable to the receiving water (i.e., "water quality-based effluent limits"). EPA has established the most stringent of applicable technology-based or water quality-based standards in the draft permit, as described below.

A. Applicable Technology-Based Effluent Limitations

Publicly Owned Wastewater Treatment Systems (POTWs)

EPA developed technology-based treatment standards for municipal wastewater treatment plants in accordance with Section 301(b)(1)(B) of the CWA. The minimum levels of effluent quality attainable by secondary treatment for Biochemical Oxygen Demand (BOD_5), Total Suspended Solids (TSS), and pH, as defined in 40 CFR § 133.102, are listed below. Mass limits, as required by 40 CFR § 122.45(f), are included for BOD_5 and TSS.

BOD_5

Concentration-based Limits

30-day average – 30 mg/L
7-day average – 45 mg/L
Removal Efficiency – minimum of 85%

Mass-based Limits

30-day average – (30 mg/L)(0.005 MGD)(8.345 conversion factor) = 1.3 lbs/day
7-day average – (45 mg/L)(0.005 MGD)(8.345 conversion factor) = 1.9 lbs/day

TSS

Concentration-based Limits

30-day average – 30 mg/L

7-day average – 45 mg/L
Removal efficiency – Minimum of 85%

Mass-based Limits
30-day average – (30 mg/L)(0.005 MGD)(8.345 conversion factor) = 1.3 lbs/day
7-day average – (45 mg/L)(0.005 MGD)(8.345 conversion factor) = 1.9 lbs/day

pH
Instantaneous Measurement: 6.0 – 9.0 standard units (S.U.)

This secondary treatment standard for pH is superseded by more stringent CNMI water quality standards, as described in section VI.C.

B. Water Quality-Based Effluent Limitations

Water quality-based effluent limitations are required in NPDES permits when the permitting authority determines that a discharge causes, has the reasonable potential to cause, or contributes to an excursion above any water quality standard (40 CFR § 122.44(d)(1)).

When determining whether an effluent discharge causes, has the reasonable potential to cause, or contributes to an excursion above narrative or numeric criteria, the permitting authority shall use procedures which account for existing controls on point and non-point sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity) and where appropriate, the dilution of the effluent in the receiving water (40 CFR § 122.44(d)(1)(ii)).

EPA evaluated the reasonable potential to discharge toxic pollutants according to guidance provided in the *Technical Support Document for Water Quality-Based Toxics Control* (TSD) (Office of Water, U.S. EPA, March 1991) and the *U.S. EPA NPDES Permit Writers' Manual* (Office of Water, U.S. EPA, September 2010). These factors include:

1. Applicable standards, designated uses and impairments of receiving water
2. Applicable Ocean Discharge Criteria
3. Type of industry
4. History of compliance problems and toxic impacts
5. Existing data on toxic pollutants - Reasonable Potential Analysis

1. Applicable Standards, Designated Uses and Impairments of Receiving Water

The CNMI water quality standards (adopted by CNMI BECQ in 1997 and approved in 2002 and amended in 2004, 2014, 2018, and 2021) establish water quality criteria for marine waters for the protection of designated beneficial uses. The CNMI water quality standards categorize the coastal and oceanic waters surrounding Managaha Island as a Class AA marine receiving waterbody. Class AA coastal and oceanic waters are protected for their natural pristine state as nearly as possible with an absolute minimum of pollution or alteration of water quality from any human-related source or actions. The uses to be protected in this class of waters are to support the propagation of aquatic life; fish and shellfish consumption; conservation of coral reefs and wilderness areas; oceanographic research; aesthetic enjoyment; and primary contact recreation in and on the water without risk to human health.

The 2014 amendment to CNMI's water quality standards included an Implementation Guidance Manual that provides information relevant to monitoring microbiology (bacteria) in receiving waters for NPDES permits:

> *For NPDES permittees, permit compliance for marine receiving waters shall be determined utilizing the geometric mean of all discrete measurements (all depths, all stations, as required in the permit) over a 30-day period.*
>
> *It is recommended that the permittee consider multiple sampling events in any 30-day period in order to obtain a representative geometric mean.*
>
> *The use of water quality based effluent limitations for bacteria with end-of-pipe limits which are calculated based on critical initial dilution is permissible for NPDES permits.*

The 2021 amendment to CNMI's water quality standards included numeric criteria for microbiology parameters. See Part 400, Section 65-130-401. This amendment included additional information about potential exceedances of these microbiology numeric criteria:

> *(b) Enterococci and E. coli may originate from environmental sources as well as from fecal contamination. Where these microbiological standards are exceeded, a determination of the impact on public health and the environment may be based upon additional sampling, a sanitary survey of the drainage area contributing run-off to the contaminated water, or special studies of the environmental sources of Enterococci and E. coli in Commonwealth waters.*

The 2022 CNMI 305(b) and 303(d) Water Quality Assessment and Integrated Report identifies Managaha (waterbody segment 23) as impaired for low pH, phosphate (PO_4), and nitrate (NO_3) (CNMI BECQ, 2022). TMDLs have not yet been developed for these parameters.

2. Applicable Ocean Discharge Criteria

EPA's Ocean Discharge Criteria establish guidelines for the issuance of NPDES permits for discharges into territorial seas, the contiguous zone, and the ocean (40 CFR § 125.120). Territorial seas are defined as the waters between the shore and 12 nautical miles offshore. Ocean Discharge Criteria are applicable because the permit authorizes discharge into a territorial sea. Ocean Discharge Criteria establish that point source discharges into territorial seas may not cause unreasonable degradation to the marine environment (40 CFR § 125.123). Discharges that are in compliance with section 301(g), 301(h), or 316(a) variance requirements or State water quality standards are presumed to be in compliance with Ocean Discharge Criteria (40 CFR § 125.122(b)). This discharge is in compliance with State water quality standards, so the discharge is in compliance with Ocean Discharge Criteria.

3. Type of Industry

For POTWs, typical pollutants of concern in untreated and treated domestic wastewater include ammonia, nitrogen, phosphorus, oxygen demand, pathogens/bacteria, temperature, pH, oil and grease, and suspended solids. Chlorine may also be of concern due to treatment plant

operations since this facility could chlorinate its effluent should the operator need to do so. The SIC code for this facility is 4952.

4. History of Compliance Problems and Toxic Impacts

As discussed in Part V, the permittee failed to submit DMRs from May 2020 onward due to lack of an operator. Prior to the COVID-19 pandemic, DMRs were often submitted late and were missing data. According to the DMR data submitted between January 2014 to March 2020, the facility experienced the following violations of permit limitations:

- In August 2014, excursion of TSS percent removal limit of 85% with a result of 84.4%
- In October 2016, excursion of TSS percent removal limit of 85% with a result of 67%
- In July 2019, exceedance of BOD weekly average limit of 30 mg/L with a result of 34 mg/L
- In March 2020, excursion of pH range of 7.6-8.6 SU with a result of 7.4 SU

5. Existing Data on Toxic Pollutants

For pollutants with effluent data available, EPA has conducted a reasonable potential analysis based on statistical procedures outlined in EPA's *Technical Support Document for Water Quality-based Toxics Control* herein after referred to as EPA's TSD (EPA 1991). These statistical procedures result in the calculation of the projected maximum effluent concentration based on monitoring data to account for effluent variability and a limited data set. The projected maximum effluent concentrations were estimated using a coefficient of variation and the 99 percent confidence interval of the 99th percentile based on an assumed lognormal distribution of daily effluent values (sections 3.3.2 and 5.5.2 of EPA's TSD). EPA calculated the projected maximum effluent concentration for each pollutant using the following equation:

Projected maximum concentration = C_e × *reasonable potential multiplier factor.*

Where, "C_e" is the reported maximum effluent value and the multiplier factor is obtained from Table 3-1 of the TSD.

Table 2. Summary of Reasonable Potential Statistical Analysis

Parameter[(1)]	Maximum Observed Concentration	*n*	RP Multiplier	Projected Maximum Effluent Concentration	Most Stringent Water Quality Criterion	Statistical Reasonable Potential?
Arsenic, total recoverable	5.1 µg/L	1	13.2	67.3 µg/L	5 µg/L (human health)	Y
Chlorine, total residual	5 µg/L	3	5.6	28 µg/L	7.5 µg/L	Y

Parameter[1]	Maximum Observed Concentration	*n*	RP Multiplier	Projected Maximum Effluent Concentration	Most Stringent Water Quality Criterion	Statistical Reasonable Potential?
Chromium, hexavalent (as Cr)	0.22 µg/L	1	13.2	2.9 µg/L	50 µg/L	N
Chromium, trivalent (as Cr)	0.518 µg/L	1	13.2	6.8 µg/L	[2]	N
Copper, total recoverable	6 µg/L	1	13.2	79.2 µg/L	3.7 µg/L	Y
Cyanide, total (as CN)	38 µg/L	1	13.2	501.6 µg/L	1 µg/L	Y
Enterococci (geomean)	19.5 MPN/100mL	23	2.1	41 MPN/100mL	35 MPN/100mL	Y
Nickel, total recoverable	5.2 µg/L	1	13.2	68.6 µg/L	8.3 µg/L	Y
Barium, total recoverable	6.8 µg/L	1	13.2	89.8 µg/L	1,000 µg/L	N
Manganese, total recoverable	39 µg/L	1	13.2	514.8 µg/L	50 µg/L	Y
Selenium, total recoverable	5.5 µg/L	1	13.2	72.6 µg/L	71.1 µg/L	Y
Zinc, total recoverable	43 µg/L	1	13.2	567.6 µg/L	85.6 µg/L	Y

(1) For purposes of RP analysis, parameters measured as Non-Detect are considered to be zeroes. Only pollutants detected are included in this analysis.

(2) CNMI's water quality standards and EPA's National Recommended Water Quality Criteria (which are incorporated in CNMI's water quality standards) do not include water quality criterion for chromium, trivalent (chromium III).

C. Rationale for Numeric Effluent Limits and Monitoring

EPA evaluated the typical pollutants expected to be present in the effluent and selected the most stringent of applicable technology-based standards or water quality-based effluent limitations. Where effluent concentrations of toxic parameters are unknown or are not reasonably expected to be discharged in concentration that have the reasonable potential to cause or contribute to water quality violations, EPA may establish monitoring requirements in the permit. Where monitoring is required, data will be re-evaluated and the permit may be re-opened to incorporate effluent limitations as necessary.

Flow

No limits established for flow, but flow rates must be monitored and reported. Monthly monitoring is retained.

BOD_5 and TSS

Limits for BOD_5 and TSS are established for POTWs as described above and are incorporated into the permit. Under 40 CFR § 122.45(f), mass limits are also required for BOD_5 and TSS. Based on the design flow, the mass-based limits are included in the draft permit.

Total filterable suspended solids

The CNMI water quality standards require concentrations of suspended matter at any point shall not exceed 5 mg/L. When ambient conditions exceed this criterion, there shall be no worsening of water quality from ambient conditions. Therefore, limitations have been established consistent with the CNMI water quality standards. Monitoring is required monthly.

Temperature

The CNMI water quality standards require that temperature shall not vary by more than 1.0°C from ambient conditions. Monthly effluent monitoring is retained. Quarterly receiving water monitoring is also required to assess ambient conditions.

Turbidity

Due to the facility's use of reclaimed wastewater, the permittee has agreed to monitor for turbidity to protect public health. Monitoring is required monthly.

pH

The CNMI water quality standards require pH limits to be no lower than 7.6 or higher than 8.6 Standard Units. Monthly monitoring is retained.

Enterococci

The CNMI water quality standards establish criteria for marine waters for enterococcus. The reasonable potential analysis demonstrated a potential to exceed water quality standards for enterococcus. Therefore, limitations have been established consistent with water quality objectives for enterococcus as the representative indicator pathogen. Monitoring is required monthly.

Total Residual Chlorine

The discharger could chlorinate its effluent should the operator need to do so. If chlorination is used, EPA has determined that the discharge has a reasonable potential to cause or contribute to an exceedance of applicable water quality standards for total residual chlorine. Therefore, the permit contains an effluent limit for total residual chlorine based on chronic water quality standards for the protection of aquatic life in saltwater. Monitoring is required monthly.

Nitrate-Nitrogen, Total Nitrogen, Total Phosphorus, Unionized Ammonia, and Orthophosphate

The CNMI water quality standards establish criteria for nitrate-nitrogen, total nitrogen, total phosphorus, unionized ammonia, and orthophosphate. Effluent monitoring has been established at Outfall 001 to obtain more accurate information regarding the facility's discharge of nutrients. Monitoring is required quarterly.

Arsenic

Based on the reasonable potential analysis, EPA has determined that the discharge has a reasonable potential to cause or contribute to an exceedance of applicable water quality standards for arsenic. Therefore, the permit contains an effluent limit for arsenic based on water quality standards for the protection of human health. Monitoring is required quarterly.

Copper and Nickel

Based on the reasonable potential analysis, EPA has determined that the discharge has a reasonable potential to cause or contribute to an exceedance of applicable water quality standards for copper and nickel. Therefore, the permit contains an effluent limit for both copper and nickel based on chronic water quality standards for protection of aquatic life. Quarterly monitoring is retained for both parameters.

Cyanide

Based on the reasonable potential analysis, EPA has determined that the discharge has a reasonable potential to cause or contribute to an exceedance of applicable water quality standards for cyanide. Therefore, the permit contains an effluent limit for cyanide based on chronic and acute water quality standards for protection of aquatic life. Monitoring is required monthly.

Manganese

Based on the reasonable potential analysis, EPA has determined that the discharge has a reasonable potential to cause or contribute to an exceedance of applicable water quality standards for manganese. Therefore, the permit contains an effluent limit for manganese based on water quality standards for protection of human health. Monitoring is required yearly.

Selenium and Zinc

Based on the reasonable potential analysis, EPA has determined that the discharge has a reasonable potential to cause or contribute to an exceedance of applicable water quality standards for selenium and zinc. Therefore, the permit contains an effluent limit for both selenium and zinc based on chronic and acute water quality standards for protection of aquatic life. Monitoring is required yearly.

D. Anti-Backsliding

Section 402(o) and 303(d)(4) of the CWA and 40 CFR § 122.44(l)(1) prohibits the renewal or reissuance of an NPDES permit that contains effluent limits and permit conditions less stringent than those established in the previous permit, except as provided in the statute and regulation. The permit does not establish any effluent limits less stringent than those in the previous permit and does not allow backsliding.

E. Antidegradation Policy

EPA's antidegradation policy under CWA § 303(d)(4) and 40 CFR § 131.12 and the CNMI water quality standards require that existing water uses and the level of water quality necessary to protect the existing uses be maintained.

As described in this document, the permit establishes effluent limits and monitoring requirements to ensure that all applicable water quality standards are met. The permit does not include a mixing zone, therefore these limits will apply at the end of pipe without consideration

of dilution in the receiving water. Therefore, due to the low levels of toxic pollutants present in the effluent, high level of treatment being obtained, and water quality-based effluent limitations, the discharge is not expected to adversely affect receiving water bodies or result in any degradation of water quality.

VII. NARRATIVE WATER QUALITY-BASED LIMITS

CNMI Water Quality Standards (2021) contains narrative water quality standards applicable to the receiving water. Therefore, the permit incorporates narrative water quality-based limits for the discharge in Part I, Section A.3 based on these applicable narrative water quality standards.

VIII. MONITORING AND REPORTING REQUIREMENTS

The permit requires the permittee to conduct monitoring for all pollutants or parameters where effluent limits have been established, at the minimum frequency specified. Additionally, where effluent concentrations of toxic parameters are unknown or where data are insufficient to determine reasonable potential, monitoring may be required for pollutants or parameters where effluent limits have not been established.

A. Effluent Monitoring and Reporting

The permittee shall conduct effluent monitoring to evaluate compliance with the permit conditions. The permittee shall perform all monitoring, sampling and analyses in accordance with the methods described in the most recent edition of 40 CFR § 136, unless otherwise specified in the permit. All monitoring data shall be reported on monthly DMRs and submitted quarterly as specified in the permit. All monitoring data shall be electronically reported via DMR forms on EPA's Central Data Exchange (CDX) and submitted as specified in the permit.

B. Priority Toxic Pollutants Scan

A Priority Toxic Pollutants scan shall be conducted once per permit term to ensure that the discharge does not contain toxic pollutants in concentrations that may cause a violation of water quality standards. The priority pollutants scan shall be conducted during the **fourth** year of the five-year permit term. The permittee must conduct the priority pollutants scan concurrently with a whole effluent toxicity testing. Permit Attachment D provides a complete list of Priority Toxic Pollutants, including identifying the volatile compounds that should be collected via grab sample procedures. The permittee shall perform all effluent sampling and analyses for the priority pollutants scan in accordance with the methods described in the most recent edition of 40 CFR § 136, unless otherwise specified in the permit or by EPA. A complete list of Priority Toxic Pollutants is provided at 40 CFR § 131.36.

C. Whole Effluent Toxicity (WET) Requirements

The CWA requires that all waters be suitable for aquatic life, which includes the protection and propagation of fish, shellfish, and wildlife. As evidence that CWA requirements protecting aquatic life from chronic and acute toxicity are met in surface waters receiving the NPDES discharge, samples are collected from the effluent and tested for toxicity in a laboratory using EPA's WET methods. These aquatic toxicity test results are used to determine if the NPDES effluent causes toxicity to aquatic organisms. Toxicity testing is important because for scores of

individual chemicals and compounds, chemical-specific environmentally protective levels for toxicity to aquatic life have not been developed or set as water quality standards. In due course, some such chemicals and compounds can eventually make their way into effluents and their receiving surface waters. When this happens, toxicity tests of effluents can demonstrate toxicity due to present, but unknown, toxicants (including possible synergistic and additive effects), signaling a water quality problem for aquatic life.

EPA's WET methods are systematically designed to expose sensitive life stages of a test species (e.g., fish, invertebrate, algae) to both an NPDES effluent sample and a control sample. During the toxicity test, the test organism may show a difference in biological response, such as; eggs not fertilized, early life stages that grow too slowly or abnormally, or death. At the end of a toxicity test, the different biological responses of the organisms in the effluent group and the organisms in the control group are summarized using common descriptive statistics (e.g., means, standard deviations, coefficients of variation). The effluent and control groups are then compared using an applicable inferential statistical approach (i.e., hypothesis testing or point estimate model) chosen by the permitting authority and specified in the NPDES permit. The chosen statistical approach is compatible with both the experimental design of the WET method and the applicable toxicity water quality standard. Based on this statistical comparison, a toxicity test will demonstrate that the effluent is either toxic or not toxic, in relation to the permit's toxicity limit for the effluent. EPA's WET methods are specified under 40 CFR § 136 and/or in applicable water quality standards.

In the permit, EPA requires the permittee to analyze WET test data using the Test of Significant Toxicity (TST) statistical approach. This statistical approach is described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document* (EPA 833-R-10-003, 2010; TST Technical Document) and Denton DL, Diamond J, and Zheng L. 2011. Test of significant toxicity: A statistical application for assessing whether an effluent or site water is truly toxic. *Environ Toxicol Chem* 30:1117-1126. This statistical approach supports important choices made within a toxicity laboratory which favor quality data and EPA's intended levels for statistical power when true toxicity is statistically determined to be unacceptably high (≥ 25 Percent Effect (PE)), or acceptably low (< 10 PE). Example choices are practices supporting healthy test organisms, increasing the minimum recommended replication component of the WET method's experimental design (if needed), technician training, etc. TST results do not often differ from other EPA-recommended statistical approaches using hypothesis testing (Diamond D, Denton D, Roberts J, Zheng L. 2013. Evaluation of the Test of Significant Toxicity for determining the toxicity of effluents and ambient water samples. *Environ Toxicol Chem* 32:1101-1108.). The TST maintains EPA's desired low false positive rate for WET methods—the probability of declaring toxicity when true toxicity is acceptably low ≤ 5%—when quality toxicity laboratories conduct toxicity tests (TST Technical Document; Fox JF, Denton DL, Diamond J, and Stuber R. 2019. Comparison of false-positive rates of 2 hypothesis-test approaches in relation to laboratory toxicity test performance. *Environ Toxicol Chem* 38:511-523.). Note: The false positive rate is a long-run property for the toxicity laboratory conducting a WET method. A low false positive rate is indicted by a low long-run toxicity laboratory control coefficent of variation for the test species/WET method, using a minimum of 30 to 50 toxicity tests.

For ocean discharges governed by CWA § 403(c) and implementing regulations, the choice of TST is also based on EPA's recommendation to apply statistical considerations linking

NPDES monitoring data, performance, and decision-making prior to data collection. See *CWA § 403: Procedural and Monitoring Guidance* (EPA 842-B-94-003, 1994), pages 37, 38, 209. Examples of such statistical considerations include defining acceptable type I (α) and type II (β) errors[2]; applying power analysis to evaluate the appropriate number of replicates (n) based on a prior knowledge of variation observed in historical data; etc.). Accordingly, statistical rigor (trustworthiness) is considered by EPA under 40 CFR § 125.122(a) in choosing the TST statistical approach for this permit because such components are explicitly considered.

No toxicity monitoring was required during the previous permit term; therefore, no toxicity data was available for a reasonable potential analysis. Thus, no chronic toxicity WQBELs are required for the permitted discharge (40 CFR § 122.44(d)(1)). However, EPA has added a requirement for monitoring and reporting chronic toxicity, so that effluent toxicity can be assessed in relation to CWA requirements for the permitted discharge in this new permit term (see Part I, Table 2 in NPDES permit).

For NPDES samples for toxicity testing, the sample hold time begins when the 24-hour composite sampling period is completed (or the last grab sample in a series of grab samples is taken) and ends at the first time of sample use (initiation of toxicity test). 40 CFR § 136.3(e) states that the WET method's 36-hour hold time cannot be exceeded unless a variance of up to 72-hours is authorized by EPA. In a June 29, 2015 inter-office memorandum, EPA Region 9 authorized a hold time variance of up to 72-hours applicable only to Pacific Island Territory permittees **which ship the NPDES sample to the continental U.S. for toxicity testing**, with conditions (see NPDES permit).

In accordance with 40 CFR § 122.44(d)(1)(ii), in setting the permit's levels for chronic toxicity and conditions for discharge, EPA is using a test species/chronic short-term WET method and a discharge Instream Waste Concentration (IWC) representing conservative assumptions for effluent dilution necessary to protect receiving water quality. The IWC is a discharge-specific term based on the permit's authorized mixing zone or initial dilution. Generally, the dilution model result "S" from Visual Plumes/Cormix is used. S is the volumetric dilution factor, i.e. 1 volume effluent is diluted with S − 1 volumes surface water) = [(Ve + Va) / Ve]. Following the mass balance equation, if the dilution ratio D = Qs / Qe, then [(Qe + Qs) / Qe] = 1 + D = S.

For this discharge, S = 1 (i.e., no authorized dilution). The discharge-specific IWC = 1 to 1 dilution (1:1, 1/1) = 100% effluent. The IWC made by the toxicity laboratory is mixed as 1 part solute (i.e., effluent) to 0 parts dilutant (1: (1 – 1)) for a total of 1 part.

[2] Type I error (α) is the error of rejecting the null hypothesis that should have been accepted. Type II (β) error is the error of accepting the null hypothesis that should have been rejected. For toxicity tests, the true population mean (μ) refers to the mean for a theoretical statistical population of results from indefinite repetition of toxicity tests on the same control water and sample (e.g., a 24-hour composite sample of effluent). For an individual toxicity test, there must be a statistical analysis to determine if the null hypothesis is rejected in favor of the alternative hypothesis—in other words, that the difference in sample and control means is real and not simply reflective of random variation among the tested organisms.

The TST's null hypothesis for chronic toxicity (H_o) is: In-stream Waste Concentration (IWC) mean response (% effluent) ≤ 0.75 Control mean response. The TST's alternative hypothesis is (H_a): IWC mean response (% effluent) > 0.75 Control mean response. For this permit, results obtained from a single chronic toxicity test are analyzed using the TST statistical approach, where the required chronic toxicity IWC for Discharge Point Number 001 is 100% effluent.

For POTWs, it is not practicable (40 CFR § 122.45(d)) for EPA to set an average (median) weekly effluent limit, in lieu of a maximum daily effluent limit. This is because discharges of unacceptable toxicity—true chronic toxicity ≥ 25 PE, the TST's chronic toxicity RMD—are not adequately restricted by two effluent limits (median weekly and median monthly) each using a median of up to 3 toxicity test results. Under such limits, a highly toxic (chronic, acute) discharge could occur with no restriction. Moreover, using two such median limits further decreases the probability that an effluent with unacceptable toxicity will be caught, resulting in a permitted discharge which under-protects the aquatic life from unacceptable chronic toxicity.

Species sensitivity screening for chronic toxicity is not an automatic requirement in this permit. However, the permit retains a species sensitivity screening condition as an option for the permitting authority to exercise, particularly when the quality of the permitted discharge has changed, or is expected to change, during the permit term.

D. Receiving Water Monitoring

The permit requires to continue receiving water monitoring for pH, Enterococci, nitrate-nitrogen, total nitrogen, total phosphorous, and NH_3 (as unionized ammonia). The permit establishes receiving water monitoring for dissolved oxygen, temperature, turbidity, salinity, and orthophosphate, consistent with the CNMI water quality criteria for Class AA marine waters. The permit requires quarterly monitoring by grab sample at three stations with specific latitude and longitude locations for the duration of the permit. All monitoring data must be reported on a monthly DMR and submitted quarterly as specified in the permit. Receiving water monitoring data shall be submitted as electronic attachments via EPA's Central Data Exchange (CDX).

IX. SPECIAL CONDITIONS

A. Biosolids

Standard requirements for the monitoring, reporting, recordkeeping, and handling of biosolids in accordance with 40 CFR § 503 are incorporated into the permit.

B. Pretreatment

EPA has established pretreatment standards to prevent the introduction of pollutants into POTWs which will interfere with or pass through the treatment works, and to improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges (Section 307 of the CWA). EPA requires any POTW (or combination of POTWs operated by the same authority) with a total design flow greater than 5 MGD and receiving from nondomestic sources pollutants which pass through or interfere with the operations of the POTW or are otherwise subject to pretreatment standards to establish a pretreatment program.

There are no nondomestic facilities discharging pollutants which pass through or interfere with the operations of this POTW, or which are otherwise subject to pretreatment standards. Therefore, there are no pretreatment requirements in this permit.

C. Capacity Attainment and Planning

The permit requires that a written report be filed within ninety (90) days if the average dry-weather wastewater treatment flow for any month exceeds 90 percent of the annual dry weather design capacity of the waste treatment and/or disposal facilities.

D. Development and Implementation of Best Management Practices

Pursuant to 40 CFR § 122.44(k)(4), EPA may impose Best Management Practices (BMPs) which are "reasonably necessary…to carry out the purposes of the Act." The pollution prevention requirements or BMPs in the draft permit operate as technology-based limitations on effluent discharges that reflect the application of Best Available Technology and Best Control Technology. Therefore, the draft permit requires that the permittee develop (or update) and implement a Pollution Prevention Plan with appropriate pollution prevention measures or BMPs designed to prevent pollutants from entering Tanapag Harbor and other surface waters while performing normal processing operations at the facility and during sampling events in the receiving waters.

E. Asset Management and Climate Change

40 CFR § 122.41(e) requires permittees to properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. USEPA published a guide entitled Incorporating Asset Management Planning Provisions into NPDES Permits (December 2014) that directs Municipalities "to manage their aging sewer and stormwater systems at a time of urban population growth, more stringent water quality protection requirements, and increased exposure to climate change-related risks." Executive Order 13990 directs federal agencies "to bolster resilience to the impacts of climate change." Asset management planning provides a framework for setting and operating quality assurance procedures and ensuring the permittee has sufficient financial and technical resources to continually maintain a targeted level of service. The permittee shall develop an Asset Management Plan that considers short-and long-term vulnerabilities (including due to climate change) of collection systems, facilities, treatment systems, and outfalls. Intent is to ensure facility operations are not disrupted and compliance with permit conditions is achieved. Asset management and climate change requirements have been established in the permit to ensure compliance with the provisions of 40 CFR § 122.41(e).

F. Reclaimed Water-use Standards

The facility reuses wastewater for non-potable water uses such as toilet flushing and for sinks and spigots in the area. DPL has agreed to follow the reclamation criteria for the reuse of wastewater to protect public health and the environment. The applicable terms are therefore included in this permit.

X. OTHER CONSIDERATIONS UNDER FEDERAL LAW

A. Consideration of Environmental Justice

EPA conducted a screening level evaluation of vulnerabilities in the community posed to local residents near the vicinity of the permitted wastewater treatment plant using EPA's EJSCREEN tool. The purpose of the screening is to identify areas disproportionately burdened by pollutant loadings and to consider demographic characteristics of the population living in the vicinity of the discharge when drafting permit conditions.

In April 2024, EPA conducted an EJSCREEN analysis of the community near the vicinity of the outfall. The analysis found that the area is too small or sparsely populated to generate an EJSCREEN report. Managaha Island is an uninhabited island with no permanent residents and its proximity to the island of Saipan is about 1.4 miles. Managaha Island WWTP discharges a relatively small quantity of effluent into Tanapag Harbor. Given this, the discharge and any pollutant loadings would likely not impact residents on Saipan.

B. Impact to Threatened and Endangered Species

Section 7 of the Endangered Species Act of 1973 (16 U.S.C. § 1536) requires federal agencies to ensure that any action authorized, funded, or carried out by the federal agency does not jeopardize the continued existence of a listed or candidate species, or result in the destruction or adverse modification of its habitat.

On December, 20, 2024, EPA used the Information for Planning and Conservation (IPaC) website for the U.S. Fish and Wildlife Service (USFWS) Pacific Islands office (see https://ipac.ecosphere.fws.gov/) to generate an Official Species List which identifies all proposed (P), candidate (C), threatened (T) and endangered (E) species and critical habitat that may occur in the vicinity of the Managaha Island wastewater treatment plant discharge and the receiving water, Tanapag Harbor. The listed species are provided in Table 3.

Table 3. Listed Species from the USFWS Pacific Islands Office, Designated under the U.S. Endangered Species Act.

Type	Common Name	Scientific Name	Status	Critical Habitat	Proposed EPA Determination
Mammals	Mariana Fruit Bat (=mariana Flying Fox)	*Pteropus mariannus mariannus*	T	No	No effect
Birds	Mariana Swiftlet	*Aerodramus bartschi*	E	No	No effect
	Micronesian Megapode	*Megapodius laperouse*	E	No	No effect
	Nightingale Reed Warbler (old World Warbler)	*Acrocephalus luscinia*	E	No	No effect
	Short-tailed Albatross	*Phoebastria (=Diomedea) albatrus*	E	No	No effect
Reptiles	Hawksbill Sea Turtle	*Eretmochelys imbricata*	E	No	No effect

Type	Common Name	Scientific Name	Status	Critical Habitat	Proposed EPA Determination
	Green Sea Turtle	*Chelonia mydas*	E	Proposed	No effect
Snails	Humped Tree Snail	*Partula gibba*	E	No	No effect
Flowering Plants	Dendrobium guamense		T	No	No effect
	Ufa-halomtano	*Heritiera longipetiolata*	E	No	No effect
Marine Mammals	Dugong	*Dugong dugon*	E	No	May affect, but not likely to adversely affect

The Marine Protect Species of Mariana Islands website for the National Marine Fisheries Service (NMFS) Pacific Islands Regional Office displays an Official Species List which identifies all proposed (P), candidate (C), threatened (T) and endangered (E) species and critical habitat that may occur in the vicinity of the Managaha Island wastewater treatment plant discharge and the receiving water, Tanapag Harbor (see https://www.fisheries.noaa.gov/pacific-islands/endangered-species-conservation/marine-protected-species-mariana-islands). EPA held a meeting with NMFS on April 8, 2024 to discuss which species were relevant to Managaha Island and Tanapag Harbor. The relevant listed species are provided in Table 4.

Table 4. Listed Species from the NMFS Pacific Islands Regional Office, Designated under the Endangered Species Act.

Type	Common Name	Scientific Name	Status	Critical Habitat	Proposed EPA Determination
Sea Turtles	Central West Pacific Green Turtle	*Chelonia mydas*	E	Proposed	May affect, but not likely to adversely affect
	Hawksbill Turtle	*Eretmochelys imbricata*	E	No	May affect, but not likely to adversely affect
Fish	Indo-West Pacific Scalloped Hammerhead Shark	*Sphyrna lewini*	T	No	May affect, but not likely to adversely affect
Invertebrates	Coral	*Acropora globiceps*	T	Proposed	May affect, but not likely to adversely affect

EPA has determined reissuance of the NPDES permit for the Managaha Island WWTP may affect but is not likely to adversely affect the following species:

- Dugong
- Central West Pacific Green Turtle
- Hawksbill Turtle
- Indo-West Pacific Scalloped Hammerhead Shark
- Coral

Therefore, EPA has developed a Biological Evaluation (BE) for the species which the permitted discharge may affect but is not likely to adversely affect. EPA requested informal consultation from both USFWS and NMFS on [DATE].

As a result of EPA's request, USFWS provided the following information on [DATE]. [INFO]

As a result of EPA's request, NMFS provided the following information on [DATE]. [INFO]

C. Impact to Coastal Zones

The Coastal Zone Management Act (CZMA) requires that Federal activities and licenses, including Federally permitted activities, must be consistent with an approved state Coastal Management Plan (CZMA §§ 307(c)(1) through (3)). Section 307(c) of the CZMA and implementing regulations at 40 CFR § 930 prohibit EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the activity complies with the State (or Territory) Coastal Zone Management program, and the State (or Territory) or its designated agency concurs with the certification.

CNMI Bureau of Environmental and Coastal Quality issued a CZMA consistency letter, dated [DATE].

D. Impact to Essential Fish Habitat

The 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act (MSA) set forth a number of new mandates for the National Marine Fisheries Service, regional fishery management councils and other federal agencies to identify and protect important marine and anadromous fish species and habitat. The MSA requires Federal agencies to make a determination on Federal actions that may adversely impact Essential Fish Habitat (EFH).

The Essential Fish Habitat Mapper website for the NMFS Pacific Islands Regional Office (see https://www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper) generated an list of EFH on December 20, 2024 which identifies all species/management units in the vicinity of the Managaha Island wastewater treatment plant discharge and the receiving water, Tanapag Harbor. The listed EFH are provided in Table 5.

Table 5. Listed Essential Fish Habitat from the NMFS Pacific Islands Regional Office, Designated under the Magnuson-Stevens Fishery Management and Conservation Act.

Species/Management Unit	Lifestage(s) at Location	Management Council	EPA Determination
All Pelagic Fisheries	Eggs/Larval, Juvenile/Adult	Western Pacific	May adversely affect EFH
Mariana Islands Coral Reef Ecosystem	All	Western Pacific	May adversely affect EFH
Marianas Bottomfish	Eggs/Larval, Juvenile/Adult	Western Pacific	May adversely affect EFH

EPA has determined reissuance of the NPDES permit for the Managaha Island WWTP may adversely affect EFH for the above-listed species. Therefore, EPA has developed an Essential Fish Habitat Assessment (EFHA). EPA requested informal consultation from NMFS on [DATE].

As a result of EPA's request, NMFS provided the following information on [DATE]. [INFO]

E. Impact to National Historic Properties

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effect of their undertakings on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. Pursuant to the NHPA and 36 CFR § 800.3(a)(1), EPA is making a determination that issuing this draft NPDES permit does not have the potential to affect any historic properties or cultural properties. As a result, Section 106 does not require EPA to undertake additional consulting on this permit issuance.

F. Water Quality Certification Requirements (40 CFR §§ 124.53 and 124.54)

For States, Territories, or Tribes with EPA approved water quality standards, EPA requests certification from the affected State, Territory, or Tribe that the permit will meet all applicable water quality standards. Certification under CWA Section 401 shall be in writing and shall include the conditions necessary to assure compliance with referenced applicable provisions of sections 208(e), 301, 302, 303, 306, and 307 of the CWA and appropriate requirements of Territory law. EPA cannot issue the permit until the certifying Territory has granted certification under 40 CFR § 124.53 or waived its right to certify. If the Territory does not respond within 60 days of the certification request, it will be deemed to have waived certification.

On September 5, 2024, EPA requested certification from CNMI BECQ that the permit will meet all applicable water quality standards. CNMI BECQ provided a CWA Section 401 certification for Managaha Island WWTP on [DATE]. This document is attached to the permit as Attachment E.

XI. STANDARD CONDITIONS

A. Reopener Provision

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

B. Clean Water Act Section 402(k)

Any discharges not expressly authorized in the Permit cannot become authorized or shielded from liability under CWA section 402(k) by disclosure to USEPA, State, or local authorities after issuance of the Permit via any means, including during an inspection.

C. Standard Provisions

The permit requires the permittee to comply with EPA Region IX Standard Federal NPDES Permit Conditions.

XII. ADMINISTRATIVE INFORMATION

A. Public Notice (40 CFR § 124.10)

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft NPDES permit or other significant action with respect to an NPDES permit or application.

B. Public Comment Period (40 CFR § 124.10)

Notice of the draft permit will be placed on the EPA website, with a minimum of 30 days provided for interested parties to respond in writing to EPA. The draft permit and fact sheet will be posted on the EPA website for the duration of the public comment period. After the closing of the public comment period, EPA is required to respond to all significant comments at the time a final permit decision is reached or at the same time a final permit is actually issued.

C. Public Hearing (40 CFR § 124.12)

A public hearing may be requested in writing by any interested party. The request should state the nature of the issues proposed to be raised during the hearing. A public hearing will be held if EPA determines there is a significant amount of interest expressed during the 30-day public comment period or when it is necessary to clarify the issues involved in the permit decision.

XIII. CONTACT INFORMATION

Comments, submittals, and additional information relating to this proposal may be directed to:

Rachel Le, (213) 244-1805
le.rachel@epa.gov
EPA Region 9

XV. REFERENCES

CNMI BECQ. 2022. Clean Water Act Section 305(b) and 303(d) Water Quality Assessment Integrated Report. Dated October 2022.

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NOAA NMFS. 2024. Conclusion of Essential Fish Habitat Assessment for Guam Bulk Fuel NPDES Permit. [DATE].

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