



Revised Draft Environmental Impact Statement Commonwealth of the Northern Mariana Islands Joint Military Training



Appendix M: Part 2



June 2025
EISX-007-17-XMC-1747255459



Appendix M - Part 2 Utility Studies

Wastewater Analysis

Solid Waste and Hazardous Waste Study Update

Electrical System Analysis

The appendices of this Revised Draft EIS are compliant with Section 508 of the Rehabilitation Act. This allows assistive technology to be used to obtain the available information from the document. However, accessibility is limited to a descriptive title for some graphics, figures, tables, images, and attachments. Individuals who require assistance may submit a request through the Section 508 link on the project website at CNMIJointMilitaryTrainingEIS.com

WASTEWATER ANALYSIS.....	M-127
1 Purpose	M-129
1.1 Description of Proposed Wastewater Infrastructure	M-129
1.1.1 Base Camp	M-129
1.1.2 Port of Tinian	M-129
1.1.3 Francisco Manglona Borja/Tinian International Airport	M-129
1.1.4 Other Facilities.....	M-129
1.2 Commonwealth of the Northern Mariana Islands Wastewater Regulations.....	M-130
1.2.1 Individual Wastewater Disposal System Regulations	M-130
1.2.2 Other Wastewater Treatment System Regulations	M-130
1.3 Existing Wastewater Infrastructure.....	M-130
1.3.1 Existing Individual Wastewater Disposal System Infrastructure	M-130
1.3.2 Existing Other Wastewater Treatment System Infrastructure	M-132
1.4 Proposed Wastewater Demand and Wastewater Infrastructure.....	M-134
1.4.1 Design Population.....	M-134
1.4.2 Proposed Wastewater Demand	M-134
1.4.3 Proposed Wastewater Infrastructure	M-134
1.5 Wash Rack	M-135
1.6 Vehicle MaintEnAnce.....	M-136
1.7 Summary	M-136
2 References.....	M-137
SOLID WASTE AND HAZARDOUS WASTE STUDY UPDATE.....	M-139
1 INTRODUCTION	M-141
1.1 Purpose.....	M-141
1.2 study goals and objectives	M-141
2 EXISTING AND PLANNED CNMI WASTE DISPOSITION OPTIONS	M-143
2.1 Tinian PUntan Diablo Disposal Facility.....	M-143
2.2 proposed atgidon landfill	M-145
2.3 marpi landfill.....	M-145
2.4 Tinian transfer station	M-146
2.5 Construction and Demolition Waste.....	M-147
2.6 Green Waste.....	M-147
2.7 Hazardous, Industrial, Universal Wastes and E-Wastes	M-147
3 PROPOSED ACTION WASTE GENERATION AND CHARACTERIZATION	M-148
3.1 Solid Waste	M-148
3.1.1 Construction Waste.....	M-149
3.1.2 Green Waste.....	M-153
3.1.3 Hazardous, Industrial, Universal Wastes and E-Wastes	M-155

4	PROPOSED ACTION WASTE GENERATION AND CHARACTERIZATION— TRAINING OPERATIONS.....	M-157
4.1	Solid Waste	M-158
4.1.1	Solid Waste Generation Rates	M-158
4.1.2	Solid Waste Composition and Diversion.....	M-158
4.1.3	Solid Waste Quantities.....	M-160
4.1.4	Construction Waste	M-164
4.1.5	Green Waste.....	M-165
4.1.6	Hazardous Waste, Industrial, Universal Wastes, and E-Wastes	M-165
5	SOLID AND HAZARDOUS WASTE MANAGEMENT AND DISPOSITION OPTIONS	M-167
5.1	Solid Waste Management Requirements	M-168
5.2	Impacts to Existing and planned Solid Waste Management Facilities	M-168
5.2.1	Tinian Puntan Diablo Landfill	M-169
5.2.2	Marpi Landfill.....	M-169
5.2.3	Tinian Transfer Station	M-169
5.3	Incineration	M-170
5.4	Hazardous, Industrial, Universal, and Electronic Waste	M-171
6	REGULATORY SETTING	M-173
6.1	Commonwealth of the Northern Mariana Islands.....	M-173
6.1.1	Bureau of Environmental and Coastal Quality	M-173
6.1.2	Coastal Resources Management	M-173
6.1.3	Division of Fish and Wildlife	M-174
6.1.4	Historic Preservation Office	M-174
6.2	United States Government	M-175
6.2.1	United States Environmental Protection Agency	M-175
6.2.2	Federal Aviation Administration	M-175
7	REFERENCES.....	M-177
	STORMWATER STUDY	M-179
1	Introduction.....	M-181
1.1	Purpose.....	M-181
2	Regulatory Framework	M-183
2.1	Energy Independence and Security Act of 2007 Section 438.....	M-183
2.2	Technical Guidance for the Energy Independence and Security Act Section 438 Implementation	M-183
2.3	Department of the Navy Low Impact Development Policy for Stormwater Management.....	M-183
2.4	Department of Defense Implementation of Storm Water Requirements under the Energy Independence and Security Act Section 438.....	M-184
2.5	Unified Facilities Criteria 3-201-01, Civil Engineering	M-184

2.6	Unified Facilities Criteria 3-210-10, Low Impact Development.....	M-184
2.7	National Pollutant Discharge Elimination System Permit Administration.....	M-184
2.8	CNMI and Guam Stormwater Management Manual.....	M-184
2.9	Range Environmental Vulnerability Assessment	M-186
3	Existing Conditions.....	M-187
3.1	Topography	M-187
3.2	Existing Slope	M-187
3.3	Soils.....	M-189
3.4	Climate and Hydrology.....	M-189
4	Stormwater Considerations	M-191
4.1	Assumptions.....	M-191
4.2	Depressional Areas	M-192
4.3	Protected Surface Waters	M-192
4.4	Fault Lines	M-192
5	Water Quantity Analysis.....	M-193
5.1	Digital Elevation Model Development	M-193
5.2	Flow Path Determination and Sub-basin Delineation.....	M-194
5.3	Land Use and Land Cover	M-194
5.4	Tinian Curve Number Values	M-196
5.5	Initial Abstraction/Storage Tinian Curve Number Values.....	M-196
5.6	Time of Concentration Tinian Curve Number Values.....	M-197
5.7	Design Storm Frequency Tinian Curve Number Values	M-197
5.8	Design Rainfall Depths and Distribution Tinian Curve Number Values	M-198
5.9	Results of Analysis Tinian Curve Number Values	M-199
6	Stormwater Best Management Practices/Integrated Management Practices.....	M-201
6.1	Stormwater Management Practices Tinian Curve Number Values	M-201
6.2	Water Quality/Low Impact Development Tinian Curve Number Values	M-202
6.3	Water Quality and Recharge Volumes Tinian Curve Number Values	M-203
6.4	Low Impact Development Application Tinian Curve Number Values	M-205
6.5	Integrated Management Practices Tinian Curve Number Values.....	M-205
6.6	Base Camp Treatment Options Tinian Curve Number Values.....	M-206
6.6.1	Multi-Purpose Maneuver Range and Explosives Training Range Treatment	M-207
7	Conclusions.....	M-209
8	References.....	M-211
	ELECTRICAL SYSTEM ANALYSIS	M-221
1	Purpose	M-223
1.1	Background	M-223

2	Existing Electrical System on Tinian	M-226
2.1	Commonwealth Utilities Corporation Island-wide System	M-226
3	Estimated Electrical Demand and Proposed Electrical Infrastructure with CJMT Action	M-228
3.1	Power Demand.....	M-228
3.2	Medium Voltage Power Distribution.....	M-230
3.2.1	Electrical Distribution System	M-230
3.3	quantities – Underground distribution	M-233
4	References.....	M-234

LIST OF FIGURES

WASTEWATER ANALYSIS

Figure 1. Existing Individual Wastewater Disposal System at USAGM	M-131
Figure 2. Existing Individual Wastewater Disposal System at Camp Tinian.....	M-132
Figure 3. Entrance to the Tinian Dynasty Hotel and Casino	M-133
Figure 4. Other Wastewater Treatment System at Tinian Diamond Hotel and Casino	M-133

STORMWATER STUDY

Figure 1. Island of Tinian – Physiographic Regions.....	M-188
Figure 2. Island of Tinian – Hydrologic Soil Groups	M-190
Figure 3. Land Cover on the Island of Tinian.....	M-195

ELECTRICAL SYSTEM ANALYSIS

Figure 1. Island of Tinian – Location	M-224
Figure 2. Island of Tinian – Military Lease Area Boundaries	M-225
Figure 3. Existing Electrical Distribution System	M-229
Figure 4. Proposed Electrical Distribution System.....	M-232

LIST OF TABLES

WASTEWATER ANALYSIS

Table 1. Peak Proposed Wastewater Demand	M-134
--	-------

SOLID WASTE AND HAZARDOUS WASTE STUDY UPDATE

Table 1. Proposed Action Project Phasing.....	M-142
Table 2. Estimated 2023 Tinian Puntan Diablo Disposal Tonnage	M-145
Table 3. Estimated Existing (2023) Marpi Landfill Disposal Tonnage.....	M-146
Table 4. Estimated Solid Waste Generation – Construction Phase	M-149
Table 5. Projected Construction Waste Generation.....	M-149
Table 6. Estimated Construction and Demolition Composition for New Structures/Buildings – Construction Phase.....	M-151
Table 7. Estimated Construction and Demolition Composition for New Concrete Surfaced Areas – Construction Phase	M-152
Table 8. Estimated Construction and Demolition Waste Generation, Diversion and Disposal – Construction Phase.....	M-152
Table 9. Projected Green Waste Generation During Construction.....	M-153
Table 10. Estimated Annual Green Waste Generation - Construction Phase.....	M-155
Table 11. Tinian Training Area - Solid Waste Composition During Training	M-158
Table 12. Tinian Training Area – Estimated Recyclable Diversion Rates	M-160
Table 13. Alternative 1 Training Events, Duration, Frequency and Projected Headcount	M-161
Table 14. Training Event Frequency and Personnel Headcount.....	M-161
Table 15. Maximum Solid Waste Generation (per year).....	M-162
Table 16. Solid Waste Generation (per day).....	M-163
Table 17. Solid Waste Generation	M-164
Table 18. Expended Ammunition Casing Metals	M-164
Table 19. Projected Construction and Demolition Waste Generation During Training Operations	M-165
Table 20. Existing Disposal Capacity vs. Required Capacity	M-169

STORMWATER STUDY

Table 1. Curve Numbers Used for Post-project Land Cover and Soil on Tinian	M-196
Table 2. Rainfall Data per Design Storm.....	M-198
Table 3. HydroCAD Stormwater Parameters	M-200
Table 4. HydroCAD Stormwater Results	M-200
Table 5. Water Quality Volumes	M-204

Table 6. Recharge Volumes	M-205
---------------------------------	-------

ELECTRICAL SYSTEM ANALYSIS

Table 1. Electrical Power System Peak Demand and Capacity	M-228
Table 2. Duct Bank Quantities	M-233

**WASTEWATER ANALYSIS
IN SUPPORT OF THE
COMMONWEALTH OF THE NORTHERN MARIANA
ISLANDS
JOINT MILITARY TRAINING
REVISED DRAFT ENVIRONMENTAL IMPACT
STATEMENT**



Department of the Navy
Naval Facilities Engineering Systems Command, Pacific
258 Makalapa Drive, Suite 100
JBPHH HI 96860-3134

June 2025

This page is intentionally left blank.

1 PURPOSE

The purpose of this evaluation is to identify existing conditions and estimate the wastewater to be generated with the Proposed Action analyzed in the Commonwealth of the Northern Mariana Islands (CNMI) Joint Military Training Revised Draft Environmental Impact Statement (EIS). This assessment evaluates existing wastewater facilities and wastewater treatment facilities resulting from the Proposed Action.

1.1 DESCRIPTION OF PROPOSED WASTEWATER INFRASTRUCTURE

1.1.1 Base Camp

The Proposed Action includes construction of a Base Camp at the United States (U.S.) Agency for Global Media (USAGM) site on Tinian. As envisioned, Administration, Range Control, and Training Support functions proposed in the Base Camp would use the existing operation and administration building, and warehouse requirements would be partially met with the existing warehouse facilities. Other previously disturbed, cleared areas within the site would accommodate other proposed Base Camp new construction needs. Wastewater infrastructure would be constructed at the Base Camp as described in the subsequent sections.

The USAGM site does not appear to be within either a Class I or II Aquifer Recharge Area/Groundwater Protection Zone on Tinian (Captain B. Bearden, U.S. Public Health Service, Personal Communication, March 3, 2025). No changes in wastewater infrastructure are proposed for the USAGM site on Saipan.

1.1.2 Port of Tinian

A biosecurity facility is proposed to be constructed at the Port of Tinian. Military vehicles would be washed there after training is complete and prior to loading on vessels for transport off-island. The wash facility would be a contained concrete facility where multiple vehicles can be washed simultaneously using permanently mounted cleaning equipment. Wash water would be contained and not discharged. Wash water would be pumped out and disposed of per CNMI regulations as described in the subsequent sections below. No wastewater infrastructure is proposed at the Port of Tinian.

1.1.3 Francisco Manglona Borja/Tinian International Airport

The Proposed Action includes construction of an aircraft shelter to be located at Tinian Divert facility at the Francisco Manglona Borja/Tinian International Airport. The shelter would be sized and constructed to provide protection for aircraft from inclement weather, including typhoon force winds. No wastewater infrastructure is proposed at the aircraft shelter.

1.1.4 Other Facilities

The Proposed Action includes construction of various other facilities including ranges, landing zones, and a drop zone. No wastewater infrastructure is proposed for any of these facilities. Portable toilets may be placed temporarily as required for construction, operation, or training activities.

1.2 COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS WASTEWATER REGULATIONS

The Northern Mariana Islands Administrative Code defines two different types of wastewater treatment systems (Northern Mariana Islands Administrative Code 2017a). The first type is an Individual Wastewater Disposal System, which consists of a septic tank and leach field. An Individual Wastewater Disposal System is typically used for a single residence or business. The second type is an Other Wastewater Treatment System, which includes all treatment methods other than a septic tank.

1.2.1 Individual Wastewater Disposal System Regulations

The following is a summary of the Northern Mariana Islands Administrative Code as it pertains to Individual Wastewater Disposal System design:

- Average daily wastewater flow rates are calculated per Northern Mariana Islands Administrative Code section 65-120-500.
- Septic tank sizing and design are determined per Northern Mariana Islands Administrative Code section 65-120-600.
- Percolation testing is required per Northern Mariana Islands Administrative Code section 65-120-700.
- Leaching field sizing and design are determined per Northern Mariana Islands Administrative Code section 65-120-800.

1.2.2 Other Wastewater Treatment System Regulations

CNMI regulations require construction and operation of an Other Wastewater Treatment System for average daily wastewater flows greater than 5,000 gallons per day (Northern Mariana Islands Administrative Code section 65-120-110). These regulations also state the maximum discharge limits for various effluent constituents, including a total nitrogen limit of 1.0 milligrams per liter (Northern Mariana Islands Administrative Code section 65-120-010). Total nitrogen is removed from wastewater by using bacteria that digest the various forms of nitrogen (e.g., nitrate and nitrite).

1.3 EXISTING WASTEWATER INFRASTRUCTURE

1.3.1 Existing Individual Wastewater Disposal System Infrastructure

Various Public and Private Systems

Tinian has no centralized municipal wastewater collection and treatment system. Residences, businesses, and municipal facilities use Individual Wastewater Disposal Systems that consist of a septic tank and leach field. The Commonwealth Utilities Corporation has awarded a contract to an engineering consultant to prepare a preliminary engineering report for a wastewater treatment plant (Bureau of Environmental and Coastal Quality, Personal Communication, September 12, 2024). Until such a system is funded and constructed, residents and visitors would continue to rely on Individual Wastewater Disposal Systems.

United States Agency for Global Media

The USAGM, formerly International Broadcasting Bureau, operates an Individual Wastewater Disposal System, constructed in 1997, consisting of a packaged wastewater treatment system for aerobic digestion (Figure 1). Treated wastewater is disposed of in a leach field without a septic tank.



Figure 1. Existing Individual Wastewater Disposal System at USAGM

Camp Tinian

A U.S. military Individual Wastewater Disposal System was constructed on Tinian in 1999 to support military training personnel at Camp Tinian (Figure 2). The septic tank and leach field system are sized for 6,640 gallons per day (Department of Environmental Quality 1999). Using the Unified Facilities Criteria 3-240-02, “Domestic Wastewater Treatment” (Department of Defense [DoD] 2012), unit demand of 50 gallons per capita per day for military training camps, this system can support approximately 133 personnel. This Individual Wastewater Disposal System is not currently in use (Senior Chief Petty Officer, U.S. Navy, Personal Communication, September 10, 2024).



Figure 2. Existing Individual Wastewater Disposal System at Camp Tinian

Commonwealth Utilities Corporation Tinian Power Plant

The Commonwealth Utilities Corporation power plant on Tinian has an Individual Wastewater Disposal System with a small aeration tank similar to the USAGM facility. No information was made available regarding this system (Bureau of Environmental and Coastal Quality, Personal Communication, September 12, 2024).

1.3.2 Existing Other Wastewater Treatment System Infrastructure

Tinian Dynasty Hotel and Casino

The Tinian Dynasty Hotel and Casino operated 500 rooms, a casino, several restaurants, and dwelling units for staff accommodation until it closed in 2016. The hotel had its own Other Wastewater Treatment System, a tertiary treatment plant that was permitted to treat 240,000 gallons per day. The condition of this facility is not known. Figure 3 shows the condition of the entrance to the facility in September 2024; the Other Wastewater Treatment System is not visible through the vegetation.



Figure 3. Entrance to the Tinian Dynasty Hotel and Casino

Note: The Other Wastewater Treatment System is located within the vegetation to the right and was not visible at the time this photo was taken.

Tinian Diamond Hotel and Casino

The Tinian Diamond Hotel and Casino operated a hotel, a casino, and a restaurant until it closed in December 2024. The facility had its own Other Wastewater Treatment System, a tertiary treatment plant that consists of membrane bioreactors with denitrification (Figure 4). The Bureau of Environmental and Coastal Quality stated that the Other Wastewater Treatment System had not operated due to a lack of minimum wastewater flow (Bureau of Environmental and Coastal Quality, Personal Communication, September 12, 2024).



Figure 4. Other Wastewater Treatment System at Tinian Diamond Hotel and Casino

1.4 PROPOSED WASTEWATER DEMAND AND WASTEWATER INFRASTRUCTURE

1.4.1 Design Population

The maximum number of personnel on island at any one time from the Proposed Action would be 1,070 (estimates for this study used 1,100 to be conservative) and consists of the following types:

- Up to a maximum of 1,000 military personnel participating in training.
- Between 30 and 50 permanent support personnel, who would maintain and operate the facility. It is assumed that 20 individuals would relocate to Tinian and that the on-island local workforce could fill 30 positions.
- Up to 50 construction workers, who are assumed to relocate to Tinian from off-island. Construction would occur in phases over approximately 10 to 15 years.

Dependents are not included in the estimates above based on the experience of other U.S. DoD construction projects on Tinian.

1.4.2 Proposed Wastewater Demand

Wastewater demand is determined using the requirements of Unified Facilities Criteria 3-240-01 based on population. Wastewater demand for both Alternatives 1 and 2 is the same. Table 1 summarizes the estimated wastewater demands for the Proposed Action.

Table 1. Peak Proposed Wastewater Demand

<i>Personnel Type</i>	<i>Use Category ^a</i>	<i>Unit Flow (gpcd)</i>	<i>Population</i>	<i>Wastewater Flow (gpd)</i>
Military Personnel	Military Training Camps	50	1,000	50,000
Construction Workers (8-hour shift)	Nonresident Personnel and Civilian Employees (per 8-hour shift)	30	50	1,500
Permanent Support Personnel (8-hour shift)	Nonresident Personnel and Civilian Employees (per 8-hour shift)	30	50	1,500
Total				53,000

Legend: gpcd = gallon(s) per capita per day; gpd = gallon(s) per day.

Notes: ^a Data per Table 3.1 of Unified Facilities Criteria 3-240-01.

Wastewater infrastructure is designed to accommodate the peak flow. Actual flow will vary significantly between training events and non-training periods. During non-training periods, wastewater flow could be 1,500 gallons per day or less.

1.4.3 Proposed Wastewater Infrastructure

The Proposed Action includes construction of new wastewater infrastructure at the Base Camp, which would be operated and maintained by the U.S. Marine Corps (USMC). The new wastewater infrastructure could include a sanitary sewer collection system, a sewer lift station, and one or more Individual Wastewater Disposal Systems. Individual Wastewater Disposal Systems are proposed because the USAGM site does not appear to be within either a Class I or II Aquifer Recharge Area/Groundwater Protection Zone on Tinian (Captain B. Bearden, U.S. Public Health Service, Personal Communication, March 3, 2025).

Wastewater service outside of the Base Camp would be met using portable toilets. These portable toilets would be periodically emptied by licensed haulers and disposed of at the new Individual Wastewater Disposal System, at the existing U.S. Department of the Navy (DON) Individual

Wastewater Disposal Systems, or at a septage disposal site approved by the Bureau of Environmental and Coastal Quality per Northern Mariana Islands Administrative Code section 65-120-1405.

Sludge from the CNMI Joint Military Training septic tanks would also be emptied by licensed haulers and disposed of at a septage disposal site approved by the Bureau of Environmental and Coastal Quality per Northern Mariana Islands Administrative Code section 65-120-1405.

Septic Tank Size

Per Northern Mariana Islands Administrative Code section 65-120-605, septic tanks shall be sized using the following equation when the average daily sewer flow is greater than 1,500 gallons per day:

$$\text{Liquid volume} = 1,125 \text{ gallons} + (75\% \times \text{Average daily sewage flow in gallons per day})$$

$$\text{Liquid volume} = 1,125 \text{ gallons} + (75\% \times 53,000 \text{ gallons per day}) = 40,875 \text{ gallons}$$

Per Northern Mariana Islands Administrative Code section 65-120-625, the minimum septic tank dimensions are 6 feet in length, 4 feet wide, and 6 feet deep. Tanks are also required to include scum storage for 15 percent of the liquid depth and 1 inch of air space at the top of the tank. Conceptual tank dimensions that would meet these requirements are:

- *Width:* 20 feet
- *Length:* 42 feet
- *Depth:* 8 feet
- *Tank Volume:* 50,272 gallons (42,208 gallons of liquid)

The calculation above assumed a single septic system for the Proposed Action. Multiple smaller systems or parallel tanks that provide the same capacity could also be used instead.

Leach Field Size

Leach fields for septic systems are sized based on the percolation rate of the soil per Northern Mariana Islands Administrative Code section 65-120-820, Table 800-1. Below are calculations for leach field size using the smallest allowable percolation rate (largest required area).

Assuming percolation at 0.67 inches per hour:

$$53,000 \text{ gallons per day} / 0.5 \text{ gallons per square foot per day} = 106,000 \text{ square feet of leach field}$$

To be conservative, it is estimated that the leach field would be 106,000 square feet, which is approximately 2.4 acres. Percolation tests would be done per Northern Mariana Islands Administrative Code section 65-120-700 prior to starting engineering design of the leach field.

1.5 WASH RACK

Wash water from the vehicle wash facility would be periodically emptied by licensed haulers and disposed of at the new Individual Wastewater Disposal System, at the existing DON Individual Wastewater Disposal System, or at a septage disposal site approved by the Bureau of

Environmental and Coastal Quality per Northern Mariana Islands Administrative Code section 65-120-1405.

1.6 VEHICLE MAINTENANCE

Under the Proposed Action, vehicle maintenance activities would not be conducted at the Base Camp. The training unit would bring on-island all vehicles used during training and remove the vehicles following the completion of training. No drainage or drywells would be constructed or used.

1.7 SUMMARY

Wastewater generated on the Military Lease Area as a result of the Proposed Action can be collected and treated in accordance with Northern Mariana Islands Administrative Code. Below is a summary of the anticipated wastewater system to be constructed at the Base Camp:

- **Wastewater Demand:** 53,000 gallons per day
- Total Septic Volume: 50,272 gallons
- Leach Field Size: 2.4 acres

Operation and maintenance of the wastewater system in accordance with Unified Facilities Criteria 3-240-03 is anticipated to include the following:

- Maintain vegetation over the leach field by cutting grass and removing trees, shrubs, and larger plants.
- Monitor sludge depth within septic tanks and remove sludge when the system is no longer working efficiently in accordance with the equipment manufacturer's recommendations.
- The quantity and frequency of sludge removal is based on the amount the system is used. Generally, it is expected that a septic tank is pumped every 3 to 5 years. If the tank is half full of sludge, then removal could consist of 25,000 gallons or approximately 100 tons.

The wastewater generated by new populations residing outside the Military Lease Area in existing housing, including wastewater generated by construction workers and permanent support personnel outside shift hours, would not exceed the capacity of the Individual Wastewater Disposal Systems. Each private property owner is responsible for maintenance and compliance with the CNMI regulations for their Individual Wastewater Disposal System. Thus, no indirect impact is anticipated from the construction workers or permanent support personnel living outside of the Military Lease Area in support of the Proposed Action.

2 REFERENCES

Department of Environmental Quality. 1999. *Individual Wastewater Disposal System Certification for Use of Septic System*. CNMI Department of Environmental Quality. March 10.

Department of Defense, United States (DoD). 2019. *Unified Facilities Criteria (UFC), Operation and Maintenance (O&M): Wastewater Treatment*. UFC 3-240-03. April 1.

Department of Defense, United States (DoD). 2024. *Unified Facilities Criteria (UFC), Wastewater Collection and Treatment*. UFC 3-240-01. October 1. Northern Mariana Islands Administrative Code. 2017a. *Wastewater Treatment and Disposal Rules and Regulations*. Chapter 65-120.

Northern Mariana Islands Administrative Code. 2017b. *Water Quality Standards*. Chapter 65-130.

This page intentionally left blank.