STORMWATER POLLUTION PREVENTION PLAN

FOR

PORT AUTHORITY OF GUAM FACILITIES

1026 CABRAS HIGHWAY, SUITE 201
PITI, GUAM 96915

SWPPP CONTACT:

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SWPPP PREPARATION DATE:

April 2023

ACCEPTED AND APPROVED:

X

Rory Respicio
General Manager, Port Authority of Guam

CERTIFICATION

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

X

Rory Respicio
General Manager

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REVISIONS

Revision	Date	Details/Comments
Revision 00	February 2011	Newly developed SWPPP
Revision 01	July 2015	Compliance with new General Permit and facility layout and operational changes
Revision 02	May 2022	Compliance with facility layout, operational changes, and expansion yard
Revision 03	February 2023	Compliance with new Multi-Sector General Permit (MSGP)

Note: Updates are required whenever there is a change in design, construction, operation or maintenance which creates a potential for the discharge of pollutants to the waters of the State or if the stormwater pollution prevention plan proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with industrial activity (see Section 1.4).

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LIST OF ACRONYMS AND ABBREVIATIONS

AS	Activity-Specific
AST	Aboveground Storage Tank
BMP	Best Management Practice
CFR	Code of Federal Regulations
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EPA	U.S. Environmental Protection Agency
EQMR	Equipment Maintenance and Repair
Guam EPA	Guam Environmental Protection Agency
IP&E	IP&E Holdings, LLC
mg/L	milligrams per liter
MSGP	Multi-Sector General Permit
NPDES	National Pollutant Discharge Elimination System
OWS	Oil/Water Separator
P2	Pollution Prevention
PAG	Port Authority of Guam
PCBs	polychlorinated biphenyls
SPCC	Spill Prevention, Control, and Countermeasure
SWPPP	Stormwater Pollution Prevention Plan
USCG	U.S. Coast Guard

1.0 FACILITY INFORMATION

1.1 BACKGROUND

This Stormwater Pollution Prevention Plan (SWPPP) has been developed for the Port Authority of Guam (PAG) facility at the commercial port located at 1026 Cabras Highway Piti, Guam 96915 in order to comply with the 1990 amendments to the Clean Water Act (CWA) that established the National Pollutant Discharge Elimination System (NPDES) permitting system. The purpose of the SWPPP is to identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges from the site. It also serves as a framework for pollution prevention activities and as a guidance document for implementing best management practices (BMPs) to minimize stormwater pollution. Facility maps have been drafted and BMP Fact Sheets are provided in Appendix B. Additional SWPPP documentation is maintained in Appendix C.

In accordance with Title 40 Code of Federal Regulations (CFR) 122.26(b)(14)(viii), this SWPPP addresses the areas of the facility that are associated with industrial activities. These operations include an equipment wash rack, outdoor fueling/storage areas, and a Crane Shop in the equipment maintenance and repair (EQMR) area of the facility, gantry crane operation and maintenance area, and the container and cargo storage yard.

This SWPPP has been prepared following U.S. Environmental Protection Agency (EPA) guidelines, *Developing Your Stormwater Pollution Prevention Plan: A Guide for Industrial Operators* (EPA 833-B-09-002, February 2009) and in accordance with the EPA *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP)*, issued on September 29, 2021.

1.2 THE NPDES PERMIT AND UPDATED REQUIREMENTS

PAG operates under MSGP GUR050000, NPDES Identification Number GUR053001. A copy of the permit is included in Appendix D. This SWPPP must address potential pollution sources of stormwater and the BMPs to prevent pollution of Apra Harbor and the Philippine Sea. This SWPPP addresses the requirements set forth in the NPDES permit for each of the drainage areas at the site, including industry sector-specific requirements outlined in Part 8, Subpart Q of the MSGP.

1.3 APPLICABILITY AND DISTRIBUTION

The EPA has authority under the CWA to regulate discharges to waters of the United States and its territories, including priority stormwater sources. Federal regulations require these discharges be managed via the NPDES. The EPA remains the permit authority for Guam.

The SWPPP will be distributed to each member of the Stormwater Pollution Prevention (P2) Team, described in Section 2.0. Updates to the SWPPP, as necessary, will be distributed by the P2 Team leader.

1.4 REQUIREMENT TO POST SIGNAGE OF PERMIT COVERAGE

A sign or other notice of the facility's permit coverage will be posted at a safe, publicly accessible location in close proximity to the facility. A font large enough to be readily viewed from a public right-of-way will be used and periodic maintenance of the sign will be performed to

ensure that it remains legible, visible, and factually correct. Requirements for the sign's contents are located in Section 1.3.5 of the MSGP.

1.5 REVISIONS TO THE SWPPP

This SWPPP will be amended whenever there is a significant change in design, construction, maintenance, or operation at the port facility that creates or modifies potential pollutant discharges, or if this SWPPP proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with industrial activity at the port. Conditions that indicate a need for revision of this SWPPP are discussed in Section 8 and will be identified during periodic site inspections, as described in Section 6.

2.0 STORMWATER POLLUTION PREVENTION TEAM

The PAG has designated a Stormwater P2 Team that provides a forum for identifying and addressing stormwater pollution concerns at the commercial port, and to ensure that the SWPPP is appropriately implemented. The PAG P2 Team consists of PAG managers and supervisors who are responsible for activities that have the potential to directly impact stormwater quality at the PAG. The P2 Team is responsible for the following:

- Identifying any changes in operations to determine whether revisions must be made to this SWPPP
- Supporting implementation of NPDES permit and SWPPP requirements, control measures, and BMPs
- Conducting or coordinating SWPPP training
- Conducting or coordinating stormwater sampling and monitoring efforts
- Ensuring timely submittal of Discharge Monitoring Reports (DMRs) and annual stormwater reports to the EPA
- Taking corrective actions when deficiencies or issues are identified
- Maintaining clear lines of communication with tenants and PAG management to ensure a cooperative partnership.

The P2 Team will meet at a minimum of once annually to discuss stormwater-related problems, or concerns. The Team Leader may call additional meetings to address specific events or issues as they arise. Additional attendees, such as consultants, vendors, or stakeholders may be included in the meetings when appropriate. The P2 Team will also ensure that the training described in Section 4.1.8 occurs annually, or more frequently, as deemed necessary by the P2 Team.

PAG P2 Team members and their responsibilities are identified in Table 2-1.

Table 2-1: Port Authority of Guam Pollution Prevention Team

Title	Telephone Number	Roles and Responsibilities
General Manager	671-477-5931 ext. 302/303	Review and approve SWPPP, enforce planning and implementation.
Environmental Specialist	671-477-5931 ext. 430	Pollution Prevention Coordinator, review/revise SWPPP as necessary, administer implementation.
Maintenance Manager	671-477-5931 ext. 401	Support implementation of SWPPP, team leader for corrective actions.
Operations Manager	671-477-5931 ext. 310	Support implementation of SWPPP, identify areas for improvement.
Health & Safety Manager	671-477-5931 ext. 258	Support implementation of SWPPP; assist with corrective actions.

3.0 Site Description

3.1 GENERAL

Facility Information

Name of Facility: Port Authority of Guam
Address: 1026 Cabras Highway, Suite 201
Piti, Guam 96915

Geographic Location (in decimal degrees, using WGS84 datum):
Latitude: 13.462656°N Longitude: 144.667326°E

The PAG Cargo Terminal is located at 1026 Cabras Highway on Apra Harbor in Piti, Guam. The Cargo Terminal compound occupies a total of 61.75 acres and includes an administrative building, EQMR building, Crane Shop and warehouse, cargo warehouse, gantry crane operation and maintenance area, and a large container and cargo storage yard (Figure 1).

As part of the port expansion and modernization program, the PAG has implemented a number of improvements to support stormwater management and minimize potential pollutant discharges. These improvements have included installation of coalescing media oil/water separators (OWSs) on outfalls, use of vegetated swales and infiltration ponds to reduce runoff, and installation of a dedicated equipment wash rack at the EQMR facility.

Industrial activities conducted on the PAG site include EQMR operations, an equipment wash rack, outdoor fueling/storage areas, a Crane Shop, gantry crane operation and maintenance area, and the container and cargo storage yard.

To the west of the PAG facility, is a site operated by IP&E Holdings, LLC (IP&E) that includes a small tank farm behind a concrete wall. A portion of the IP&E site that encompasses the tank farm is included in a drainage area that discharges through an OWS on the PAG site.

3.2 DRAINAGE SYSTEM DESCRIPTIONS

Drainage at the PAG site is split into ten drainage areas: Drainage Areas 1 (DA-1) through 10. Stormwater in each drainage area except DA-4 is collected through a number of storm drain inlets and is conveyed to outfalls (Outfalls 001 through 010) that discharge directly into Apra Harbor.

Drainage at the EQMR facility consists of two drainage areas, DA-1 and DA-2. Stormwater in these drainage areas is collected through a number of storm drain inlets and is conveyed to Outfalls 001 and 002 that discharge directly into Apra Harbor.

The gantry crane operation and maintenance area is comprised of two drainage areas: Drainage Area 3 and Drainage Area 4. Drainage Area 3 includes a staging area for bulk cargo. Stormwater in Drainage Area 3 is collected through a number of storm drain inlets and is conveyed to Outfall 003 that discharges directly into Apra Harbor. Drainage Area 4 runs the length of the gantry crane tracks. Stormwater in Drainage Area 4 generally sheet flows to the south and discharges directly into Apra Harbor.

The remaining six drainage areas, DA-5 through DA-10, consist of the container and cargo

storage yard. Stormwater in these drainage areas is collected through a number of storm drain inlets and is conveyed to Outfalls 005 through 010 that discharge directly into Apra Harbor.

A detailed description of each drainage area is provided below.

3.2.1 Drainage Area 1

Primary Features: *EQMR Building, Crane Shop, IP&E Site*
Drainage Area: *6.13 acres (4.00 acres within PAG boundary and 2.13 acres of IP&E site)*
Imperviousness: *High*

Drainage Area 1 (Figure 2) consists of a portion of the IP&E facility to the west of PAG that includes a small aboveground storage tank (AST) farm and a storage yard, the EQMR building, the western portion of Warehouse 1 that contains the Crane Shop, the western portion of the administration building, and a parking area. A total of ten storm drain inlets are located within Drainage Area 1. Stormwater enters the inlets and is conveyed to an OWS that drains to Outfall 001, located in the western portion of the drainage area, which discharges into Apra Harbor. Paved surfaces in the drainage area are graded to direct stormwater to the inlets. Rooftop areas are not equipped with downspouts but are sloped to direct water to flow off the sides of the roofs and onto the pavement below.

A small diesel fuel tank farm, operated by IP&E, is located within Drainage Area 1. Stormwater that accumulates in the secondary containment of this tank farm is occasionally pumped through a pipe and is discharged to a storm drain inlet within the drainage area. IP&E conducts a visual inspection of the stormwater for any indication of contamination prior to discharge. If there is any evidence of contamination, the stormwater is not discharged, and an alternative means of offsite disposal is used. Inspection and management of the stormwater is conducted in accordance with IP&E's Spill Prevention, Control, and Countermeasure (SPCC) Plan (IP&E, 2018).

3.2.2 Drainage Area 2

Primary Features: *Equipment Washing, Fueling Area, Used Oil Storage Area, Outdoor Storage Area*
Drainage Area: *5.33 acres*
Imperviousness: *High*

Drainage Area 2 (Figure 3) includes the equipment wash rack, a fueling area, a used oil storage area, an outdoor material storage area, the eastern portion of Warehouse 1, the eastern portion of the administration building, and a parking area.

Throughout Drainage Area 2, eleven storm drain inlets capture and convey stormwater to an OWS that drains to Outfall 002, located in the southern corner of the drainage area, which discharges into Apra Harbor. All paved surfaces in the drainage area are graded to direct stormwater to the inlets. Rooftop areas are not equipped with downspouts but are sloped to direct water to flow off the sides of the roof and onto the pavement below.

3.2.3 Drainage Area 3

Primary Features: *Portion of Cargo Building, Bulk Cargo Staging Area*
Drainage Area: *4.34 acres*
Imperviousness: *High*

Drainage Area 3 (Figure 3) includes the western portion of the cargo building and a bulk cargo staging area. Bulk cargo, including rebar, is occasionally staged in this area before it is transported offsite. Throughout Drainage Area 3, eight storm drain inlets capture and convey stormwater to an OWS that drains to Outfall 003, located along the wharf, which discharges into Apra Harbor.

3.2.4 Drainage Area 4

Primary Features: *Gantry Crane Operation and Maintenance Area*
Drainage Area: *11.47 acres (11.28 acres within PAG boundary and 0.19 acres of IP&E site)*
Imperviousness: *High*

Drainage Area 4 (Figure 4) is located along the wharf. The gantry cranes in this area operate along a track system that fronts the wharf. Due to their size and configuration, the gantry cranes cannot be moved to the EQMR facility for repair. Therefore, periodic equipment maintenance and repair is performed in this area. There are no storm drain inlets in the immediate vicinity and stormwater in this area generally sheet flows towards the south where it discharges into Apra Harbor. Because the area does not have a single point source there is no designated outfall.

3.2.5 Drainage Area 5

Primary Features: *Portions of Cargo Building and Storage Yard*
Drainage Area: *4.70 acres*
Imperviousness: *High*

Drainage Area 5 (Figure 5) includes the eastern portion of the cargo building and a portion of the cargo storage yard. Throughout Drainage Area 5, six storm drain inlets capture and convey stormwater to an OWS that drains to Outfall 005, located along the wharf, which discharges into Apra Harbor.

3.2.6 Drainage Area 6

Primary Features: *Portion of Cargo Storage Yard*
Drainage Area: *2.81 acres*
Imperviousness: *High*

Drainage Area 6 (Figure 6) includes a portion of the cargo storage yard. Throughout Drainage Area 6, four storm drain inlets capture and convey stormwater to an OWS that drains to Outfall 006, located along the wharf, which discharges into Apra Harbor.

3.2.7 Drainage Area 7

Primary Features: *Portion of Cargo Storage Yard*
Drainage Area: *12.51 acres*
Imperviousness: *High*

Drainage Area 7 (Figure 6) includes a portion of the cargo storage yard. Throughout Drainage Area 7, trench drains capture and convey stormwater to two OWSs that drain to Outfall 007, located along the wharf, which discharges into Apra Harbor.

3.2.8 Drainage Area 8

Primary Features: *Portion of Cargo Storage Yard*
Drainage Area: *5.98 acres*
Imperviousness: *High*

Drainage Area 8 (Figure 7) includes a portion of the cargo storage yard. Throughout Drainage Area 8, one storm drain inlet and trench drains capture and convey stormwater to an OWS that drains to Outfall 008, located along the wharf, which discharges into Apra Harbor.

3.2.9 Drainage Area 9

Primary Features: *Portion of Cargo Storage Yard*
Drainage Area: *4.80 acres*
Imperviousness: *High*

Drainage Area 9 (Figure 7) includes a portion of the cargo storage yard. Throughout Drainage Area 9, trench drains capture and convey stormwater to an OWS that drains to Outfall 009, located in the storage yard, which discharges into Apra Harbor.

3.2.10 Drainage Area 10

Primary Features: *Portion of Cargo Storage Yard*
Drainage Area: *8.28 acres*
Imperviousness: *High*

Drainage Area 10 (Figure 8) includes a portion of the cargo storage yard. Throughout Drainage Area 10, trench drains capture and convey stormwater to an OWS that drains to Outfall 010, located in the marshy area south of the storage yard, which discharges into Apra Harbor.

3.3 FACILITY ACTIVITIES

Primary activities conducted within the PAG facility include container and cargo storage and preventative care, maintenance, and repair of PAG-owned vehicles and equipment, which includes gantry cranes, forklifts, top lifters, grounds equipment, and official government vehicles. Equipment maintenance includes inspection, painting operations, battery servicing and storage, change-out of equipment fluids (engine oil and hydraulic fluids), fueling, basic welding and fabrication, and equipment washing.

Vehicle and Equipment Maintenance Area (Drainage Area 1)

Vehicle and equipment maintenance and repair activities are performed within the EQMR building and under covered service areas located under the eaves on the south side of the structure. Vehicle and equipment maintenance and repair activities are also performed outside in uncovered areas, to the south of the EQMR building, and to the northeast of Warehouse 1 (Drainage Area 1). Additional metal fabrication occurs in the Welding Shop (Drainage Area 2). Chemicals used in this area include lubricants, solvents, paints, diesel fuel, gasoline, hydraulic fluid, and engine oil. These chemicals are stored inside the EQMR building and are kept within appropriate storage containers such as flammable material storage lockers and containment pallets.

Crane Shop (Drainage Area 1)

Maintenance and repair of PAG gantry crane spreaders is performed within the Crane Shop, which is located in the western portion of Warehouse 1. All maintenance and repair activities associated with the Crane Shop are conducted indoors and are not exposed to precipitation or

stormwater run-on/runoff. Chemicals and products used in this area include lubricants, solvents, paints, diesel fuel, gasoline, hydraulic fluid, and engine oil. These materials are stored inside Warehouse 1 and are kept within appropriate storage containers such as flammable material storage lockers and containment pallets.

Vehicle and Equipment Wash Rack (Drainage Area 2)
Vehicle and equipment washing occurs in the designated wash rack that is located to the east of the Welding Shop. Wash water is contained by the washing pad and directed to a self - contained wash water recycling system that is periodically maintained by a service contractor in accordance with manufacturer specifications.

Diesel Fuel Storage Area (Drainage Area 2)
A secondary containment pad is located approximately 100 feet to the southeast of the EQMR building. The containment pad is used to house one 8,000-gallon diesel fuel AST. Equipment fueling operations take place immediately adjacent to the containment pad.

Used Oil Storage Area (Drainage Area 2)
An outdoor secondary containment area, identified as the Used Oil Storage Area, is located immediately to the south of the Diesel Fuel Storage Area. The Used Oil Storage Area houses two 950-gallon used oil ASTs and is also used to store drums of used oil and spent oily absorbents.

Material Storage Area (Drainage Area 2)
Outdoor storage areas are located to the west and southwest of the Welding Shop that house miscellaneous materials including concrete barriers, metal pipes and beams, crane fittings, and other materials used for welding and fabrication. The storage area to the southwest of the Welding Shop is contained within concrete curbing.

Gantry Crane Operation and Maintenance Area (Drainage Area 4)
Due to their size and configuration, gantry cranes that operate in this area cannot be moved to the EQMR for maintenance and repair. Therefore, periodic maintenance of this equipment is performed in place. Chemicals used in these operations include lubricants, solvents, paints, diesel fuel, gasoline, hydraulic fluid, and engine oil. Chemicals are not stored in this area during normal operations and are only brought to this area to support maintenance activities. These chemicals are stored at the EQMR facility as described above.

Bulk Cargo Staging Area (Drainage Area 3)
Bulk cargo, including rebar, is occasionally staged outside in this area before it is transported offsite. Chemicals are not stored in this area.

Cargo Storage Area (Drainage Areas 3, 5, 6, 7, 8, 9, and 10)
Cargo is stored inside the Cargo Building located in drainage areas 3 and 5 as well as in the container storage yard located in drainage areas 5 through 10. Chemicals are not stored in these areas.

3.4 POTENTIAL POLLUTANT SOURCES

Although the most significant equipment maintenance and repair is performed inside the EQMR building, other operations and materials have the potential to be exposed to stormwater. Table 3-1 provides a summary of industrial activities and the corresponding potential pollutants that may be exposed to stormwater.

Table 3-1: Potential Pollutants Associated with Industrial Activities

Industrial Activity	Potential Pollutants
Vehicle and equipment maintenance	Diesel fuel, gasoline, grease, oil, hydraulic fluid, solvents, lubricants, metals, battery acid, paint
Vehicle and equipment fueling	Diesel fuel
Vehicle and equipment washing	Diesel fuel, gasoline, grease, oil, hydraulic fluid, lubricants, metals, paint
Material storage	Metals, paint, used oil
Welding and fabrication	Metals, cutting compounds, lubricants

3.5 SPILLS AND LEAKS

Due to the nature of equipment fueling and industrial activities conducted at the site, the potential exists for fuel or chemicals to be spilled or for storage containers to leak. EPA has defined "significant spills" to include releases within a 24-hour period of hazardous substances in excess of reportable quantities under Section 311 of the CWA and Section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act.

The following is a summary of where potential spills and leaks could occur at the facility and which outfalls would be likely to be affected:

Vehicle and Equipment Maintenance Area (Drainage Area 1)

Potential spills and leaks may occur during vehicle and equipment maintenance activities either due to unanticipated equipment failure or accidental spillage of materials by maintenance personnel. Materials spilled indoors at the EQMR building would be readily contained and cleaned up without impacting stormwater; however, spills that occur in the outdoor maintenance area on the south side of the EQMR building could potentially flow into storm drain inlets and impact stormwater discharging from Outfall 001.

Crane Shop (Drainage Area 1)

Potential spills and leaks may occur during crane maintenance activities either due to unanticipated equipment failure or accidental spillage of materials. Materials spilled indoors at the Crane Shop would be readily contained and cleaned up without impacting stormwater at the port. Although all operations at the Crane Shop occur indoors, there is a small potential for spills to occur outdoors during transfer of equipment or materials into the shop area. Spills occurring outside of the Crane Shop could potentially flow into a storm drain inlet and impact stormwater discharging from Outfall 001.

Vehicle and Equipment Wash Rack (Drainage Area 2)

Potential spills and leaks from the equipment wash rack could include wash water from vehicle and equipment washing activities as well as any associated soaps and/or detergents. A small potential also exits for equipment leaks during washing activities, which could include oil, grease, fuel, and/or hydraulic oil. Although the wash rack is designed to contain all liquids generated from its use, any spilled material that was not successfully contained could enter storm drain inlets and impact stormwater discharging from Outfall 002.

Diesel Fuel Storage Area (Drainage Area 2)

Potential spills and leaks from the diesel fuel storage area could include diesel fuel from the 8,000-gallon AST or equipment fueling operations that occur in the surrounding area. The

secondary containment pad is meant to prevent leaks from migrating out of the containment area, however, any material spilled outside of the containment area could enter storm drain inlets and impact stormwater discharging from Outfall 002.

Used Oil Storage Area (Drainage Area 2)
Potential spills and leaks within the used oil storage area could occur during transfer to/from the used oil ASTs, or from container failure. Container failure could also cause leaks from new liquid material containers, or from hazardous and non-hazardous waste containers staged in this area. Although the used oil storage area is designed to prevent leaks from migrating out of the containment area, any spilled material that was not successfully contained could enter storm drain inlets and impact stormwater discharging from Outfall 002.

Gantry Crane Operation and Maintenance Area (Drainage Area 4)
Potential spills and leaks may occur in this area as a result of unanticipated equipment failure or from accidental spillage of materials during gantry crane maintenance operations. If left uncontained, spills occurring in this area could impact stormwater discharging from Drainage Area 4

Bulk Cargo Staging Area (Drainage Area 3)
Potential spills and leaks may occur in this area as a result of uncovered material storage and leaks from unused equipment stored in the area. If left uncontained, spills occurring in this area could impact stormwater discharging from Outfall 003.

Cargo Storage Area (Drainage Areas 3, 5, 6, 7, 8, 9, and 10)
Potential spills and leaks may occur in these areas as a result of leakage from cargo containers. If left uncontained, spills occurring in these areas could impact stormwater discharging from Outfalls 003, 005, 006, 007, 008, 009, and 010.

3.5.1 Historic Spills
No significant spills were reported to have occurred onsite during the period of record. An Emergency Spill Log is contained in Appendix C.

3.6 NON-STORMWATER DISCHARGE IDENTIFICATION

3.6.1 Methodology
A comprehensive site inspection was conducted in October 2019. The purpose of this inspection was to identify the presence and potential causes of any unauthorized non-stormwater discharges occurring at the site. All of the drainage areas were inspected, including secondary containment pads, the equipment wash rack, outdoor storage areas, gantry crane operation area, as well as all storm drain inlets and stormwater outfall locations.

3.6.2 Findings
At the time of the inspection there were no sources of non-stormwater discharge identified. All structural BMPs were found to be in good condition with no evidence of structural deterioration or other operational conditions that could lead to an unauthorized non-stormwater discharge. All storm drain inlets were found to be in good condition with no evidence of contaminants or other unauthorized materials entering the system. All of the outfalls were also found to be in good condition with no indication of non-stormwater discharges.

3.7 EXISTING MONITORING

A visual inspection program of the ASTs and related equipment is in place at the PAG facility. Monthly inspections are performed by maintenance staff and documentation of the inspections is kept onsite in the SPCC plan for a minimum of 3 years. Inspection checklists are available in Appendix D.1 of the SPCC plan. A copy of the SPCC plan is maintained onsite in the same location as this SWPPP.

3.8 HISTORICAL STORMWATER MONITORING DATA

The following section provides a summary of quarterly benchmark sampling results obtained under a previous permit. Under the 2015 MSGP, benchmark criteria for total aluminum, total iron, total lead, and total zinc were not hardness dependent values. Grab samples were intermittently collected from Outfall 001 and Outfall 002 between December 2015 to April 2022.

Monitoring Period 1: October – December 2015		
Sample Collection Date: December 28, 2015		
Monitoring Location: Outfall 001		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.087 J mg/L	0.75 mg/L
Total Iron	0.051 J mg/L	1.0 mg/L
Total Lead	< 0.005 mg/L	0.21 mg/L
Total Zinc	0.270 mg/L	0.09 mg/L
Monitoring Location: Outfall 002		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.250 mg/L	0.75 mg/L
Total Iron	1.600 mg/L	1.0 mg/L
Total Lead	0.0019 J mg/L	0.21 mg/L
Total Zinc	0.280 mg/L	0.09 mg/L
Monitoring Period 2: July – September 2016		
Sample Collection Date: September 22, 2016		
Monitoring Location: Outfall 001		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.240 mg/L	0.75 mg/L
Total Iron	0.230 mg/L	1.0 mg/L
Total Lead	0.0011 J mg/L	0.21 mg/L
Total Zinc	0.088 mg/L	0.09 mg/L
Monitoring Location: Outfall 002		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.140 mg/L	0.75 mg/L
Total Iron	0.260 mg/L	1.0 mg/L
Total Lead	0.0017 J mg/L	0.21 mg/L
Total Zinc	0.150 mg/L	0.09 mg/L

Monitoring Period 3: July – September 2017		
Sample Collection Date: September 20, 2017		
Monitoring Location: Outfall 001		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.088 J mg/L	0.75 mg/L
Total Iron	0.100 mg/L	1.0 mg/L
Total Lead	0.0018 J mg/L	0.21 mg/L
Total Zinc	0.043 mg/L	0.09 mg/L
Monitoring Location: Outfall 002		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.085 J mg/L	0.75 mg/L
Total Iron	0.080 J mg/L	1.0 mg/L
Total Lead	<0.005 mg/L	0.21 mg/L
Total Zinc	0.033 mg/L	0.09 mg/L
Monitoring Period 4: October – December 2017		
Sample Collection Date: December 28, 2017		
Monitoring Location: Outfall 001		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.097 mg/L	0.75 mg/L
Total Iron	1.100 mg/L	1.0 mg/L
Total Lead	<0.005 mg/L	0.21 mg/L
Total Zinc	0.180 mg/L	0.09 mg/L
Monitoring Location: Outfall 002		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.320 mg/L	0.75 mg/L
Total Iron	0.760 mg/L	1.0 mg/L
Total Lead	<0.005 mg/L	0.21 mg/L
Total Zinc	0.620 mg/L	0.09 mg/L

Monitoring Period 5: April – June 2018		
Sample Collection Date: April 27, 2018		
Monitoring Location: Outfall 001		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.240 mg/L	0.75 mg/L
Total Iron	0.780 mg/L	1.0 mg/L
Total Lead	0.0069 mg/L	0.21 mg/L
Total Zinc	0.150 mg/L	0.09 mg/L
Monitoring Location: Outfall 002		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	<0.100 mg/L	0.75 mg/L
Total Iron	<0.100 mg/L	1.0 mg/L
Total Lead	<0.005 mg/L	0.21 mg/L
Total Zinc	<0.020 mg/L	0.09 mg/L
Monitoring Period 6: July – September 2018		
Sample Collection Date: August 18, 2018		
Monitoring Location: Outfall 001		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.140 mg/L	0.75 mg/L
Total Iron	0.200 mg/L	1.0 mg/L
Total Lead	0.0024 J mg/L	0.21 mg/L
Total Zinc	0.046 mg/L	0.09 mg/L
Monitoring Location: Outfall 002		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.084 J mg/L	0.75 mg/L
Total Iron	0.160 mg/L	1.0 mg/L
Total Lead	0.0024 J mg/L	0.21 mg/L
Total Zinc	0.093 mg/L	0.09 mg/L

Monitoring Period 7: April – June 2019		
Sample Collection Date: June 21, 2019		
Monitoring Location: Outfall 001		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.190 mg/L	0.75 mg/L
Total Iron	0.510 mg/L	1.0 mg/L
Total Lead	0.0032 J mg/L	0.21 mg/L
Total Zinc	0.110 mg/L	0.09 mg/L
Monitoring Location: Outfall 002		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.100 mg/L	0.75 mg/L
Total Iron	0.042 J mg/L	1.0 mg/L
Total Lead	<0.005 mg/L	0.21 mg/L
Total Zinc	0.110 mg/L	0.09 mg/L
Monitoring Period 8: April – June 2022		
Sample Collection Date: April 12, 2022		
Monitoring Location: Outfall 001		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.0691 J mg/L	0.75 mg/L
Total Iron	0.0542 J mg/L	1.0 mg/L
Total Lead	0.000443 J mg/L	0.21 mg/L
Total Zinc	0.0593 mg/L	0.09 mg/L
Monitoring Location: Outfall 002		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.112 mg/L	0.75 mg/L
Total Iron	0.0514 J mg/L	1.0 mg/L
Total Lead	0.000232 J mg/L	0.21 mg/L
Total Zinc	0.0655 mg/L	0.09 mg/L

Monitoring Period 9: July – September 2022		
Sample Collection Date: July 26, 2022		
Monitoring Location: Outfall 001		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.0618 mg/L	0.75 mg/L
Total Iron	0.0564 mg/L	1.0 mg/L
Total Lead	0.000578 mg/L	0.21 mg/L
Total Zinc	0.0308 mg/L	0.09 mg/L
Monitoring Location: Outfall 002		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.0631 mg/L	0.75 mg/L
Total Iron	0.0419 mg/L	1.0 mg/L
Total Lead	0.000532 mg/L	0.21 mg/L
Total Zinc	0.0584 mg/L	0.09 mg/L

Average Parameter Concentrations 2014/2015		
Monitoring Location: Outfall 001		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.135 mg/L	0.75 mg/L
Total Iron	0.342 mg/L	1.0 mg/L
Total Lead	0.0029 mg/L	0.21 mg/L
Total Zinc	**0.108 mg/L**	0.09 mg/L
Monitoring Location: Outfall 002		
Parameter	**Result**	**2015 Benchmark Criteria**
Total Aluminum	0.139 mg/L	0.75 mg/L
Total Iron	0.343 mg/L	1.0 mg/L
Total Lead	0.003 mg/L	0.21 mg/L
Total Zinc	**0.149 mg/L**	0.09 mg/L

Average quarterly benchmark sampling results were below 2015 criteria for all parameters except for concentrations of total zinc detected at Outfall 001 and Outfall 002. The exceedances for total zinc at Outfall 001 and Outfall 002 have potentially been caused by exposed galvanized metal surfaces and tire dust.

In an effort to reduce concentrations of zinc in stormwater runoff, the port has made an effort to move galvanized materials under cover and has increased the frequency of housekeeping and sweeping operations. The port has also implemented a scheduled vehicle and equipment washing program at the equipment wash rack, which helps reduce potential pollutant load on fleet vehicles and equipment. The port is aware that the marine waters benchmark value for zinc under the 2015 MSGP (0.09 mg/L) is significantly lower than the hardness dependent value derived under the previous permit. The port will continue to evaluate additional control options if quarterly benchmark sampling results under the new permit exceed benchmark criteria.

4.0 STORMWATER CONTROL MEASURES

This section of the SWPPP discusses stormwater control measures utilized at the PAG facility. BMPs can minimize potential pollutant sources and effective stormwater management can further reduce pollutants in stormwater discharges. BMPs can be characterized into three groups based on generic activities, specific activities, and site/structural-specific activities. These BMP groups are defined as follows:

- "Baseline" BMPs are practices that are relatively simple, applicable to a wide variety of industries and activities, and are inexpensive. EPA identifies eight baseline BMPs as discussed in Section 4.1 of this SWPPP.

- "Activity-Specific" (AS) BMPs are practices that are applicable to a specific type of activity that occurs at the facility. The activity may occur at more than one location. Examples include equipment washing and maintenance. Activities specific to the facility that potentially contribute to stormwater pollution and their respective BMPs are discussed in Section 4.2.

- "Site-Specific" BMPs are practices that are applicable to specific locations, structures, or items of equipment at the facility. Site-specific BMPs are discussed in Section 4.3.

Fact sheets for the BMPs relevant to the PAG facility are provided in Appendix B.

4.1 BASELINE BEST MANAGEMENT PRACTICES

The maintenance facility NPDES permit requires the SWPPP to provide an implementation schedule for stormwater control measures and BMPs, including the following baseline BMPs:

- Minimize Exposure
- Good Housekeeping
- Preventive Maintenance
- Visual Inspections
- Spill Prevention and Response
- Sediment and Erosion Prevention and Control
- Management of Stormwater Runoff
- Pollution Prevention Training
- Recordkeeping and Internal Reporting Procedures
- Major Storm Events

These eight BMPs are also identified in the EPA Guidance for SWPPPs and are applicable to all types of industrial facilities. Specific measures for implementing these BMPs are described in subsequent sections of this SWPPP. In addition, three of the fact sheets included in Appendix B specifically address the concepts of baseline BMPs. Those fact sheets are:

- BMP Sheet BL1 – Elimination of Non-Stormwater Discharges to Storm Drains
- BMP Sheet BL2 – Emergency Spill Cleanup Plans
- BMP Sheet BL3 – Stormwater Pollution Prevention Education

4.1.1 Minimize Exposure

The following control measures have been implemented to minimize the exposure of potential

pollutants to rain and runoff.

- All maintenance and repair activities are performed indoors at the EQMR building and Crane Shop whenever practicable.
- Use of containment measures (i.e. hanging plastic barriers, tarpaulins, and roofing cover) is in effect for all painting and outdoor maintenance operations.
- Vehicle and equipment washing is performed at the designated wash rack.
- Diesel fuel AST, used oil ASTs, and drums and containers are all maintained on secondary containment pads with impervious ground surfaces and walls.
- Outdoor material storage occurs within a curbed area to prevent run-on and minimize potential pollutant runoff.

4.1.2 Good Housekeeping

Good housekeeping requires the maintenance of a clean, orderly facility. Good housekeeping measures are implemented as part of daily operations and include weekly visual inspections and regular cleaning of work areas to remove garbage, debris, and other potential pollutants, as well as weekly sweeping of all surfaces at PAG with a road sweeper.

Fact sheets for AS BMPs addressing good housekeeping measures as they apply to specific operations or general site/building maintenance activities have been created and are discussed in Section 4.2 and included in Appendix B.

4.1.3 Preventive Maintenance

A preventive maintenance program involves timely inspection and maintenance of stormwater management devices, as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures. These breakdowns or failures can result in discharges of pollutants to surface waters. Routine facility inspections are conducted quarterly, at minimum, and aid in identifying potential areas requiring maintenance. Specific attention is paid to the EQMR area, vehicle and equipment wash rack, equipment fueling area, used oil storage area, gantry crane operation area, and the outside material storage areas.

4.1.4 Spill Prevention and Response Procedures

The Port Police document spills and leaks of oil or hazardous materials at PAG facilities both on land and in the water. Spills in the water are handled by the Guam EPA and the U.S. Coast Guard (USCG). The USCG responds to spills in the waterways to conduct an evaluation of the spill and predict the movement and effects of the spill.

In the event of a spill, the following agencies must be contacted immediately:

Agency	Telephone Number
Port Police	Direct Line: (671) 472-2703 Main Gate: (671) 477-2864
Guam Fire Department	Piti Station: (671) 472-8139 Tamuning/Tumon Station: (671) 646-8801/8802
National Response Center	(800) 424-8802
USCG	Sector Guam: (671) 355-4824 On-Base Emergency: (671) 333-4357
Guam EPA	(671) 300-4751

The relevant AS BMPs that provide suggestions for handling spills and leaks as they may potentially occur while conducting a specific activity are described in Section 4.2 and fact sheets are located in Appendix B. PAG personnel should also refer to and comply with spill prevention and response procedures outlined in the facility's SPCC plan, which is maintained onsite in the same location as this document.

4.1.5 Erosion and Sediment Control

Erosion concerns can be divided into two broad categories:

(1) Erosion due to active construction projects, and
(2) Chronic or nuisance eroding areas due to inadequate conveyance, steep slopes, erodible fills, etc.

The first category of erosion potential is associated with various development projects being actively constructed or planned on facility property. For each project, an approved sediment and erosion control plan will be developed and approved by the local or state regulatory agencies. These plans will identify the specific control measures that will be in place during construction to minimize erosion and sedimentation. At present there are no sites of construction-related erosion at PAG facility areas covered by this SWPPP.

The second category of erosion or sedimentation problems involves areas that may experience nuisance erosion due to inadequate conveyance, steep slopes, or erodible fills. No significant visible erosion was identified during site inspections.

The MSGP requires that at a minimum, facilities must implement flow velocity dissipation devices at outfall locations to minimize the potential for erosion. However, the stormwater outfalls at the PAG facility discharge directly into Apra Harbor from storm drainage pipes embedded in the retaining seawall or directed underground into the harbor. In addition, sheet flow from pavement directly discharges to the surface waters of Apra Harbor from the sea wall. Stormwater discharging from the outfalls does not come into contact with any natural or manmade feature with potential to erode prior to entering the harbor. Furthermore, water depths at the point of discharge from the sea wall are upwards of 30 feet, thereby posing no risk for erosion of the harbor floor.

Due to the unique configuration of the stormwater outfalls at the site, flow velocity dissipation devices do not serve a practical function. Therefore, flow velocity dissipation devices have not been installed.

In an effort to minimize discharge of sediment mobilized by stormwater runoff at the site, the port has incorporated grit traps into the design of the coalescing media OWSs located on the stormwater drainage lines in each drainage area other that DA-4 which is sheet flow. The stormwater in each of these drainage areas passes through the OWSs, effectively capturing sediment in the grit traps prior to stormwater discharge. The port will continue to evaluate sedimentation through the periodic inspection program and will identify and implement additional BMPs, if necessary. Further information regarding the OWSs is presented in Section 4.1.6.

4.1.6 Management of Stormwater Runoff

A typical system of devices and facilities to manage stormwater runoff includes catch basins, underground chambers, detention basins, wet ponds, OWSs, and oil/grit chambers. The various facilities and devices provide different types of stormwater quality and quantity management.

For example, a typical stormwater basin may be designed to provide quantity management for attenuating peak discharges and targeting pollutants like sediment and phosphorus from paved areas, whereas an OWS is utilized to remove petroleum from lower flows through the drainage systems in maintenance areas.

Structural BMPs in place at the PAG facility include an equipment wash rack, stormwater diversion measures, ¼" mesh wire installed on the administrative parking lot storm drains, and OWSs.

As part of the port modernization program, an equipment wash rack was installed in the northeast corner of the EQMR facility to support vehicle and equipment washing while minimizing the potential for pollutants from these activities to impact stormwater discharge (Figure 2). The wash rack is designed to contain all associated wash water and prevent stormwater run-on/runoff. The system uses a self-contained wash water recycling system that is periodically inspected and maintained by a service contractor.

Stormwater diversion measures are currently used to reduce exposure of stormwater to potential pollutants. Diversion measures at the site include impervious walls, curbing, and grading around secondary containment and material storage areas. The facility also uses storm drain inlets and an underground conveyance system to direct stormwater flow.

Coalescing OWSs have been integrated into the stormwater drainage lines in all drainage areas except DA-4 which is sheet flow to remove potential petroleum contamination prior to stormwater discharge from the outfalls. The OWSs are periodically inspected and maintained by a service contractor in accordance with the manufacturer's specifications.

4.1.7 MSGP Sector-Specific Non-Numeric Effluent Limits

Sector-specific technology-based effluent limits are defined for the PAG facility industrial sector (Subsector Q1). The additional Subsector Q1 requirements that apply to the site have been incorporated into facility operations, and although generally discussed throughout this document, these specifically include the following:

Good Housekeeping Measures

- *Painting Area.* Containment measures (plastic barriers/tarpaulins) have been implemented to minimize overspray and potential runoff from painting operations. At least once per month stormwater conveyances and inlets are cleaned of deposits of debris and paint chips.

- *Material Storage Areas.* All containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) are labeled and stored in protected, secure locations away from drains. Outdoor storage areas are managed appropriately to minimize the potential for contamination of precipitation or surface runoff from storage areas. Inventory control measures are used to limit the quantity of potentially hazardous materials kept onsite.

- *Equipment Maintenance and Repair Areas.* To minimize the contamination of precipitation or surface runoff from equipment maintenance and repair to the extent practical, all maintenance activities are indoors. Stormwater runoff from all areas but DA-4 is treated through the use of oil water separators.

4.1.8 Major Storm Events

The following enhanced control measures will be implemented to minimize the exposure of

potential pollutants to rain and runoff from storm surges and flood events (when possible).

- Reinforce materials storage structures to withstand flooding and additional exertion of force;
- Prevent floating of semi-stationary structures by elevating to the Base Flood Elevation (BFE) level or securing with a non-corrosive device;
- When a delivery of exposed materials is expected, and a storm is anticipated within 48 hours, delay delivery (if possible) until after the storm or store materials as appropriate;
- Temporarily store materials and waste above the BFE level;
- Temporarily reduce or eliminate outdoor storage;
- Temporarily relocate any mobile vehicles and equipment to higher ground;
- Develop scenario-based emergency procedures for major storms that are complementary to regular stormwater pollution prevention planning and identify emergency contacts for staff and contractors; and
- Conduct staff training for implementing your emergency procedures at regular intervals.

Material Handling Area. To minimize contamination of precipitation or surface runoff from material handling operations and areas, spill and overflow protection is implemented whenever possible during fueling activities. Paint and solvent mixing is performed in designated areas and under cover whenever possible.

Employee Training. The following additional sector-specific employee training topics are included in the Pollution Prevention Training discussed in Section 4.1.8: used oil management, spent solvent management, spill prevention and control, fueling procedures, general good housekeeping practices, painting procedures, and used battery management.

Preventative Maintenance. The preventive maintenance program includes testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and also includes timely inspection and maintenance of stormwater management devices (secondary containment areas, storm drain inlets, oil/water separators, and the equipment wash rack).

4.1.8 Pollution Prevention Training

Training is necessary to ensure that PAG employees are aware of their impact to stormwater, their responsibilities to prevent pollution, and methods to control such pollution release. Training sessions are held annually for PAG maintenance staff. Topics covered during training include, but are not limited to:

- Purpose of SWPPP, requirements, and contents
- Spill prevention and response procedures
- Good housekeeping practices
- Preventative maintenance
- Material management practices
- Equipment washing procedures
- Recordkeeping and reporting
- Additional training topics identified in Section 4.1.7

All training is organized and coordinated through the P2 Team annually. Staff is alerted by the

P2 Team in advance of the training session to ensure full participation. A copy of the attendance sheet and topics covered is maintained onsite.

Other training sessions are held as needed for members of the P2 Team or others to address specific topics of interest. Topics for such training sessions may include basic concepts of pollution prevention and baseline BMPs (for new P2 Team members); site- specific BMPs; and proper use and maintenance of stormwater management systems and structures. Training on these topics is scheduled on an as-needed basis by the P2 Team Leader in coordination with the P2 Team.

4.1.9 Non-Stormwater Discharges

Inspection and elimination of unauthorized non-stormwater discharges is discussed in Section 3.6. To ensure continued prevention and elimination of non-stormwater discharges from the site, a BMP factsheet has been created for this baseline BMP and is located in Appendix B (BL-1).

4.1.10 Waste, Garbage, and Floatable Debris

As part of daily operations and general good housekeeping practices, all employees routinely inspect and sweep their work areas to ensure waste materials, garbage, or other floatable debris are not permitted to accumulate. Garbage receptacles are located throughout the site and are kept with their lid closed to minimize contamination of runoff. Garbage bins are maintained and regularly emptied by a service contactor.

4.1.11 Recordkeeping and Internal Reporting Procedures

Recordkeeping is an important aspect of determining the long-term history and practices at a facility. It is also necessary to prove a facility is in compliance with local, state, and federal laws and programs. A template for additional documentation requirements is provided in Appendix C.

In addition to items listed in Appendix C, records will be maintained for the following:

- Current inventory of materials used onsite
- Records of routine site inspections
- Reports of spills
- Records of annual and additional stormwater training sessions

4.2 ACTIVITY-SPECIFIC BMPS

In addition to the baseline BMPs, the P2 Team and staff will consider their individual activities and the techniques that are available to aid in reducing stormwater pollution. The following AS BMPs are provided in a series of fact sheets in Appendix B:

- BMP Sheet AS1 – Vehicle and Equipment Maintenance
- BMP Sheet AS2 – Vehicle and Equipment Fueling
- BMP Sheet AS3 – Vehicle and Equipment Washing, Cleaning, and Degreasing
- BMP Sheet AS4 – Outdoor Storage of Waste and Materials
- BMP Sheet AS5 – Waste/Garbage Handling and Disposal
- BMP Sheet AS6 – Building and Grounds Maintenance
- BMP Sheet AS7 – Aboveground Storage Tank Management

All AS BMPs listed above apply to the PAG facility.

4.3 SITE-SPECIFIC AND STRUCTURAL BMPS

In some situations, special practices may be necessary to prevent pollution based on the specific stormwater management structure or a unique site design or practice. In general, the manufacturer of physical structures, such as sand traps and storm filters, can provide documentation for proper maintenance and recommended practices to prevent the release of pollutants to stormwater.

P2 Team members should continue to assess individual areas and processes to determine the need for different or additional BMPs.

The EPA Guidance specifically identifies Site-Specific BMPs for the following items:

- **Flow Diversion Practices**

Stormwater Conveyances
Diversion Dikes
Graded Areas and Pavements

- **Exposure Minimization Practices**

Containment Dikes
Curbing
Drip Pans
Collection Basins
Sumps
Covering
Vehicle Positioning
Loading/Unloading by Air Pressure/Vacuum

- **Mitigative Practices**

Sweeping
Shoveling
Excavation Practices
Vacuum/Pump Systems
Sorbents
Gelling Agents

- **Other Preventive Practices**

Preventive Monitoring
Dust Control
Signs and Labels
Security
Area Control Procedures
Equipment Washing

- **Sediment and Erosion Prevention**

Vegetative Practices
Structural Erosion Prevention and Sediment Control Practices

- **Infiltration Practices**

Vegetated Filter Strips
Grassed Swales
Level Spreaders
Infiltration Trenches
Porous Pavements/Concrete Grids and Modular Pavement

Ensuring that maintenance and operations personnel are aware of maintenance and use requirements prior to installation is essential for the successful operation of stormwater management structures. As needed, training on the correct use and maintenance of stormwater management structures is included in the annual P2 training or is separately scheduled (See Section 4.1.8).

4.4 BMP IMPLEMENTATION PROGRAM

4.4.1 Scheduling of Implementation

The P2 Team is responsible for implementing the schedule for the goals, reports, activities, and BMPs described above. BMPs will be distributed to the relevant maintenance staff and PAG offices as needed. The P2 Team will meet periodically to identify the need for new BMPs and schedules for their implementation. Annual P2 training is scheduled as described in Section 4.1.8.

5.0 STORMWATER MONITORING AND REPORTING

This section of the SWPPP describes the stormwater monitoring requirements for the PAG facility.

5.1 SUBSTANTIALLY IDENTICAL OUTFALLS

Outfalls 005, 006, 007, 008, 009, and 010 are considered substantially identical due to the types of activities conducted within the drainage areas for these outfalls (i.e., storage of cargo containers on a paved surface); therefore, monitoring one of these outfalls will provide data for all 6 drainage areas. PAG has chosen to monitor Outfall 005.

5.2 BENCHMARK AND INDICATOR MONITORING

5.2.1 Benchmark Monitoring

In accordance with section 4.2.2 of the MSGP benchmark monitoring must be conducted quarterly for the first and fourth years of permit coverage. Monitoring periods for the first year are summarized as follows:

- Monitoring Period 1 – April 1 through June 30, 2023
- Monitoring Period 2 – July 1 through September 31, 2023
- Monitoring Period 3 – October 1 through December 31, 2023
- Monitoring Period 4 – January 1 through March 31, 2024

One sample will be collected from each monitored outfall (Outfalls 001, 002, 003, and 005), and will be analyzed for the following parameters:

Table 5-1: Quarterly Benchmark Monitoring Criteria

Parameter	Benchmark Monitoring Concentration
Total Aluminum	1.1 mg/L
Total Lead	0.21 mg/L
Total Zinc	0.09 mg/L

DA-4 is sheet flow and cannot be monitored.

5.2.2 Indicator Monitoring

Because PAG has paved surfaces that will be sealed or re-sealed with coal-tar sealcoat in areas of the port covered under the MSGP, in accordance with section 4.2.1.1b of the MSGP, indicator monitoring for polycyclic aromatic hydrocarbons (PAHs) must be conducted biannually for the first and fourth year of permit coverage. Monitoring periods for the first year are summarized as follows:

- Monitoring Period 1 – April 1 through June 30, 2023
- Monitoring Period 2 – October 1 through December 31, 2023

One sample will be collected from each monitored outfall (Outfalls 001, 002, 003, and 005), and will be analyzed for the following parameters:

Table 5-2: Biannual Indicator Monitoring Criteria

Parameter	Benchmark Monitoring Concentration
PAHs	Report only/ No thresholds or baseline values

5.2.3 Benchmark and Indicator Monitoring Reports

Monitoring data must be reported to the EPA in accordance with Section 7.3 of the MSGP. Data must be submitted to EPA using the EPA's Net-DMR system (available at https://npdes-ereporting.epa.gov/net-netdmr) no later than 30 days after receiving analytical results for all outfalls monitored during the reporting period.

Refer to Section 4.2.2.3 of the MSGP for additional guidance regarding the benchmark monitoring program and to determine if continued monitoring is required.

5.2.4 Benchmark and Indicator Monitoring Procedure

Benchmark monitoring samples will be collected by the sampling team, which shall at minimum consist of one member of the P2 Team and/or a qualified contracted professional. Stormwater sampling should occur during measurable storm events, which are defined as a storm event that results in an actual discharge from the site and occurs at least 72 hours after the previous measurable storm event. The 72-hour storm interval does not apply if you can document that less than a 72-hour interval is representative for local storm events during the monitoring period. National Weather Service forecasts can be used as a planning tool for gauging storm events.

Sampling will be performed using the following equipment:

- Sample bottles, sample cooler with ice
- Rope and bucket to lower and collect discharge water from the outfall
- Measuring glass and a watch to calculate the flow rate
- Disposable gloves
- Field notebook, marking pen, and chain of custody form

Once a rainfall has been determined to result in a discharge and there has not been a measurable storm event in the last 72 hours, the sampling team should conduct sampling activities.

Personnel shall collect one grab sample for analysis during the first 30 minutes of the discharge. If it is not possible to collect the sample within the first 30 minutes of a measurable storm event, the sample must be collected as soon as practicable, and documentation must be kept with the SWPPP explaining why it was not possible to take samples within the first 30 minutes. Samples can be collected directly in the sample bottles. Alternatively, a food grade high density

polyethylene bucket or other suitable container can be lowered down to the outfall and filled with discharge water and then used to fill the sample bottles. This bucket must be decontaminated between each sampling event. Sample bottles will be labeled and placed in a cooler with ice. The team members will record the time that the rain ceased in the field notebook and take the samples to the laboratory for analysis.

All sample containers will have a label that is placed on the side of the container. Sample container caps should not be labeled. The labels will include the following information:

- Date
- Time
- Collector
- Sample Number (this should correspond to the Outfall; i.e. SW-001, SW-002)
- Sampling Site (PAG Facility)
- Sample Type (i.e. grab)
- Preservative used (i.e. ice)
- Tests Required (indicated on chain of custody)

A chain of custody form shall be properly filled out and signed by the sampling personnel to ensure sample integrity.

5.3 IMPAIRED WATERS MONITORING

Apra Harbor is currently listed as an impaired water body due to the presence of polychlorinated biphenyls (PCBs) in fish tissue. In accordance with Section 4.2.5 of the MSGP, monitoring of impaired waters must be conducted once annually at each of the four monitored outfalls. The annual monitoring period begins in the first full quarter of permit coverage.

One sample will be collected from each monitored outfall (Outfall 001, Outfall 002, Outfall 003, and Outfall 005), and will be analyzed for the following:

- Total PCBs

Currently, there are no EPA-approved or established Total Maximum Daily Load Waste Load Allocation values for Apra Harbor, and PCBs are not expected to be present in stormwater discharges covered under this SWPPP. In accordance with Section 4.2.5.1 of the MSGP, monitoring for total PCBs can be discontinued for the next two years if the contaminant is not detected in the stormwater discharge monitoring results. The facility must resume monitoring for PCBs in year four of permit coverage.

Refer to Section 6.2.4 of the MSGP to determine if continued monitoring is required. Section 6.2.4 of the MSGP also provides additional guidance regarding documentation and records necessary to support this determination.

5.3.1 Impaired Waters Monitoring Reports

Impaired waters monitoring data must be reported to the EPA in accordance with Section 7.3 of the MSGP. DMRs must be submitted to EPA using the EPA's NetDMR system (available at https://npdes-ereporting.epa.gov/net-netdmr) no later than 30 days after receiving analytical results for all outfalls monitored during the reporting period.

5.3.2 Impaired Waters Monitoring Procedure

Collection of stormwater samples for impaired waters monitoring shall be conducted in

accordance with the procedures outlined in Section 5.1.2 of this document. To minimize the burden of sample collection, the impaired waters monitoring samples can be collected at the same time as one of the quarterly benchmark monitoring samples.

5.4 ANNUAL REPORT

An annual report containing information from the previous calendar year must be submitted to the EPA by 30 January for each year of permit coverage. Annual reports must be submitted via EPA's eReporting tool, which can be accessed at:

https://npdes-ereporting.epa.gov/net-msgp/

Refer to Section 7.4 of the MSGP for additional information and guidance regarding preparation and submittal of the annual report.

6.0 INSPECTIONS

6.1 ROUTINE FACILITY INSPECTIONS

Regular visual inspections are the most effective way to ensure that all the elements of the SWPPP are in place and are effective at preventing stormwater pollution. Routine facility inspections occur at least quarterly and include all areas of the facility, but specifically focus on the equipment washing area, equipment maintenance and repair areas, painting areas, material storage areas (indoor and outside), material handing/fueling areas, and storm drain inlets and conveyances. Due to the higher risk for pollutant discharge associated with equipment washing activities, the equipment wash rack are inspected at least monthly to ensure potential issues are identified and corrected in a timely manner.

Routine inspections are conducted by qualified personnel and include one member of the P2 Team. Routine inspections are tentatively scheduled to occur during the months of February, May, August, and November. Inspections of the wash rack area occur monthly. At least one such inspection per year occurs during stormwater discharge.

Although not reported to the EPA, documentation of routine inspections is maintained onsite and made available upon request. Documentation includes the following:

- The inspection date and time;
- The name(s) and signature(s) of the inspector(s);
- Weather information and a description of any discharges occurring at the time of the inspection;
- Any previously unidentified discharges of pollutants from the facility;
- Any evidence of, or the potential for, pollutants entering the drainage system;
- Observations regarding the physical condition of the outfalls and the surrounding area, including any evidence of pollutants in the discharge and/or the receiving water;
- Any control measures needing maintenance or repairs;
- Any failed control measures that need replacement;
- Any incidents of noncompliance observed; and
- Any additional control measures needed to comply with the permit requirements.

Sample routine facility inspection forms are located in Appendix C.

6.2 QUARTERLY VISUAL STORMWATER ASSESSMENTS

One stormwater sample from each outfall is collected quarterly for visual assessment. These samples are representative of the stormwater discharge and are made:

- Of a sample in a clean, clear glass, or plastic container, and examined in a well-lit area;
- Of samples collected within the first 30 minutes of an actual discharge from a storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes and documentation must be made noting why it was not possible to take samples within the first 30 minutes; and
- Of samples collected from discharges that occur at least 72 hours (3 days) from the previous discharge.

The sample is visually inspected for the following characteristics:

- Color;
- Odor;
- Clarity;
- Floating solids;
- Settled solids;
- Suspended solids;
- Foam;
- Oil sheen; and
- Other obvious indicators of stormwater pollution.

Documentation of the visual sample assessments is maintained onsite with the SWPPP. Documentation includes the following:

- Sample location(s);
- Sample collection date and time, and visual assessment date and time for each sample;
- Personnel collecting the sample and performing visual assessment, and their signatures;
- Nature of the discharge (i.e., runoff)
- Results of observations of the stormwater discharge;
- Probable sources of any observed stormwater contamination;
- If applicable, why it was not possible to take samples within the first 30 minutes.

If the results of the visual assessment identify signs of stormwater pollution, corrective action must be implemented in accordance with Part 4 of the MSGP. Sample visual assessment forms are located in Appendix C.

6.2.1 Visual Assessment of Substantially Identical Outfalls

Outfalls 005, 006, 007, 008, 009, and 010 are considered substantially identical due to the types of activities conducted within the drainage areas for these outfalls (i.e., storage of cargo containers on a paved surface); therefore, visually assessing one of these outfalls will provide data for all six drainage areas. PAG has chosen to visually assess Outfall 005.

7.0 DOCUMENTATION TO SUPPORT ELIGIBILITY CONSIDERATIONS UNDER OTHER FEDERAL LAWS

7.1 DOCUMENTATION REGARDING ENDANGERED SPECIES

Consultation of the United States Fish and Wildlife Service and National Marine Fisheries Service was performed in 2012 as part of the Environmental Assessment conducted to support PAG facility expansion activities. Potential impacts to endangered species as a result of pollutant discharges were evaluated during the consultation and determined to be insignificant. Additionally, no critical habitat was identified in the vicinity of the site. Supporting documentation is provided in Appendix E.

7.2 DOCUMENTATION REGARDING HISTORIC PROPERTIES

From 2010 to 2015, PAG expanded their facility and worked closely with the State Historic Property Office to establish the absence of historic structures. Stormwater discharges and stormwater control measures at the facility will therefore not impact historic properties. Supporting documentation is provided in Appendix F.

8.0 CORRECTIVE ACTIONS AND ADDITIONAL IMPLEMENTATION MEASURES

Corrective actions and additional implementation measures (AIM) must be implemented in accordance with Part 5 of the 2021 MSGP. The following provides a summary of conditions requiring corrective action and procedures for response. Refer to Part 5 of the MSGP for additional guidance.

8.1 CONDITIONS REQUIRING SWPPP REVISIONS

If the following events occur, PAG will revise this SWPPP to meet effluent limits:

- Unauthorized release or discharge of non-stormwater
- Discharge violates numeric effluent limits depicted in this SWPPP
- Non-numeric effluent limits depicted in this SWPPP are not met
- A required control measure was not installed, was incorrectly installed, or not properly operated or maintained
- Visual assessment yields evidence of stormwater pollution such as color, odor, floating solids, settled solids, suspended soils, etc.

8.2 CONDITIONS REQUIRING SWPPP REVIEW

If the following events occur, PAG will review the SWPPP to determine if modifications are necessary:

- Construction, changes in operation, or maintenance at the facility.
- Average of four quarterly sampling results exceeds an applicable benchmark.

8.3 ADDITIONAL IMPLEMENTATION MEASURES (AIM)

If any of the AIM triggering events described in Parts 5.2.3, 5.2.4, or 5.2.5 of the MSGP occur, PAG will follow the response procedures described in those parts, called “additional implementation measures” or “AIM.” There are three AIM levels: AIM Level 1, Level 2, and Level 3. PAG will respond as required to different AIM levels which prescribe sequential and increasingly robust responses when a benchmark exceedance occurs. PAG will follow the corresponding AIM level responses and deadlines described in Parts 5.2.3, 5.2.4, and 5.2.5 unless the port qualifies for an exception under Part 5.2.6.

8.4 CORRECTIVE ACTION AND AIM DOCUMENTATION AND DEADLINES

If corrective action is required, PAG shall take immediate action to prevent events described in Section 8.1.

Subsequent actions must be implemented within 14 calendar days of discovery of the event. If this is not feasible, then PAG must document why it is infeasible and provide a revised schedule within the allocated 14 calendar days. The revised schedule can be no longer than 45 days. The corrective action must be documented as follows:

- Description of event
- Date of event
- Description of immediate actions
- Statement, signed and certified that actions are complete per schedule requirements

Documentation of any of the conditions listed in Sections 8.1 or 8.2 must be made within 24 hours of becoming aware of the condition. Such documentation must be made available to the EPA upon request and will also be summarized in the annual stormwater report. Refer to Section 5.3 of the MSGP for additional guidance regarding corrective action documentation.

9.0 REFERENCES AND INFORMATION SOURCES

IP&E Holdings, LLC (IP&E). 2018. *Spill Prevention, Control, and Countermeasure Plan, IP&E F-3 Dock Facility*. October.

U.S. Environmental Protection Agency (EPA). 2009. *Developing Your Stormwater Pollution Prevention Plan: A Guide for Industrial Operators*. EPA 833-B-09-002.

U.S. Environmental Protection Agency (EPA). 2021. *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP)*

APPENDICES

A. FIGURES (NOT INCLUDED)

B. BMP FACT SHEETS

Port Authority of Guam
Equipment Maintenance and Repair Facility SWPPP

BL BMP 1	ELIMINATION OF NON-STORMWATER DISCHARGE TO STORM DRAIN
PURPOSE	**Existing discharges**: Eliminate non-stormwater discharges to the stormwater collection system. Non-storm water discharges can be classified as follows: 1) Activity-based (subtle), and 2) Overt (hard pipe connection). Activity-based non-stormwater discharges may include: wash water, and spillage. Overt non-storm water discharges may include: building floor drains and sanitary wastewater. **Prevention of illicit connections:** Prevent improper physical connections to the storm drain system from sanitary sewers, floor drains, and washbays through education, developing project approvals conditions, and performing both construction phase and post-construction inspections.

APPROACH TO FUTURE FACILITIES AND UPGRADES

Design of New Facilities and Existing Facility upgrades

- Perform inspections during the design review and project construction phases to ensure drainage, wastewater, and water supply connections are correct (no cross connections or illicit hookups).
- Develop a set of as-built prints for all projects. Keep a set of prints at the facility.
- Design projects to include adequate waste repositories at locations near waste origin points.
- Provide adequate and appropriately designed facilities for functions such as steam cleaning, degreasing, painting, mechanical maintenance, chemical/fuel storage and delivery, material handling, waste handling and storage, and lavatory service that may produce non-stormwater discharges.

APPROACH TO EXISTING FACILITY ACTIVITIES

Operational Considerations

Contingency Response:

- Develop and implement a Spill Prevention Control and Countermeasure (SPCC) plan under guidelines set forth in 40 CFR, Section 112.3(a), (b).
- Notify the Team Leader in the event of a spill (any size).
- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur (i.e. near the scale house, entrances/exits, compaction area and areas where large quantities of hazardous materials are stored).

Inspection and Training:

- Inspect waste containers and storage tanks, including any piping and appurtenances, on a routine basis for leaks, drip marks, and discoloration and proper closure seal.
- Develop employee training programs which emphasize the proper disposal procedures for operations-derived wastes.
- Provide annual employee training in the following areas: spill prevention and response, storm waste pollution prevention.

REQUIREMENTS

- Capital and operation and maintenance (O&M) funding may be required to eliminate non-storm water discharges.

LIMITATIONS

- Activity-based (subtle) non-storm water discharges from a particulate facility are typically sporadic, transient, and often require frequent inspections to detect.

RECOMMENDATIONS

Use dry cleaning procedures.
Implement regular training of staff in materials disposal, and spill response.

Port Authority of Guam Equipment Maintenance and Repair Facility SWPPP	
BL BMP 2	EMERGENCY SPILL CLEANUP PLANS
PURPOSE	Prevent or reduce the discharge of pollutants to storm water resulting from spills of petroleum products or other materials.

General Approach

Owners and operators of facilities that store, process, or refine oil or oil products may be required by federal law (40CFR 112) to develop and implement a Spill Prevention, Control, and Countermeasure (SPCC) Plan. Emergency spill cleanup plans should include the following information:

- A description of the facility including the nature of the facility activity and the general types and quantities of chemicals stored at the facility.
- A site plan showing the location of chemical storage areas, fire hydrant location, and the location and description of any devices used to contain spills such as positive shut-off control valves.
- Notification procedures to be implemented in the event of a spill, such as keep company personnel and local, state, and federal agencies.
- Instructions regarding cleanup procedures.
- Designated personnel with overall spill response cleanup responsibility.

APPROACH TO EXISTING FACILITY ACTIVITIES
Operational Considerations

Operational Considerations:

- Maintain an inventory of appropriate cleanup materials on-site (absorbent material, solvent/cleaning material) and store spill kits near the Maintenance Building, materials transfer points, material storage areas, and other areas where spills are likely.

Contingency Response:

- If the spilled material is of a reportable quantity, the EC should call:
  - National Response Center at 1-800-424-8802
  - U.S. Coast Guard Guam Chapter Prevention Department at 671-355-4937 (if spill reaches Apra Harbor/Philippine Sea)
  - Guam EPA (GEPA) Emergency Response pager number is 671-635-9500 and their main line is 671-475-1658 (if spill reaches State Water).
- A written notification must also be submitted to the GEPA Clean Water contact (671-475-1628) no later than five (5) days following the violation and a written notification must be submitted to the Guam Department of Health Director's Office at 671-735-7173 no later than thirty (30) days following the discovery of the release. Containment and cleanup of spills shall begin immediately.

REQUIREMENTS

- Capital and operations and maintenance (O&M) costs should be small to moderate (locate spill kits containing absorbent material and cleaning solvent at facility).
- Maintenance costs include periodic training and equipment replacement.

LIMITATIONS

- Spills occurring after work hours may go undetected until impacting off-site areas.

RECOMMENDATIONS

- Train staff in spill response.
- Locate spill kits near the Maintenance Shop, Fueling Area, material storage areas, and other area where spill are likely.

Port Authority of Guam Equipment Maintenance and Repair Facility SWPPP	
BL BMP 3	STORM WATER POLLUTION PREVENTION EDUCATION
PURPOSE	Prevent or reduce the discharge of pollutants to stormwater through implementing an education program.

APPROACH TO FUTURE FACILITIES AND UPGRADES
Design of New Facilities and Existing Facility upgrades

- Incorporate proactive stormwater management features into projects such as, decreased impervious areas, infiltration Best Management Practices (BMPs) biofilters, oil/water separators, etc.

APPROACH TO EXISTING FACILITY ACTIVITIES
Operational Considerations

Contingency Response:

- Train employees in the use of spill response equipment and materials.

Inspection and training:

- Perform and document in a log book, inspections of work areas, waste storage facilities, maintenance areas, and contractor projects to examine compliance with BMPs. Follow up with additional training or enforcement as required. Incorporate inspection findings into subsequent training efforts.
- Implement regular stormwater pollution prevention education programs:
  - Promote the proper storage and use of all materials, chemicals, and equipment inside a building, garage, or covered area. Dispose of materials in a proper and timely fashion.
  - Promote the use of environmentally safe products.
  - Perform all vehicle and equipment washing in contained washing area.
  - Encourage good housekeeping practices on site.
  - Increase awareness of the detrimental environmental impacts that result when fuel antifreeze, pesticides, lubricants, detergent, paints and other wastes are dumped onto the ground or into storm drains.
  - Promote source reduction and recycling of waste materials.
  - Increase awareness of what is and what is not allowed to enter storm drains.

REQUIREMENTS

- Capital and operation and maintenance (O&M) costs are minimal for educational programs.
- Educational programs need to be ongoing. Information and training must be disseminated at regular intervals.

LIMITATIONS

- The success of educational programs is difficult to measure. Acceptance and awareness are critical factors.

RECOMMENDATIONS

- Conduct annual training of staff in proper materials handling and disposal.

Port Authority of Guam Equipment Maintenance and Repair Facility SWPPP	
AS BMP 1	**VEHICLE AND EQUIPMENT MAINTENANCE**
PURPOSE	Prevent or reduce the discharge of pollutants to storm water drains from vehicles and equipment maintenance and repair.

APPROACH TO FUTURE FACILITIES AND UPGRADES
Design of New Facilities and Existing Facility upgrades

- Provide covered maintenance areas when designing new facilities or upgrading existing facilities. Utilize indoor areas, overhangs, or portable covers.
- Locate maintenance areas so minimal quantities of runoff cross the site.
- Include appropriate storm water quality structures (oil/water separators, sumps, first flush diversion basins, etc.) in the design of outdoor maintenance and storage areas.

APPROACH TO EXISTING FACILITY ACTIVITIES
Operational Considerations

Implement the following to the maximum extent practicable:

Good Housekeeping

- Use drip pans to collect fluid leaks.
- Use absorbent materials at potential problem areas.
- Adequately collect/remove absorbent materials from area after use and dispose of them in an appropriate manner.
- Perform all vehicle maintenance within the Maintenance Shop. All byproducts from that maintenance (i.e. oil filters, batteries, etc.) should be stored in a covered storage area and disposed of in a proper fashion.
- Drain and crush oil filters (and oil containers) before recycling or disposal. Store crushed oil filters and empty lubricant containers in a leak-proof container.
- Label storm drain inlets (“Don’t Dump” or “Drains to Bay”) to indicate they are to receive no waste.
- Employ only dry cleaning in the buildings and work areas (i.e. sweeping). Do not hose down work areas.
- Drain and properly dispose of all fluids and remove batteries salvaged from vehicles and equipment.
- Drain parts and equipment of all fluids. Store in secondary containment within covered storage area.
- Recycle or properly dispose of the following: grease, oil, antifreeze, brake fluid, cleaning solutions, hydraulic fluid, batteries, transmission fluid, and filters. If materials are stored on-site prior to disposal, keep in labeled containers appropriately.
- Use biodegradable products and substitute materials with less hazardous properties where feasible.
- Maintain and organized inventory of materials used in maintenance areas.

Physical Site Usage

- Store mechanical parts and equipment that may yield even small amounts of contaminants (e.g., oil or grease) under cover and away from drains.
- Store vehicles and equipment awaiting maintenance in designated areas only. Vehicles awaiting maintenance should be stored under cover if possible.

REQUIREMENTS

- Capital investment may be required depending on the facility layout.

• Operation and maintenance (O&M) investment is not expected to be significant.
LIMITATIONS
• Size, space and time limitations may preclude work from being performed indoors.
RECOMMENDATIONS
• Perform all vehicle maintenance indoors. Keep all vehicles awaiting maintenance under cover as much as possible • All byproducts of vehicle and equipment maintenance will be labeled, stored under cover, and disposed of in a proper and timely manner. • Use biodegradable and eco-friendly materials as much as possible. Do not use materials containing phosphorus and minimize chlorine use. • Train staff regularly in materials handling, pollution prevention, and spill response.

Port Authority of Guam Equipment Maintenance and Repair Facility SWPPP	
AS BMP 2	VEHICLE AND EQUIPMENT FUELING
PURPOSE	Prevent fuel spills and leaks, and reduce their impacts to stormwater.

APPROACH TO FUTURE FACILITIES AND UPGRADES
Design of New Facilities and Existing Facility upgrades

- Design fueling areas to prevent the run-on of storm water and the runoff of spills by employing the following approaches:
  - Cover the fueling area if possible
  - Use a perimeter drain or slope the fueling area to a dead-end sump or oil/water separator.
- If stormwater runoff from fueling areas is not collected, install an appropriately-sized oil/water separator.
- Design facilities to include secondary containment where required and/or appropriate.

APPROACH TO EXISTING FACILITY ACTIVITIES
Operational Considerations

Implement the following to the maximum extent practicable:

Good Housekeeping

- Perform all vehicle fueling on secondary containment pad or under cover whenever possible to minimize the discharge of fuel to the surrounding environment.
- Use spill and overflow protection whenever possible
- Fuel pumps intended for vehicular use should be posted with signs stating “No topping off” to prevent overflow.

RECOMMENDATIONS

- Monitor fueling area and fueling truck to ensure that no leaking is occurring.
- Locate spill kits near the fueling station.
- Train staff in spill response.

Port Authority of Guam Equipment Maintenance and Repair Facility SWPPP	
AS BMP 3	VEHICLE AND EQUIPMNET WASHING, CLEANING, AND DEGREASING
PURPOSE	Prevent or reduce the discharge of pollutants to storm water drains from vehicles and equipment washing, and cleaning and degreasing activities.

APPROACH TO FUTURE FACILITIES AND UPGRADES

Design of New Facilities and Existing Facility upgrades

- Outdoor washing operations should not occur without the following design characteristics:
  - Paved area (Portland cement concrete pavement resists degradation from petroleum products)
  - Bermed and/or covered to prevent contact with storm water.
  - Sloped to facilitate wash water collection.
  - Wash water should be collected in a dead-end sump for removal to off-site treatment or discharged to the sanitary sewer through a permitted connection.
  - Drainage piping serving uncovered was areas should be equipped with control valves that are easy to operate from the surface and can direct discharges wither to the storm drain system or sanitary sewer as appropriate.
  - Wash areas should be clearly identified with appropriate signage.
  - Equip with an oil/water separator designed to operate under storm water runoff conditions to treat storm water volumes and flow rates.

APPROACH TO EXISTING FACILITY ACTIVITIES

Operational Considerations

Implement the following to the maximum extent practicable:

Good Housekeeping

- Provide secondary containment, and cover if possible, for containers of washing and steam cleaning additives.
- Use inlet covers over catch basins, spill berms or spill mats to control the discharge of wash water.
- Use biodegradable phosphate-free detergents.
- Keep wash area clean and free of waste.
- Include proper signage to prohibit the discharge of waste oils into the drains.
- Collect and discharge wash water to an approved treatment facility.

REQUIREMENTS

- Capital costs vary depending on measures implemented.
- Operation and maintenance (O&M) costs increase with capital investment.

LIMITATIONS

- Steam cleaning and de-greasing operations can generate significant pollutant concentrations that may require permitting, monitoring, pretreatment, and inspections.

RECOMMENDATIONS

- Perform all vehicle washing within the designated washing area.
- Do not use phosphate or chlorine based detergents.

Port Authority of Guam Equipment Maintenance and Repair Facility SWPPP	
AS BMP 4	OUTDOOR STORAGE OF WASTE AND MATERIALS
PURPOSE	Prevent or reduce the discharge of pollutants to stormwater from outdoor storage areas for waste or materials (i.e. fuel, chemicals, bagged solids, contaminated soil, bulk storage, etc.). Outdoor material storage is discouraged. Storage of materials in designated areas indoors is preferred.

APPROACH TO FUTURE FACILITIES AND UPGRADES

Design of New Facilities and Existing Facility upgrades

- Require the appropriate use of water quality control structures for fuel, waste, and chemical storage areas such as berms, detention/retention basins, and sumps. Develop appropriate minimum performance standards for these water quality control structures and implement a reporting program to monitor the performance and maintenance of these structures.
- Chemical, fuel, oil dispensing sites, and waste collection areas should be covered, if possible.
- Develop standard guidelines for the management of stormwater which collect in secondary containment areas.

APPROACH TO EXISTING FACILITY ACTIVITIES

Operational Considerations

Implement the following to the maximum extent practicable:

Good Housekeeping

- Avoid dispensing from drums positioned horizontally in cradles. Dispensing materials from upright drums equipped with hand pumps is preferred. Always use secondary containment and self closing spigots if dispensing from horizontally positioned drums.
- Store drums and containers on spill containment pallets or other structures to keep the container out of contact with stormwater.
- Use drum lids and drum-top absorbent pads to prevent rainfall from washing materials and drips from the top of containers to the storm drain system.
- Discharge collected stormwater from secondary containment areas according to guidelines developed by the federal government and applicable state and local regulations.
- Store all materials in their original containers or containers approved for that use. Ensure that all containers are appropriately sealed. Store empty containers in fully enclosed area, under cover, or move them off-site.
- Properly label all containers with information, including their contents, hazards, spill response and first aid procedures, manufacturer's name and address, and storage requirements.
- Maintain copies of MSDS on file for any material stored and/or handled by the applicator
- Maintain a spill response plan near the material or waste storage area.

REQUIREMENTS

- Capital and operation and maintenance (O&M) costs will vary widely depending on the size of the facility and the necessary controls.
- Store materials under cover as much as possible
- If materials have to be stored outdoors, locate the materials to minimize the contact with stormwater (i.e. under a cover, on a raised platform, inside secondary containment).
- Locate spill kits near the Maintenance Shop, Fueling area, material storage location and other areas where spills are likely.
- Regularly inspect outdoor waste storage areas to ensure that the containers are not leaking.

Port Authority of Guam Equipment Maintenance and Repair Facility SWPPP	
AS BMP 5	WASTE HANDLING AND DISPOSAL
PURPOSE	Prevent or reduce the discharge of pollutants to storm water from proper waste storage, handling and disposal; reducing waste generation and disposal through source reduction, reuse, and recycling; and preventing run-on and runoff from waste management areas.

APPROACH TO FUTURE FACILITIES AND UPGRADES
Design of New Facilities and Existing Facility upgrades

- Avoid the following characteristics when examining candidate sites for storing wastes:
  - Excessive slope
  - High water table
  - Locations near storm drain inlets
  - Locations near public access area
- Waste handling and storage areas should be covered.
- Develop standard guidelines for the management of stormwater that collects in secondary containment areas.
- Provide contained and covered area for hazardous waste collection sites.

APPROACH TO EXISTING FACILITY ACTIVITIES
Operational Considerations

Implement the following to the maximum extent practicable:
Good Housekeeping

- Perform regular housekeeping to maintain waste storage areas in a clean and orderly condition.
- Recycle materials whenever possible.
- Inspect waste management areas for spills and waste management containers for leaks.
- Ensure that sediments and waste are prevented from being washed, leached, or otherwise carried off-site.
- Completely drain containers (e.g. quart oil cans) prior to disposal.
- Regularly service waste storage areas to avoid overloaded/ overfilled disposal containers.
- Minimize spills and fugitive losses such as dust or mist from loading areas.
- Maintain a minimal inventory of required chemicals to reduce the magnitude of potential spills and limit waste generation.
- Find substitutes for harmful chemicals.
- Properly dispose of unusable chemical inventory.

REQUIREMENTS

- Capital and operation and maintenance (O&M) costs for these programs will vary substantially depending on the size of the facility and the types of waste handled.

LIMITATIONS

- Hazardous waste that cannot be re-used or recycled; must be disposed of at a permitted facility by a licensed hazardous waste hauler.

RECOMMENDATIONS

- Regularly service waste storage areas to prevent a build-up of accumulated waste.
- Keep all garbage dumpsters covered.

Port Authority of Guam Equipment Maintenance and Repair Facility SWPPP	
AS BMP 6	BUILDING AND GROUNDS MAINTENANCE
PURPOSE	Prevent or reduce the discharge of pollutants to stormwater from building and grounds maintenance by washing and cleaning up with as little water as possible, preventing and cleaning up spills immediately, keeping debris from entering storm drains, and maintaining the storm water collection system.

APPROACH TO FUTURE FACILITIES AND UPGRADES
Design of New Facilities and Existing Facility upgrades

- Specify low-maintenance structures/features for capital improvements.
- Incorporate storm water detention/retention to reduce peak runoff flows and for water quality control.
- Incorporate design considerations such as leaving vegetation or planting native vegetation to reduce irrigation, fertilizer, and pesticide/herbicide needs.

APPROACH TO EXISTING FACILITY ACTIVITIES
Operational Considerations

Implement the following to the maximum extent practicable:

Good Housekeeping

- Do not employ any wet cleaning procedures.
- Clean any accumulated trash/debris from stormwater management features.
- Regularly inspect and service oil/water separators.
- Seek less harmful/toxic products to replace ones currently used for building or grounds maintenance.
- Properly dispose of landscape waste, sweepings, and sediments.
- Regularly clean paved surfaces that are exposed to industrial activity. Use “dry” cleaning techniques.

REQUIREMENTS

- Costs will vary depending on the type and size of the facility. Costs of on-site stormwater detention/retention facility could be high.

RECOMMENDATIONS

- Regularly clean site surfaces using dry techniques.

Port Authority of Guam Equipment Maintenance and Repair Facility SWPPP	
AS BMP 7	ABOVEGROUND STORAGE TANK MANAGEMENT
PURPOSE	Prevent or reduce the discharge of pollutants to storm water from aboveground storage tanks (ASTs).

APPROACH TO FUTURE FACILITIES AND UPGRADES
Design of New Facilities and Existing Facility upgrades

- Use appropriate and adequate secondary containment and water quality control structures for ASTs such as berms, detention/retention basins, and sumps. Minimum requirements for performance structures and reporting program to monitor the performance and maintenance of these structures are set forth under guidelines in 40 CFR, section 112.7 9c)
- Provide adequate supplies of spill response equipment and materials in a readily accessible location in close proximity to ASTs/dispensers.
- Manage storm water that collects in secondary containment areas as set forth in 40 CFR, section 112.8 (1).
- New storage thanks must be properly labeled and permitted in accordance with applicable regulations.
- Obtain the necessary permits when handling hazardous or flammable materials, as applicable.
- Provide sufficient protection for tanks from vehicles, etc. by providing structural barriers or adequate buffer from high traffic areas. A higher degree of protection may be appropriate for non-metallic ASTs.

APPROACH TO EXISTING FACILITY ACTIVITIES
Operational Considerations

- Properly label all ASTs with their contents and capacity. Retain information regarding potential hazard, spill response and first air procedures, tank/piping manufacturer's name and address, and storage requirements.
- Maintain copies of MSDS on file for any materials stored and/or handled by the operator.
- Maintain a spill response plan and specifications book near the material or waste storage area.
- Maintain all necessary permits and keep up-to-date.
- Require adequate supplies of spill response equipment and materials in a readily accessible location in close proximity to ASTs/dispensers.
- Require the use of appropriately trained personnel during AST filing or transferring of material.
- Maintain records of any testing, repairs and/or problems that have occurred with ASTs.

RECOMMENDATIONS

- Regularly inspect AST's and document.
- Locate spill kits near Maintenance building, Fueling area, material storage locations, and other areas where spill are likely.
- Train staff in spill response.

C. ADDITIONAL DOCUMENTATION

Additional MSGP Documentation

for:

Port Authority of Guam
1026 Cabra Highway, Suite 201
Piti, Guam, 96915
(671) 477-5931
GUR053001

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Instructions:

- Keep the following inspection, corrective action, monitoring, and certification records in the same location that you keep your SWPPP:
  - A copy of the NOI submitted to EPA along with any correspondence exchanged between you and EPA specific to coverage under this permit (you should already have this);
  - A copy of the authorization email you receive from the EPA assigning your NPDES ID (you should already have this);
  - A copy of the 2021 MSGP (either a hard copy or an electronic copy easily available to SWPPP personnel);
  - Documentation of maintenance and repairs of stormwater control measures and industrial equipment and systems, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, and for repairs, date(s) that the control measure(s)/industrial equipment/system(s) returned to full function, and the justification for any extended maintenance/repair schedules (see Part 2.1.2.3);
  - All inspection reports, including the Routine Facility Inspection Reports (see Part 3.1.6) and Visual Assessment Documentation (see Part 3.2.3);
  - Description of any deviations from the schedule for visual assessments and/or monitoring, and the reason for the deviations (e.g., adverse weather or it was impracticable to collect samples within the first 30 minutes of a measurable storm event) (see Parts 3.2.4 and 4.1.5);
  - Corrective action documentation required per Part 5.1;
  - Documentation of any benchmark threshold exceedances, which AIM Level triggering event the exceedance caused, and AIM response employed per Part 5.2, including:
    - The AIM triggering event;
    - The AIM response taken;
    - Any rationale that SWPPP/SCM changes were unnecessary; or
    - Any documentation required to meet any AIM exception per Part 5.2.6;
  - Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if you discharge directly to impaired waters, and that such pollutants were not detected in your discharge after three years or were solely attributable to natural background sources (see Part 4.2.5.1); and
  - Documentation to support your claim that your facility has changed its status from active to inactive and unstaffed with respect to the requirements to conduct routine facility inspections (see Part 3.1.5), quarterly visual assessments (see Part 3.2.4.4), benchmark monitoring (see Part 4.2.2.4), and/or impaired waters monitoring (see Part 4.2.5.2).
  - With the exception of the first three items, these are records that you will be updating throughout the permit term. Follow the instructions in Sections A through L of this template to keep your records complete.

Contents

A. EMPLOYEE TRAINING

Instructions:

- Keep records of employee training, including the date of the training (see Parts 2.1.2.8 and 6.2.5.1.e of the 2021 MSGP).
- For in-person training, consider using the tables below to document your employee trainings. For computer-based or other types of training, keep similar records on who was trained, the training date, and the type of training conducted.

Training Date: Insert Date of Training	
Training Description: Insert Description of Training	
Trainer(s): Insert Trainer Name(s)	
Employee(s) Trained:	**Employee Signature**
Insert Name	

Training Date: Insert Date of Training	
Training Description: Insert Description of Training	
Trainer(s): Insert Trainer Name(s)	
Employee(s) Trained:	**Employee Signature**
Insert Name	

Training Date: Insert Date of Training	
Training Description: Insert Description of Training	
Trainer(s): Insert Trainer Name(s)	
Employee(s) Trained:	**Employee Signature**
Insert Name	

B. MAINTENANCE

Instructions:

- Include in your records documentation of maintenance and repairs of stormwater control measures and industrial equipment and systems (see Part 2.1.2.3 and 6.5), including:
  - the control measure(s)/equipment/system(s) maintained,
  - date(s) of regular maintenance,
  - date(s) of discovery of areas in need of repair/replacement, and for repairs, date(s) that the control measure(s)/equipment/system(s) returned to full function, and
  - the justification for any extended maintenance/repair schedules and the notification to your EPA Region that you need an extension past 45 days to complete repairs/maintenance.
- As a reminder:
  - you are required to immediately take all reasonable steps to prevent or minimize the discharge of pollutants until the final repair or replacement is implemented.
  - final repair/replacements of stormwater controls should be completed as soon as feasible but no later than 14 days, or if that is infeasible within 45 days.
  - if the completion of stormwater control measure/equipment/system repairs/replacement will exceed the 45 day timeframe, you may take the minimum additional time necessary to complete the maintenance, provided that you notify the EPA Regional Office of your intention to exceed 45 days and document your rationale for your modified maintenance timeframe in your SWPPP.
- Provide information, as shown below, to document your maintenance activities for each stormwater control measure and industrial equipment/system. Repeat as necessary by copying and pasting the information below for additional stormwater control measures and industrial equipment/systems.

Note that maintenance documentation in this section is separate from corrective action and AIM documentation required in Part 5.3 of the 2021 MSGP. For any condition or event triggering the need for corrective action review and/or AIM response you must include documentation in section G of this Template.

Stormwater Control Measure Maintenance Records (copy information below for each stormwater control measure)

Stormwater Control Measure: Insert Name of Stormwater Control Measure
Regular Maintenance Activities: Describe Maintenance Activities
Regular Maintenance Schedule: Insert Maintenance Schedule

Date of Maintenance Action: Insert Date of Action
Reason for Action: ☐ **Regular Maintenance** ☐ **Discovery of Problem**
If Problem,
- **Description of Action Required:** Describe Actions Taken in Response to Problem
- **Date Control Measure Returned to Full Function:** Insert Date
- **Justification for Extended Schedule, if applicable:** Insert Justification (if applicable)

Notes: Insert Notes (if applicable)

Date of Maintenance Action: Insert Date of Action
Reason for Action: ☐ **Regular Maintenance** ☐ **Discovery of Problem**

If Problem,
- **Description of Action Required:** Describe Actions Taken in Response to Problem
- **Date Industrial Equipment Returned to Full Function:** Insert Date
- **Justification for Extended Schedule, if applicable:** Insert Justification (if applicable)

Notes: Insert Notes (if applicable)

Date of Maintenance Action: Insert Date of Action

Reason for Action: ☐ **Regular Maintenance** ☐ **Discovery of Problem**

If Problem,
- **Description of Action Required:** Describe Actions Taken in Response to Problem
- **Date Industrial Equipment Returned to Full Function:** Insert Date
- **Justification for Extended Schedule, if applicable:** Insert Justification (if applicable)

Notes: Insert Notes (if applicable)

<u>Industrial Equipment and Systems Maintenance Records</u> (copy information below for each industrial equipment/system)

Industrial Equipment/System: Insert Name of Industrial Equipment/System
Regular Maintenance Activities: Describe Maintenance Activities
Regular Maintenance Schedule: Insert Maintenance Schedule

Date of Maintenance Action: Insert Date of Action

Reason for Action: ☐ **Regular Maintenance** ☐ **Discovery of Problem**

If Problem,
- **Description of Action Required:** Describe Actions Taken in Response to Problem
- **Date Industrial Equipment Returned to Full Function:** Insert Date
- **Justification for Extended Schedule, if applicable:** Insert Justification (if applicable)

Notes: Insert Notes (if applicable)

Date of Maintenance Action: Insert Date of Action

Reason for Action: ☐ **Regular Maintenance** ☐ **Discovery of Problem**

If Problem,
- **Description of Action Required:** Describe Actions Taken in Response to Problem
- **Date Industrial Equipment Returned to Full Function:** Insert Date
- **Justification for Extended Schedule, if applicable:** Insert Justification (if applicable)

Notes: Insert Notes (if applicable)

Date of Maintenance Action: Insert Date of Action

Reason for Action: ☐ **Regular Maintenance** ☐ **Discovery of Problem**

If Problem,
- **Description of Action Required:** Describe Actions Taken in Response to Problem
- **Date Industrial Equipment Returned to Full Function:** Insert Date
- **Justification for Extended Schedule, if applicable:** Insert Justification (if applicable)

Notes: Insert Notes (if applicable)

Date of Maintenance Action: Insert Date of Action

Reason for Action: ☐ **Regular Maintenance** ☐ **Discovery of Problem**

If Problem,

- **Description of Action Required:** Describe Actions Taken in Response to Problem
- **Date Industrial Equipment Returned to Full Function:** Insert Date
- **Justification for Extended Schedule, if applicable:** Insert Justification (if applicable)

Notes: Insert Notes (if applicable)

C. ROUTINE FACILITY INSPECTION REPORTS

Instructions:

- Include in your records copies of all routine facility inspection reports completed for the facility.
- The sample inspection report is consistent with the requirements in Part 3.1.6 of the 2021 MSGP relating to routine facility inspections. Facilities subject to state industrial stormwater permits may also find this form useful. **If your permitting authority provides you with an inspection report, use that form.**

Using the Sample Routine Facility Inspection Report

- This inspection report is designed to be customized according to the specific control measures and activities at your facility. For ease of use, you should take a copy of your site plan and number all of the stormwater control measures and areas of industrial activity that will be inspected. A brief description of the stormwater control measures and areas that were inspected should then be listed in the site-specific section of the inspection report.
- You can complete the items in the "General Information" section that will remain constant, such as the facility name, NPDES ID, and inspector (if you only use one inspector). Print out multiple copies of this customized inspection report to use during your inspections.
- When conducting the inspection, walk the site by following your site map and numbered control measures/areas of industrial activity to be inspected. Also note whether the "Areas of Industrial Materials or Activities exposed to stormwater" have been addressed (customize this list according to the conditions at your facility). Note any required corrective actions and the date and responsible person for the correction.

Stormwater Industrial Routine Facility Inspection Report

General Information			
Facility Name	Port Authority of Guam		
NPDES ID.	GUR053001		
Date of Inspection	Insert Date	**Start/End Time**	Insert Start/End Time
Inspector Name(s)	Insert Name(s)		
Inspector Title(s)	Insert Title(s)		
Inspector Contact Information	Insert Contact Information		
Inspector Qualifications	Insert Qualifications or Add Reference to the SWPPP		

Weather Information

Weather at time of this inspection?
☐ Clear ☐ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snow ☐ High Winds
☐ Other: Temperature:

Observations

Have any previously unidentified discharges of pollutants occurred since the last inspection? ☐ Yes ☐ No
If yes, describe: Describe

Are there any discharges occurring at the time of inspection? ❑Yes ❑No
If yes, describe: Describe

Stormwater Control Measures

- Number the structural stormwater control measures identified in your SWPPP on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.
- Identify if maintenance or corrective action is needed.
  - If maintenance is needed, fill out section B of this template
  - If corrective action is needed, fill out section G of this template

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Maintenance or Corrective Action Needed and Notes
1	Insert Control Measure Name	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	Describe Maintenance and/or Corrective Actions Needed
2	Insert Control Measure Name	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	Describe Maintenance and/or Corrective Actions Needed
3	Insert Control Measure Name	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	Describe Maintenance and/or Corrective Actions Needed
4	Insert Control Measure Name	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	Describe Maintenance and/or Corrective Actions Needed

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Maintenance or Corrective Action Needed and Notes
5	Insert Control Measure Name	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	Describe Maintenance and/or Corrective Actions Needed
6	Insert Control Measure Name	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	Describe Maintenance and/or Corrective Actions Needed
7	Insert Control Measure Name	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	Describe Maintenance and/or Corrective Actions Needed
8	Insert Control Measure Name	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	Describe Maintenance and/or Corrective Actions Needed
9	Insert Control Measure Name	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	Describe Maintenance and/or Corrective Actions Needed
10	Insert Control Measure Name	☐ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	Describe Maintenance and/or Corrective Actions Needed

Areas of Industrial Materials or Activities Exposed to Stormwater

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility that are potential pollutant sources. Identify if maintenance or corrective action is needed. If maintenance is needed, fill out section B of this template. If corrective action is needed, fill out section G of this template.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective and operating)?	Maintenance or Corrective Action Needed and Notes
1	**Material loading/unloading and storage areas**	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	Describe Maintenance and/or Corrective Actions Needed
2	**Equipment operations and maintenance areas**	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	Describe Maintenance and/or Corrective Actions Needed
3	**Fueling areas**	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	Describe Maintenance and/or Corrective Actions Needed
4	**Outdoor vehicle and equipment washing areas**	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	Describe Maintenance and/or Corrective Actions Needed
5	**Waste handling and disposal areas**	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	Describe Maintenance and/or Corrective Actions Needed
6	**Erodible areas/construction**	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	Describe Maintenance and/or Corrective Actions Needed
7	**Non-stormwater/illicit connections**	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	Describe Maintenance and/or Corrective Actions Needed

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective and operating)?	Maintenance or Corrective Action Needed and Notes
8	**Salt storage piles or pile containing salt**	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	Describe Maintenance and/or Corrective Actions Needed
9	**Dust generation and vehicle tracking**	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	Describe Maintenance and/or Corrective Actions Needed
10	**Processing areas**	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	Describe Maintenance and/or Corrective Actions Needed
11	**Areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water**	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	Describe Maintenance and/or Corrective Actions Needed
12	**Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility**	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	Describe Maintenance and/or Corrective Actions Needed
13	**(Other)**	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	Describe Maintenance and/or Corrective Actions Needed
14	**(Other)**	☐ Yes ☐ No ☐ N/A	☐ Yes ☐ No	Describe Maintenance and/or Corrective Actions Needed

Discharge Points

At discharge points, describe any evidence of, or the potential for, pollutants entering the stormwater drainage system. Also describe observations regarding the physical condition of and around all stormwater discharge points, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. Identify if any corrective action is needed.

Describe Discharge Point Observations

Discharges/Pollutants

Describe any previously unidentified stormwater discharges from and/or pollutants:
Describe Discharges and/or Pollutants

Non-Compliance

Describe any incidents of non-compliance observed and not described above:
Describe Non-compliance

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:
Describe Additional Controls Needed

Notes

Use this space for any additional notes or observations from the inspection:
Additional Notes

CERTIFICATION STATEMENT

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

Print Name and Title: _____

Signature: _____Date Signed:_____

D. VISUAL ASSESSMENT DOCUMENTATION

Instructions:

- Include in your records all visual assessment documentation completed for the facility (Part 3.2.3). An example visual assessment form can be found on the following page.

MSGP Visual Assessment Form

(Complete a separate form for each discharge point you assess)

Name of Facility: Enter Name of Facility

NPDES ID. Insert NPDES ID

Sample Location: Enter Discharge Point ID

"Substantially Identical Discharge Point" (SIDP)? ☐ Yes (identify SIDPs): ☐ No

Person(s)/Title(s) Collecting Sample: Enter Name(s)/Title(s)

Signature(s) of Person(s) Collecting Sample:

Person(s)/Title(s) Examining Sample: Enter Name(s)/Title(s)

Signature(s) of Person(s) Examining Sample:

Date & Time Discharge Began: Enter Date and Time

Date & Time Sample Collected: Enter Date and Time. If sample not taken within first 30 minutes, explain why.

Date & Time Sample Examined: Enter Date and Time

Substitute Sample? ☐ No ☐ Yes* (identify quarter/year when sample was originally scheduled to be collected): _____

Is this a substitute sample for quarterly visual assessments distributed during seasons when precipitation more regularly occurs? ☐ No ☐ Yes* (identify the quarter/year when the sample was originally scheduled to be collected): _____

Nature of Discharge: ☐ Rainfall ☐ Snowmelt

If Rainfall: Rainfall Amount: Number of inches

Previous Storm Ended > 72 hours (three days) Before Start of This Storm? ☐ Yes ☐ No**

(describe): _____

Pollutants Observed

Color ☐ None ☐ Other (describe): _____

Odor ☐ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas ☐ Solvents ☐ Other (describe): _____

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other

Floating Solids ☐ No ☐ Yes (describe): _____

Settled Solids*** ☐ No ☐ Yes (describe): _____

Suspended Solids ☐ No ☐ Yes (describe): _____

Foam (gently shake sample) ☐ No ☐ Yes (describe): _____

Oil Sheen ☐ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick ☐ Other (describe): _____

Other Obvious Indicators of Stormwater Pollution ☐ No ☐ Yes (describe): _____

* Your facility must be located in an area where limited rainfall occurs during many parts of the year (e.g., arid or semi-arid climate) or in an area where freezing conditions exist that prevent discharges from occurring for extended periods. Identify the quarter/year when the sample was originally scheduled to be collected.

** The 72-hour (three day) interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour (three day) interval is representative of local storm events during the sampling period.

*** Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Sampling not performed due to adverse conditions: ☐ No ☐ Yes (explain): _____

Sampling not performed due to no measurable storm event occurring that resulted in a discharge during the monitoring quarter:
☐ No ☐ Yes (explain): _____

Identify probable sources of any observed stormwater contamination. Also, include any additional comments, descriptions of pictures taken, and any corrective actions necessary below (attach additional sheets as necessary). Insert details

Certification Statement (Refer to MSGP Appendix B, Part B.11 for Signatory Requirements)

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

A. Name: _____ B. Title: _____

C. Signature: _____ D. Date Signed: _____

E. MONITORING RESULTS

Instructions:

- Include in your records copies of all monitoring results (including analytical laboratory data, indicator monitoring, benchmark monitoring, annual effluent limitations guidelines monitoring, state- or tribal-specific monitoring, impaired waters monitoring, and any other monitoring required or conducted) for the facility. Also include copies of monitoring data submitted to EPA's Net-DMR reporting system or paper DMRs if EPA has granted your facility a waiver from electronic reporting (Part 4.1.9).

F. DEVIATIONS FROM VISUAL ASSESSMENT AND/OR MONITORING SCHEDULE

Instructions:

Include in your records:

- A description of any deviations from the schedule you provided in your SWPPP for visual assessments and/or monitoring (Part 6.5), and
- The reason for the deviations (e.g., it was impracticable to collect samples within the first 30 minutes of a measurable storm event or adverse weather) (Parts 3.2.4 and 4.1.5 of the 2021 MSGP).

Use the fields below to document the deviations. Repeat as necessary for any deviations.

Date:
☐ **Visual Assessments** ☐ **Monitoring**
Describe Deviation from Schedule: Describe Deviation
Reason for deviation: Describe Reason

Date: Insert Date
☐ **Visual Assessments** ☐ **Monitoring**
Describe Deviation from Schedule: Describe Deviation
Reason for Deviation: Describe Reason

Date: Insert Date
☐ **Visual Assessments** ☐ **Monitoring**
Describe Deviation from Schedule: Describe Deviation
Reason for Deviation: Describe Reason

Date: Insert Date
☐ **Visual Assessments** ☐ **Monitoring**
Describe Deviation from Schedule: Describe Deviation
Reason for Deviation: Describe Reason

G. CORRECTIVE ACTION AND AIM DOCUMENTATION

Instructions:

Within 24 hours of becoming aware of a condition identified in Parts 5.1.1, 5.2.3, 5.2.4, or 5.2.5 of the 2021 MSGP, document the existence of the condition and subsequent actions. Note that this information must be summarized in the annual report (as required in Part 7.4 of the 2021 MSGP).

Description of Condition: Insert Description of Condition or Event Trigering Need for Corrective Action Review and/or AIM Response

For Spills and Leaks:

Description of Incident: Insert Description
Material: Insert Description of Material
Date/Time: Insert Date/Time
Amount: Insert Amount of Spill/Leak
Location: Insert Location of Spill/Leak
Reason for Spill: Insert Reason for Spill/Leak
Discharge to Waters of U.S.: Insert Whether Spill/Leak/Other Release Discharged to a Water of the U.S.

Date: Insert Date Condition/Triggering Event was Identified
Immediate Actions: Insert Description of Immediate Actions Taken
Actions Taken within 14 Days: Insert Description of Corrective Actions and/or AIM Responses Taken Within 14 days of Discovery of Condition/Triggering Event
14 Day Infeasibility: If Applicable, Document Why It Is Infeasible to Complete Necessary Corrective Actions and/or AIM Responses Within 14 Day Timeframe and Describe Schedule
45 Day Extension: If Applicable, Document Rationale Provided to EPA for Extension of 45 Day Timeframe

Description of Condition: Insert Description of Condition or Event Trigering Need for Corrective Action Review and/or AIM Response

For Spills and Leaks:

Description of Incident: Insert Description
Material: Insert Description of Material
Date/Time: Insert Date/Time
Amount: Insert Amount of Spill/Leak
Location: Insert Location of Spill/Leak
Reason for Spill: Insert Reason for Spill/Leak
Discharge to Waters of U.S.: Insert Whether Spill/Leak/Other Release Discharged to a Water of the U.S.

Date: Insert Date Condition/Triggering Event was Identified
Immediate Actions: Insert Description of Immediate Actions Taken
Actions Taken within 14 Days: Insert Description of Corrective Actions and/or AIM Responses Taken Within 14 days of Discovery of Condition/Triggering Event
14 Day Infeasibility: If Applicable, Document Why It Is Infeasible to Complete Necessary Corrective Actions and/or AIM Responses Within 14 Day Timeframe and Describe Schedule
45 Day Extension: If Applicable, Document Rationale Provided to EPA for Extension of 45 Day Timeframe

H. BENCHMARK THRESHOLD EXCEEDANCES

Instructions:

Include in your records documentation of any annual average benchmark threshold exceedances, which AIM Level triggering event the exceedances caused, and AIM response employed per Part 5.2,including:

- The AIM triggering event;
- The AIM response taken;
- Any rationale that SWPPP/SCM changes were unnecessary; or
- Any documentation required to meet any AIM exception per Part 5.2.6.

Note: an annual average exceedance for a parameter can occur if the four-quarterly annual average for a parameter exceeds the benchmark threshold, or fewer than four quarterly samples are collected, but a single sample, or the sum of any sample results withing the sampling year exceeds the benchmark threshold by more than four times for a parameter (Part 5.2.2).

Date: Insert Date
Pollutant Exceeded and Results: Insert Pollutant Name
Sample 1 (Sample date: Insert Sample Date**) Result:** Insert Sample Result
Sample 2 (Sample date: Insert Sample Date**) Result:** Insert Sample Result
Sample 3 (Sample date: Insert Sample Date**) Result:** Insert Sample Result
Sample 4 (Sample date: Insert Sample Date**) Result:** Insert Sample Result
Average Result: Insert Value
Benchmark Value: Insert Benchmark Value from 2021 MSGP

AIM Level Triggered (select one)

☐ AIM Level 1 (quarterly benchmark monitoring results indicate that an AIM triggering event per Part 5.2.2 has occurred)

☐ AIM Level 2 (continued quarterly benchmark monitoring results indicate that an AIM triggering event per Part 5.2.2 has occurred)

☐ AIM Level 3 (continued quarterly benchmark monitoring results indicate that an AIM triggering event per Part 5.2.2 has occurred)

AIM Response Taken: Document AIM response taken in section G of this Template

Do You Qualify for an Exception from AIM Requirements and Continued Benchmark Monitoring?

☐ **Yes (indicate the exception below)** ☐ **No**

Exception(s): (if applicable)

☐ **Solely Attributable to Natural Background Pollutant Levels**
Pollutant(s): Insert Pollutant
Maintain supporting rationale and applicable data as required in Part 5.2.6.1

☐ **Due to Run-On**
Pollutant(s): Insert Pollutant

Attach documentation and concurrence from EPA Regional Office required in Part 5.2.6.2

☐ **Due to An Abnormal Event**

Pollutant(s): Insert Pollutant
Attach documentation required in Part 5.2.6.3

☐ **Demonstrated to Not Result in An Exceedance of Facility-Specific Value Using National Recommended Water Quality Criteria in Lieu of Applicable MSGP Benchmark Threshold (For Aluminum and Copper Benchmark Parameters Only)**

Pollutant(s): Insert Pollutant
Attach documentation and concurrence from EPA Regional Office required in Part 5.2.6.4

☐ **Demonstrated Not to Result in Any Exceedance of Water Quality Standards**

Pollutant(s): Insert Pollutant
Attach documentation and concurrence from EPA Regional Office required in Part 5.2.6.5

I. IMPAIRED WATERS MONITORING: DOCUMENTATION OF NATURAL BACKGROUND SOURCES OR NON-PRESENCE/ACCEPTABLE RANGE OF IMPAIRMENT POLLUTANT

Instructions:

This section applies only if your facility:

- Discharges directly to an impaired water without an EPA-approved or established total maximum daily load (TMDL); and
- Your first or fourth year annual impaired waters monitoring results indicate that the pollutant(s) for which the water is impaired is (1) not detected in your discharge, or is within the acceptable range for a given parameter for the waterbody to meet its designated use (e.g., pH or temperature) or (2) is detected in your discharge, but you have determined that its presence is caused solely by natural background sources. See Part 4.2.5.1 of the 2021 MSGP.

Date: Insert Date

Check one of the boxes below and complete the additional documentation:

☐ **1 – Pollutant(s) for which the water is impaired is not present in your discharge or is within the acceptable range for a given parameter for the waterbody to meet its designated use.**

Attach documentation that the impairment pollutant(s) was not detected in your discharge sample(s) or was detected within an acceptable range.

☐ **2 – Pollutant(s) for which the water is impaired is present, but you have determined its presence is caused solely by natural background sources.**

Attach the following documentation:

- An explanation of why you believe that the presence of the pollutant(s) causing the impairment in your discharge is not related to the activities at your facility; and
  Data and/or studies that tie the presence of the pollutant(s) causing the impairment in your discharge to natural background sources in the watershed.

J. ACTIVE/INACTIVE STATUS CHANGE

Instructions:

If your facility changes its status from active to inactive and unstaffed (or from inactive/unstaffed to active), include documentation in this section to support your claim.

Date: Insert Date of Change in Status
New Facility Status: ☐ **Inactive and Unstaffed** ☐ **Active**
Reason for Change in Status: Describe Reason

K. SWPPP AMENDMENT LOG

Instructions:

Include in your records:

- A log of the date and description of any amendments to your SWPPP.

Fill in the appropriate columns of this table for each amendment to your SWPPP. Copy and paste additional rows into the table as necessary.

Amend. No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title(s)]
1	Insert Description of Amendment	Insert Date	Insert Name(s)/Title(s)
2			
3			
4			
5			
6			
7			
8			
9			
10			

L. MISCELLANEOUS DOCUMENTATION

Instructions:

Use this section to keep records of any additional documentation that relates to your compliance with the 2021 MSGP.

D. NOTICE OF INTENT AND 2021 MULTI-SECTOR GENERAL PERMIT

The NOI and submission receipt are available from the Port upon request.

E. ENDANGERED SPECIES DOCUMENTATION

Endangered Species Eligibility Determination

Appendix E - Procedures Relating to Endangered Species Protection

E.1 Assessing the Effects of Your Discharges and Discharge-Related Activities

In accordance with Part 1.1.4, you must follow the procedures in this appendix to determine which of the eligibility criteria (i.e., criterion A - E) you qualify under, if any, with respect to the protection of threatened or endangered species listed, and "critical habitat" designated, under the federal Endangered Species Act (ESA). If you do not meet one of these criteria, you are not eligible for coverage under this permit.

The procedures in this appendix will help you assess the potential effects of applicable stormwater discharges, discharge-related activities, and authorized non-stormwater discharges on federally listed threatened and endangered species and their designated critical habitat. In accordance with Part 6.2.6.1 of this permit, you must keep any documentation that supports your eligibility criteria determination, including the completed *Criterion Selection Worksheet* in Part E.4 of this appendix, with your Stormwater Pollution Prevention Plan (SWPPP).

You must complete your eligibility determination outlined in the Endangered Species Protection section of the Notice of Intent (NOI) in the NPDES eReporting Tool (NeT-MSGP) and provide all information as required on your NOI that supports the Part 1.1.4 eligibility criterion you qualify under. Note that if you have determined that you may be eligible under Criterion C3 or Criterion F, you must complete additional questions in the Endangered Species Protection section of the NOI in NeT-MSGP, unless the EPA Regional Office grants you a waiver from electronic reporting, in which case you must submit a completed *Criterion C3 Eligibility Form* to EPA a minimum of 30 days prior to submitting your NOI for permit coverage.

While coordination between you and the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS)(together, the "Services") is not necessarily required in all cases, EPA encourages you to coordinate with the Services, to document that coordination, and to do so early in the planning process prior to submitting your NOI.

When evaluating the potential effects of your activities, you must consider effects to listed species or critical habitats within the "action area" of your industrial activity, as identified by the USFWS IPaC and/or the NOAA Species Directory (see Part E.4 of this appendix). Action area is defined in Appendix A of the MSGP and below:

> **Action Area** – all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. See 50 CFR 402. For the purposes of this permit and for application of Endangered Species Act requirements, the following areas are included in the definition of action area:
>
> - The areas where stormwater discharges originate and flow from the industrial facility to the point of discharge into receiving waters. (Example: Where stormwater flows into a ditch, swale, or gully that leads to receiving waters and where listed species (such as listed amphibians) are found in the ditch, swale, or gully.)
>
> - The areas where stormwater from industrial activities discharge into receiving waters and the areas in the immediate vicinity of the point of discharge. (Example: Where stormwater from industrial activities discharges into a stream segment that is known to harbor listed aquatic species.)

• The areas where stormwater controls will be constructed and operated, including any areas where stormwater flows to and from the stormwater controls. (Example: Where a stormwater retention pond would be built.)

• The areas upstream and/or downstream from the stormwater discharge into a stream segment that may be affected by these discharges. (Example: Where sediment discharged to a receiving stream settles downstream and impacts a breeding area of a listed aquatic species.)

E.2 Eligibility Criterion

As required by Part 1.1.4, you must certify in your NOI that you meet one of the following criteria (A - E) to be eligible for coverage under the permit. Once you determine the applicable eligibility criterion, you must:

- Specify the basis for your selection of the applicable eligibility criterion, and if required, provide documentation that is the basis for your determination with the NOI form; and
- Provide documentation in your SWPPP that is sufficient to support your determination that you satisfy the requirements of the applicable criterion.

NOTE: You must use the information from the USFWS IPaC and NOAA Species Directory (see Step 2 and Step 3 of this appendix) when determining the presence of ESA listed species and critical habitat. Attaching aerial image(s) of the site to this NOI is helpful to EPA, USFWS, and NMFS in confirming eligibility under this criterion. Please Note: NMFS' jurisdiction includes ESA-listed marine and estuarine species that spawn in inland rivers.

Criterion A. **No ESA-listed species and/or critical habitat present in action area.** No ESA-listed species and designated critical habitat(s) are likely to occur in your facility's "action area" as defined in Appendix A. You must provide a description below of the basis for selecting this criterion and provide documentation supporting your eligibility determination in your SWPPP.

Basis statement content: A basis statement supporting the selection of this criterion must identify the USFWS and NMFS information sources used. State resources are not acceptable. Attaching aerial image(s) of the site to this NOI is helpful to EPA, USFWS, and NMFS in confirming eligibility under this criterion. Note that NMFS' jurisdiction includes ESA-listed marine and estuarine species that spawn in inland rivers.

Criterion B. **Eligibility requirements met by another operator under the 2021 MSGP.** Your industrial activity's discharges and discharge-related activities were already addressed in another operator's valid certification of eligibility for your "action area" under eligibility criteria A, C, D, or E of the 2021 MSGP and you have confirmed that no additional ESA-listed species and designated critical habitat not considered in that certification may be present or located in the "action area" (e.g., due to a new species listing or critical habitat designation). To certify your eligibility under this criterion, there must be no lapse of NPDES permit coverage in the other 2021 MSGP operator's certification. By certifying eligibility under this criterion, you must comply with any conditions upon which the other operator's certification was based. You must include in your NOI the NPDES ID assigned to the other 2021 MSGP operator's authorization under this permit. If your certification is based on another 2021 MSGP operator's certification under

criterion C, you must provide EPA with the relevant supporting information required (i.e., permit tracking number, industrial activity SWPPP, a description of the basis for the criterion selected) in your NOI form.

Basis statement content: A basis statement supporting the selection of this criterion must identify the eligibility criterion of the other MSGP NOI, the authorization date, and confirmation that the authorization is effective.

Criterion C1. **Facility eligible for Criterion C in the 2015 MSGP with NO CHANGE to listed species, critical habitat, or action area.** Your facility was eligible for Criterion C in the 2015 MSGP and there has been no change in your facility's action area and you have confirmed that there are no additional threatened or endangered species or designated critical habitat listed by USFWS and/or NMFS in your action area since your certification under Criterion C in the 2015 MSGP. You must provide a description of the basis of this criterion selected on your NOI form and provide documentation supporting your eligibility determination in your SWPPP.

Basis statement content: A basis statement supporting the selection of this criterion must provide the USFWS and/or NMFS resources consulted that helped you determine that there are no additional and/or critical habitat listed by under the jurisdiction of the Services in your action area.

Criterion C2. **Facility eligible for Criterion C in the 2015 MSGP with CHANGES to listed species, critical habitat, or action area.** Your facility was eligible for Criterion C in the 2015 MSGP, but there have been changes in your facility's action area, and/or additional threatened or endangered species and/or designated critical habitat have been listed by USFWS and/or NMFS in your action area since your certification under Criterion C under the 2015 MSGP. You must provide a description of the basis of this criterion selected on your NOI form and provide documentation supporting your eligibility determination in your SWPPP. You must submit your completed Criterion C2 Eligibility information at the same time that you submit your NOI, which will be held for 30 additional days prior to the standard 30-day review for all NOIs.

Basis statement content: A basis statement supporting the selection of this criterion must identify the following:

1. A description of the changes in the facility's action area (if applicable).
2. The USFWS and/or NMFS resources consulted that helped you determine that additional species and/or critical habitat have been listed/designated by either of the Services in your action area.
3. What ESA-listed species and/or designated critical habitat are located in your "action area".
4. Distance in miles between your site and the ESA-listed species and/or designated critical habitat within the action area (in miles, or state "on site" if the ESA-listed species and/or designated critical habitat is within the area to be disturbed).
5. A description of EPA approved measures you will implement or will continue to implement, including additional measures previously

suggested by the services and required by the EPA under the 2015 MSGP, to ensure no likely adverse effects on ESA-listed species and/or critical habitat.

Criterion C3. **ESA-listed species and/or designated critical habitat likely to occur, but discharges not likely to adversely affect them.** ESA-listed threatened or endangered species or their designated critical habitat(s) under the jurisdiction of USFWS and/or NMFS are likely to occur in or near your facility's "action area," and you certify to EPA that your industrial activity's discharges and discharge-related activities are not likely to adversely affect ESA-listed and/or critical habitat. To certify your eligibility under this criterion, you must complete the Criterion C3 Eligibility Form, which you must complete additional questions in the Endangered Species Protection section of the NOI in NeT-MSGP, unless the EPA Regional Office grants you a waiver from electronic reporting, in which case you must submit to EPA at least 30 days prior to filing your NOI for permit coverage. After evaluation of your Criterion C3 Eligibility Form, EPA may require additional measures that you must implement to avoid or eliminate likely adverse effects on ESA-listed species and/or critical habitat from discharges and discharge-related activities. You must submit your completed Criterion C3 Eligibility information at the same time that you submit your NOI, which will be held for 30 additional days prior to the standard 30-day review for all NOIs. You must also provide a description of the basis for the criterion you selected on your NOI form and provide documentation supporting your eligibility determination in your SWPPP.

Basis statement content: A basis statement supporting the selection of this criterion must identify the following:

1. The USFWS and NMFS information resources and expertise (e.g., state or federal biologists) used to arrive at this conclusion. Any supporting documentation should explicitly state that both ESA-listed species and designated critical habitat under the jurisdiction of the USFWS and/or NMFS were considered in the evaluation.

2. What ESA-listed species and/or designated critical habitat are located in your "action area".

3. Distance in miles between your site and the ESA-listed species and/or designated critical habitat within the action area (in miles, or state "on site" if the ESA-listed species and/or designated critical habitat is within the area to be disturbed).

4. A description of EPA approved measures you will implement to ensure no likely adverse effects on ESA-listed species and/or critical habitat.

5. A statement affirming that "I agree to implement any additional measures that were determined by EPA to be necessary to ensure that my discharges and/or discharge-related activities will not have likely adverse effects on listed species and critical habitat."

6. If the EPA Regional Office granted you a waiver from electronic reporting, date you sent completed Criterion C3 Eligibility form to EPA.

Criterion D. **ESA Section 7 consultation has successfully concluded**. Consultation between a Federal Agency and the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service under section 7 of the Endangered Species Act has concluded. The consultation must have addressed the effects of the facility's discharges and discharge-related activities on ESA-listed species and/or designated critical habitat under the jurisdiction of USFWS and/or NMFS. To certify eligibility under this criterion, indicate the result of the consultation:

i. A biological opinion and/or conference opinion that concludes that the action in question (taking into account the effects of your facility's discharges and discharge-related activities) is not likely to jeopardize the continued existence of ESA-listed species, or result in the destruction or adverse modification of designated critical habitat; or

ii. Written concurrence from the applicable Service(s) with a finding that your facility's discharges and discharge-related activities are not likely to adversely affect ESA-listed species or designated critical habitat.

You must verify that the consultation does not warrant reinitiation under 50 CFR §402.16. If reinitiation of consultation is required, in order to be eligible under this criterion you must ensure consultation is reinitiated and the result of the consultation must be consistent with Criterion D (i), or (ii) above.

If eligible under Criterion D, you must also provide supporting documentation for your determination in your NOI and SWPPP, including the Biological Opinion (or ECO tracking number) or concurrence letter. You must include copies of the correspondence between yourself and the USFWS and/or NMFS in your SWPPP and your NOI.

Basis statement content: A basis statement supporting the selection of this criterion should identify the federal action agency(ies) involved, the field office/regional office(s) providing that consultation, any tracking numbers of identifiers associated with that consultation (e.g., IPaC number, ECO number), and the date the consultation was completed.

Criterion E. **Issuance of section 10 permit.** Potential take is authorized through the issuance of a permit under section 10 of the ESA by the USFWS and/or NMFS, and this authorization addresses the effects of the facility's discharges and discharge-related activities on ESA-listed species and designated critical habitat. You must include copies of the correspondence between yourself and the participating agencies in your SWPPP and your NOI.

Basis statement content: A basis statement supporting the selection of this criterion should identify whether USFWS or NMFS or both agencies provided a section 10 permit, the field office/regional office(s) providing permit(s), any tracking numbers of identifiers associated with that consultation (e.g., IPaC number, ECO number), and the date the permit was granted.

E.3 Eligibility Compliance

You must comply with any measures that formed the basis of your eligibility determination in Part 1.1.4 for the duration of your coverage under the MSGP in order to maintain your eligibility for coverage under the permit. These measures become permit requirements per Part 2.3. Documentation of these measures must be kept as part of your SWPPP (see Part 6.2.6.1).

E.4 Criterion Selection Worksheet

Instructions:

You must follow the step-by-step instructions in this worksheet in order to determine your eligibility under Part 1.1.4. Alternatively, if you prefer to use a Biological Evaluation (or its equivalent) in making a determination of your eligibility, you should ensure all of the information requested below for the criterion you are selecting is fully addressed in the document and provided. You must attach this completed document or Biological Evaluation (or equivalent) to your SWPPP to support your Part 1.1.4 eligibility determination.

You may need the following information in order to determine your eligibility:

1) Your facility's draft Stormwater Pollution Prevention Plan (SWPPP), including information on receiving waters.

2) Any additional site-specific information related to your facility's discharges and discharge-related activities, such as the geographic location.

3) The list(s) of threatened and endangered species and/or any designated critical habitat in your action area, as acquired from the Fish and Wildlife Service and/or the National Marine Fisheries Service. Directions on how to acquire species lists is described in a subsequent section below.

   Note that much of the information needed to complete this worksheet is also needed in order to prepare your NOI for permit coverage and is information that is part of your SWPPP. You may copy and paste any information that is already required and completed in your SWPPP into this worksheet. (*You may also decide to make minor changes or additions to your SWPPP while filling out the worksheet for clarification purposes or to address any concerns that are identified below.)*

STEP 1: DETERMINE IF YOU MEET THE ELIGIBILITY REQUIREMENTS OF CRITERION B, D, or E.

I. You should first determine whether you are eligible under criterion B (because another operator has accounted for your action area in their valid certification of eligibility under the 2021 MSGP), criterion D (because of a previously completed ESA section 7 consultation), or criterion E (because of a previously issued ESA section 10 permit).

II. If you determine that your facility does not meet criterion B, D, or E (e.g., due to difference in action area described, lack of analysis of appropriate effects, new listings or designation of critical habitat), proceed to **Step 2** below.

Criterion B Eligibility Requirements

If your industrial activities were already addressed in another operator's valid certification of eligibility under the current 2021 MSGP, you may be eligible for coverage under criterion B. In order to be eligible for coverage under criterion B, you must confirm that **all** three of the following are true:

- ☐ You have confirmed that the other operator's certification of eligibility accounted for your action area and that the eligibility determination was valid.
- ☐ There has been no lapse of NPDES permit coverage in the other operator's certification.

☐ You will comply with all measures that formed the basis of the other operator's valid certification of eligibility. Provide the operator's NPDES permit number and list any measures that you must comply with in the box below (or enter "N/A" if none exist):

- **If all three of the above are true, you may select criterion B on your NOI.** You must include in your NOI the NPDES ID assigned to the other operator's authorization under this permit, and a description of the basis for the criterion selected on your NOI form, including the eligibility criterion selected in the other operator's NOI. You must include this completed Worksheet in your SWPPP.
- **If any of the above are <u>not</u> true, you may <u>not</u> select criterion B and must proceed to Step 2.** For example, if there are any listed species in your action area that were not addressed in the other operator's certification, you are not eligible under criterion B.

<u>Criterion D Eligibility Requirements</u>

If consultation under section 7 of the ESA has concluded, you may be eligible for coverage under criterion D. In order to be eligible for coverage under criterion D, you must confirm that **all** two of the following are true:

■ A consultation between a federal agency and the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service under section 7 of the ESA has concluded. Consultations can be either formal or informal, and would have occurred only as a result of a separate federal action (e.g., during application for an individual wastewater discharge permit or the issuance of a wetlands dredge and fill permit), <u>and</u> the consultation must have addressed the effects of your industrial activity's discharges and discharge-related activities on all ESA-listed threatened or endangered species and all designated critical habitat in your action area. The result of this consultation must be either:

i. A biological opinion currently in effect that concludes that the action in question (taking into account the effects of your facility's discharges and discharge-related activities) is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. The biological opinion must have included the effects of your facility's discharges[1] and discharge-related activities on all the listed species and designated critical habitat in your action area. To be eligible under (i), any

[1] Effects of discharge includes, but is not limited to, the analysis of the hydrological, chemical, and biological effects of the discharge on listed species, their prey, and their habitat, as well as critical habitat, where designated. For example, the effects analysis would have evaluated whether the various pollutants in the discharge (e.g., TSS, metals) would adversely affect listed species through exposure to the pollutants, or to their prey or habitat. Effects that look only at short-term effects unrelated to the stormwater discharge effects to listed species are not sufficient for these purposes.

reasonable and prudent measures specified in the incidental take statement must be implemented;

ii. Written concurrence (e.g., letter of concurrence) from the applicable Service(s) with a finding that your facility's discharges and discharge-related activities are not likely to adversely affect ESA-listed species and/or designated critical habitat. The concurrence letter must have included the effects of your facility's discharges and discharge-related activities on all the ESA-listed species and/or designated critical habitat on your species list(s) acquired from the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service as part of this worksheet.

☐ The consultation does not warrant reinitiation under 50 CFR §402.16; or, if reinitiation of consultation is required (e.g., due to a new species listing or critical habitat designation; new information), you have reinitiated the consultation and the result of the consultation is consistent with the statements above. Attach a copy of any reinitiation documentation from the Services or other consulting federal agency.

- **If both of the above are true, you may select criterion D on your NOI.** You must also provide a description of the basis for the criterion selected on your NOI form and you must include this completed worksheet in your SWPPP. In both your SWPPP and NOI you must also provide the Biological Opinion (or ECO tracking number) or concurrence letter and any other documentation supporting your eligibility determination.
- **If any of the above are not true, you may not select criterion D and must proceed to Step 2.** For example, if the biological opinion or written concurrence did not include the effects of the discharge or discharge-related activities as described above (e.g., the previous consultation covered some but not all of the species or critical habitat in your action area as shown on your species list), or if the consultation is no longer valid (e.g., due to new species listings), you are not eligible under criterion D.

Criterion E Eligibility Requirements

If your industrial activities are the subject of a permit under section 10 of the ESA, and this authorization addresses the effects of your facility's discharges and discharge-related activities on ESA-listed species and designated critical habitat in your action area, you may be eligible for coverage under criterion E. In order to be eligible or coverage under criterion E, you must confirm that the following is true:

☐ A permit has been issued under section 10 of the ESA. The permit authorization specifically addresses the effects of your facility's discharges and discharge-related activities (if applicable) on all federally-listed species and designated critical habitat in your action area.

- **If the above is true, you may select criterion E on your NOI.** You must also provide a description of the basis for the criterion selected on your NOI form and must include this completed worksheet in your SWPPP. In both your SWPPP and your NOI you must provide a copy of the section 10 permit issued by the Services.
- **If the above is not true, you may not select criterion E and must proceed to Step 2.** For example, if a permit has been issued under section 10 of the ESA, but the permit authorization did not address the effects of your facility's discharges and/or discharge-related activities on all federally-listed species and designated critical

habitat in your action area, you are not eligible under criterion E, but you should attach a copy of the permit to the SWPPP for reference.

STEP 2: DETERMINE THE EXTENT OF YOUR ACTION AREA

You must determine whether species listed as either threatened or endangered, or their critical habitat(s) are located in your facility's action area (i.e., all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action, including areas beyond the footprint of the facility that are likely to be affected by stormwater discharges, discharge-related activities, and authorized non-stormwater discharges). Consider the following in determining the action area for your facility:

- Discharges of pollutants into downstream areas can expand the action area well beyond the footprint of your facility and the discharge point(s). Take into account the controls you will be implementing to minimize pollutants and the receiving waterbody characteristics (e.g., perennial, intermittent, ephemeral) in determining the extent of physical, chemical, and/or biotic effects of the discharges. All receiving waterbodies that could receive pollutants from your facility must be included in your action area.
- Discharge-related activities must also be accounted for in determining your action area. Discharge-related activities are any activities that cause, contribute to, or result in stormwater and authorized non-stormwater point source discharges, and measures such as the siting, construction, and operation of stormwater controls to control, reduce, or prevent pollutants from being discharged. For example, any new or modified stormwater controls that will have noise or other similar effects, and any disturbances associated with construction of controls, are part of your action area.

If you have any questions about determining the extent of your action area, you may contact EPA or the Services for assistance. https://www.epa.gov/npdes/contact-us-stormwater#regional

You must include a **map and a written description of** the action area of your facility in Attachment 1 of this appendix. You may choose to include the map that is generated from the FWS' on-line mapping tool IPaC (the *Information, Planning, and Consultation System*) located at http://ecos.fws.gov/ipac/ (see Step 3 for information about using this tool).

You must proceed to **Step 3** below.

STEP 3: DETERMINE IF LISTED THREATENED OR ENDANGERED SPECIES AND/OR CRITICAL HABITAT ARE PRESENT IN YOUR ACTION AREA.

You must determine whether species listed as either threatened or endangered under the Endangered Species Act, and/or their designated critical habitat(s) (as defined in Appendix A), are located in your facility's action area. ESA listed species and designated critical habitat are under the purview of the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS), and in many cases, you will need to acquire species and critical habitat lists from both Services.

- For NMFS species and critical habitat information, use the following webpages, which provide up-to-date information on listed species
    - For the Northeastern U.S.: NOAA Fisheries Greater Atlantic Region ESA Section 7 Mapper: https://noaa.maps.arcgis.com/apps/webappviewer/index.html?id=1bc332edc5204e03b250ac11f9914a27;

- For Puerto Rico:
  - *Acropora* critical habitat map: https://www.fisheries.noaa.gov/resource/map/acropora-elkhorn-and-staghorn-coral-critical-habitat-map-and-gis-data;
  - Green turtle critical habitat map: https://www.fisheries.noaa.gov/resource/map/green-turtle-critical-habitat-map-and-gis-data;
  - Hawksbill Turtle critical habitat map: https://www.fisheries.noaa.gov/resource/map/hawksbill-turtle-critical-habitat-map-and-gis-data;
- Western U.S.: West Coast Region Protected Resources App: https://www.webapps.nwfsc.noaa.gov/portal/apps/webappviewer/index.html?id=7514c715b8594944a6e468dd25aaacc9; and
- Pacific Islands: Contact the Pacific Islands Regional Office at (808) 725-5000 or pirohonolulu@noaa.gov.

If you need more information, go to https://www.fisheries.noaa.gov/regions. Choose the Region where the project is based from the left-hand column and the office from the About Us on the right-hand column.

If the action area includes coastal waters or waters used by species that migrate between fresh and salt waters (e.g., salmon, sturgeon), you must obtain a species list from NMFS field office.

- For FWS species information, use the on-line mapping tool IPaC (the *Information, Planning, and Consultation System*) located at http://ecos.fws.gov/ipac/, and follow these steps:
  - *Select Get Started*.
  - **Search or zoom to find your location:** Use an address, city name or other location to find your facility then use the zoom in/out feature to see the entire extent of your action area on the screen.
  - **Define you action area:** Use one of the mapping features (e.g., sketch, polygon or line drawing tool) to draw your entire action area.
    - For the aquatic portion of your action area, trace the waterbody(ies) with the tool to characterize your action area.
    - If your proposal will include any upland activities (i.e., discharge-related activities), or if there is some aspect of your discharge that would potentially result in effects to terrestrial species, include the corresponding upland areas within your action area.
    - When you are done, go to confirm and press *Continue*.
  - Select *Define Project* to request an Official Species List.
  - Complete the fields on the Official Species List Request page and include "(MSGP)" at the end of the project description.
    - For Classification, select "Water Quality Modification".
    - Select the appropriate requesting agency/organization type (for most operators, this should be "Other").

- Submit the request to acquire an Official Species List, which should show both listed species as well as any designated critical habitat that are present in the action area in the previous step.
- Note: *If a link to an Official Species List is not available on the page, follow the web link of the office(s) indicated, or contact the office directly by mail or phone if a web link is not shown*.

The principle authority for critical habitat designations and associated requirements is found at 50 CFR Parts 17 and 226.

Attach a copy of the species and critical habitat list(s) from the Service(s) to Attachment 2 of this appendix and use the list(s) to complete the rest of this worksheet. For FWS species, include the full printout from your IPaC query/Official Species List in Attachment 2. You can include the map from your IPaC query in Attachment 1. For NMFS species, include the full printout from the Species Directory with the correct Region selected.

If after following the steps you have determined that there are no listed species and/or designated critical habitat in your action area, you may be eligible for coverage under criterion A.

If you have determined that there are or may be listed species and/or designated critical habitat in your action area, you are not eligible under criterion A and must proceed to **Step 4** below.

Criterion A Eligibility Requirements

In order to be eligible for coverage under criterion A, you must confirm that the following is true:

☒ I have confirmed there to be no ESA-listed species and no critical habitat in my action area.

- **If the above is true, you may select criterion A on your NOI form.** You must also provide a description of the basis for the criterion selected on your NOI form. You must include this completed worksheet in your SWPPP. *Note: If your Official Species List from the USFWS indicated no species or critical habitat were present in your action area, include the full consultation tracking code at the top of your Official Species List in your NOI in the basis statement for Criterion A. If an Official Species List was not available on IPaC, list the contact date and name of the Service staff with whom you corresponded to verify no USFWS species or critical habitat were present in your action area.*

Note: For existing dischargers that have previously obtained coverage under criterion A, you must verify whether ESA-protected species and/or critical habitat are expected to exist in your action area, as described above. Please note that if you now find that your action area overlaps with ESA-protected species or critical habitat, you must proceed to Step 4.

- If the above is not true, you may not select criterion A and must proceed to **Step 4** to determine if you can become eligible under criterion C.

STEP 4: DETERMINE IF YOUR INDUSTRIAL FACILITY'S DISCHARGES OR DISCHARGE-RELATED ACTIVITIES ARE LIKELY TO ADVERSELY AFFECT LISTED THREATENED OR ENDANGERED SPECIES OR DESIGNATED CRITICAL HABITAT AND ANY MEASURES THAT MUST BE IMPLEMENTED TO AVOID ADVERSE EFFECTS.

If in Step 3 you determined that listed species and/or designated critical habitat could exist in your action area, you must next assess whether your discharges and discharge-related activities are likely to adversely affect ESA-listed threatened or endangered species or designated critical habitat, and whether any additional measures are necessary to ensure no likely adverse effects. In order to make a determination of your facility's likelihood of adverse effects, you must complete additional questions in the Endangered Species Protection section of the NOI in NeT-MSGP, unless the EPA Regional Office grants you a waiver from electronic reporting, in which case you must complete the attached *Criterion C3 Eligibility Form* and must submit this form to EPA a minimum of 30 days prior to filing your NOI for permit coverage. After you submit your NOI containing Criterion C3 information or your *Criterion C3 Eligibility Form*, you may be contacted by EPA with additional measures that you must implement in order to ensure your eligibility under criterion C3.

Criterion C3 Eligibility Form

Instructions:

In order to be eligible for coverage under criterion C3, **you must complete the Endangered Species Protection section of the Notice of Intent in the NPDES eReporting Tool (NeT-MSGP)**. Per Part 7.1, you must submit your NOI electronically via NeT-MSGP, unless the EPA Regional Office grants you a waiver from electronic reporting, in which case you may use this paper Criterion C3 form. If using the paper form, you must complete the following form and you must submit it to EPA following the instructions in Section VII a **minimum of 30 days prior to filing your NOI for permit coverage.** After you submit your form, you may be contacted by EPA with additional measures (e.g., additional stormwater controls or modifications to your discharge- related activities) that you must implement in order to ensure your eligibility under criterion C3.

If after completing this worksheet you cannot make a determination that your discharges and discharge-related activities are not likely to adversely affect ESA listed threatened or endangered species or designated critical habitat, you must submit this completed worksheet to EPA, and you may not file your NOI for permit coverage until you receive a determination from EPA that your discharges and/or discharge-related activities are not likely to adversely affect ESA-protected species and critical habitat.

Note: Much of the information needed for this form can be obtained from your draft SWPPP which will be needed when you file your NOI.

SECTION I. OPERATOR, FACILITY, AND SITE LOCATION INFORMATION.

1) **Operator Information**

   a) **Operator Name:** _____

   b) **Point of Contact**

   First Name:_____ **Last Name:** _____

   Phone Number: _____

   E-mail: _____

2) **Facility Information**

   a) **Facility Name:** _____

   b) **Check which of the following applies:**

☐ I am seeking coverage under the MSGP as a new discharger or as a new source.

☐ I am seeking coverage under the MSGP as an existing discharger and my facility has modifications to its discharge characteristics (e.g., changes in discharge flow or area drained, different pollutants) and/or discharge-related activities (e.g., stormwater controls).

Indicate the number of years the facility has been in operation:_____years

Provide your NPDES ID (i.e., permit tracking number) from your previous MSGP coverage: _____

☐ I am seeking coverage under the MSGP as an existing discharger and there are no modifications to my facility.

Indicate the number of year(s) the facility has been in operation: _____ year(s)

Provide your NPDES ID (i.e., permit tracking number) from your previous MSGP coverage: _____

c) Facility Address:

Address 1: _____

Address 2: _____

City: _____ **State:** _____ **Zip Code:** _____

d) Identify the primary industrial sector to be covered under the 2021 MSGP:

SIC Code _____ or Primary Activity Code _____

Sector _____ and Subsector _____

e) Identify the sectors of any co-located activities to be covered under the 2021 MSGP:

Sector _____ Subsector _____

Sector _____ Subsector _____

Sector _____ Subsector _____

Sector _____ Subsector _____

Sector _____ Subsector _____

Sector _____ Subsector _____

f) Estimated area of industrial activity exposed to stormwater: ___acres

g) Provide a general description of the industrial activities that are taking place at this facility:

3) Receiving Waters Information

List all the stormwater outfalls from your facility.				**For each outfall, provide the following receiving water information:**	
Discharge Point ID	**Design Capacity (if known)**	**Latitude (decimal degrees)**	**Longitude (decimal degrees)**	**Name of the receiving water that receives stormwater from the discharge point and/or from the MS4 that the discharge point discharges to**	**Type of Waterbody (e.g., lake, pond, river/stream/creek, estuarine/marine water)**
		_ _ _ . _ _ _ _	_ _ _ . _ _ _ _		
		_ _ _ . _ _ _ _	_ _ _ . _ _ _ _		
		_ _ _ . _ _ _ _	_ _ _ . _ _ _ _		
		_ _ _ . _ _ _ _	_ _ _ . _ _ _ _		
		_ _ _ . _ _ _ _	_ _ _ . _ _ _ _		

SECTION II. ACTION AREA

As required in Step 2, you must include a map and a written description of the action area of your facility in Attachment 1 of this appendix.

SECTION III. LISTED SPECIES AND CRITICAL HABITAT LIST

As required in Step 3, attach a copy of the species and critical habitat list(s) from the Service(s) to Attachment 2 of this appendix and use the list(s) to complete the rest of this worksheet. For FWS species, include the full printout from your IPaC query/Official Species List in Attachment 2. You can include the map from your IPaC query in Attachment 1.

Review your species list in Attachment 2, choose one of the following three statements, and follow the corresponding instructions:

Note: For the purposes of this permit, "terrestrial species" would not include animal or plant species that 1) spends any portion of its life cycle in a waterbody or wetland, or 2) if an animal, depends on prey or habitat that occurs in a waterbody or wetland. For example, shorebirds, wading birds, amphibians, and certain reptiles would not be considered terrestrial species under this definition. Please also be aware that some terrestrial animals (e.g., certain insects, amphibians) may have an aquatic egg or larval/juvenile phase.

☐ The species list includes only terrestrial species and/or their designated critical habitat. No aquatic or aquatic-dependent species or their critical habitat are present in the action area. **You may skip to Section IV of this form. You are not required to fill out Section V.**

☐ The species list includes only aquatic and/or aquatic-dependent species and/or their designated critical habitat. No terrestrial species or their critical habitat are present in the action area. **You may skip to Section V of this form and are not required to fill out Section IV.**

☐ The species list includes both terrestrial and aquatic or aquatic-dependent species and/or their designated critical habitat. **You must fill out both Sections IV and V of this form.**

SECTION IV. EVALUATION OF DISCHARGE-RELATED ACTIVITIES EFFECTS

Note: You are only required to fill out this section if your facility's action area contains terrestrial species and/or their designated critical habitat. If your action area only contains aquatic and/or aquatic-dependent species and/or their designated critical habitat, you can skip directly to Section V.

Most of the potential effects related to coverage under the MSGP are assumed to occur to aquatic and/or aquatic-dependent species. However, in some cases, potential effects to terrestrial species and/or their critical habitat should be considered as well from any discharge-related activities that occur during coverage under the MSGP. Examples of discharge-related activities that could have potential effects on listed terrestrial species or their critical habitat include the storage of materials and land disturbances associated with stormwater management-related activities (e.g., the installation or placement of stormwater control measures).

A. Select the applicable statement(s) below and follow the corresponding instructions:

☐ There are no discharge-related activities that are planned to occur during my coverage under the 2021 MSGP. You can conclude that your discharge-related activities will have no likely adverse effects, and:

- If there are any aquatic or aquatic-dependent species and/or their critical habitat in your action area, you must skip to Section V, *Evaluation of Discharge Effects,* below.
- If there are no aquatic or aquatic-dependent species, you may skip to Section VI and verify that your activities will have no likely adverse effects. You must submit this form to EPA as specified in Section VII of this form. You may select criterion C on your NOI form and may submit your NOI for permit coverage 30 days after you have submitted this *Criterion C Eligibility Form*. You must also provide a description of the basis for the criterion you selected on your NOI form, **including the species and critical habitat list(s) in your action area**, as well as any other documentation supporting your eligibility. You must also include this completed *Criterion C Eligibility Form* in your SWPPP.

☐ There are discharge-related activities planned as part of the proposal. Describe your discharge- related activities in the following box and continue to (B) below.

B. In order to ensure any discharge-related activities will have no likely adverse effects on ESA-listed threatened and endangered species and/or their designated critical habitat, you must certify that all the following are true:

☐ Discharge-related activities will occur:

- on previously cleared/developed areas of the site where maintenance and operation of the facility are currently occurring or where existing conditions of the area(s) in which the discharge-related activities will occur precludes its use by listed species (e.g., work on existing impervious surfaces, work occurring inside buildings, area is not used by species), and
- if discharge-related activities will include the establishment of structures (including, but not limited to, infiltration ponds and other controls) or any related disturbances, these structures and/or disturbances will be sited in areas that will not result in isolation or degradation of nesting, breeding, or foraging habitat or other habitat functions for listed animal species (or their designated critical habitat), and will avoid the destruction of native vegetation (including listed plant species).

☐ If vegetation removal (e.g., brush clearing) or other similar activities will occur, no terrestrial listed species that use these areas for habitat would be expected to be present during vegetation removal and these activities will not occur within critical habitat.

If all the above are true, you can conclude that your discharge-related activities will have no likely adverse effects, and:

- If there are any aquatic or aquatic-dependent species and/or critical habitat in your action area, you must skip to Section V, *Evaluation of Discharge Effects,* below.
- If there are no aquatic or aquatic-dependent species, you may skip to Section VI and verify that your activities will have no likely adverse effects. You must submit this form to EPA as specified in Section VII of this form. You may select criterion C on your NOI and may submit your NOI for permit coverage 30 days after you have submitted this completed form. You must also provide a description of the basis for the criterion you selected on your NOI form, **including the species and critical habitat list(s)**, and any other documentation supporting your eligibility. You must also include this completed *Criterion C Eligibility Form* in your SWPPP.
- **If any of the above are not true**, you cannot conclude that your discharge-related activities will have no likely adverse effects. You must complete the rest of this form (if applicable) and must submit the form to EPA for assistance in determining your eligibility for coverage.

SECTION V. EVALUATION OF DISCHARGE EFFECTS

Note: You are only required to fill out this section if your facility's action area includes aquatic and/or aquatic-dependent species and/or their critical habitat.

In this section, you will evaluate the likelihood of adverse effects from your facility's discharges. The scope of effects to consider will vary with each facility and species/critical habitat characteristics. The following are examples of discharge affects you should consider:

- *Hydrological Effects.* Stormwater discharges may adversely affect receiving waters by causing changes in water quality parameters such as turbidity, temperature, salinity, or pH. Stormwater discharges may adversely affect the immediate vicinity of the discharge point through streambank erosion and scour. These effects will vary with the amount of stormwater discharged and the volume and condition of the receiving water. Where a stormwater

discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely.

- *Toxicity of Pollutants.* Pollutants in stormwater may have toxic effects on listed species and may adversely affect critical habitat. Exceedances of benchmarks, effluent limitation guidelines, or state or tribal water quality requirements may be indicative of potential adverse effects on listed species or critical habitat. However, some listed species may be adversely affected at pollutant concentrations below benchmarks, effluent limitation guidelines, and state or tribal water quality standards due to exposures to multiple stressors at the same time. In addition, stormwater pollutants identified in Part 6.2.3.2 of your SWPPP, but not monitored as benchmarks or effluent limitation guidelines, may also adversely affect listed species and critical habitat.

As these effects are difficult to analyze for listed species, their prey, habitat, and designated critical habitat, this form helps you to analyze your discharges to make a determination of whether your discharges will likely have adverse effects and whether there are any additional controls you can implement to ensure no likely adverse effects.

A. Evaluation of Pollutants and Controls to Avoid Adverse Effects. In this section, you must document **all** of your pollutant sources and pollutants expected to be discharged in stormwater (see Part 8). You must also document the controls you will implement to avoid adverse effects on listed aquatic and aquatic-dependent species and critical habitat. You must include specific details about the expected effectiveness of the controls in avoiding adverse effects to the listed aquatic-and aquatic-dependent species and critical habitat. Attach additional pages if needed.

Potential Pollutant Source	Potential Pollutants	**Controls to Avoid Adverse Effects on Listed Aquatic and Aquatic-Dependent Species and Critical Habitat.** Include information supporting why the control(s) will ensure no adverse effects, including any data you have about the effectiveness of the control(s) in reducing pollutant concentrations. You may also attach photos of your controls to this form.
e.g., • **vehicle and equipment fueling**	***e.g.,*** • **Oil & grease** • **Diesel** • **Gasoline** • **TSS** • **Antifreeze**	***e.g.,*** • **Fueling operators (including the transfer of fuel from tank trucks) will be conducted on an impervious or contained pad or under cover** • **Drip pans will be used where leaks or spills of fuel can occur and where making and breaking hose connections** • **Spill kit will be kept on-site in close proximity to potential spill areas** • **Any spills will be cleaned-up immediately using dry clean-up methods** • **Stormwater runoff will be diverted around fueling areas using diversion dikes and curbing**

Potential Pollutant Source	Potential Pollutants	Controls to Avoid Adverse Effects on Listed Aquatic and Aquatic-Dependent Species and Critical Habitat.

Potential Pollutant Source	Potential Pollutants	Controls to Avoid Adverse Effects on Listed Aquatic and Aquatic-Dependent Species and Critical Habitat.

☐ Check if you are not able to make a preliminary determination that any of your pollutants will be controlled to a level necessary to avoid adverse effects on aquatic and/or aquatic-dependent listed species and their designated critical habitat. You must check in Section VI that you are unable to make a determination of no likely adverse effects and must complete the rest of the form. You must submit your completed form to EPA for assistance in determining your eligibility for coverage.

B. Analysis of Effects Based on Past Monitoring Data. Select which of the following applies to your facility:

☐ I have no previous monitoring data for my facility because there are no applicable monitoring requirements for my facility's sector(s).

☐ I have no previous monitoring data for my facility because I am a new discharger or a new source, but I am subject to monitoring under the 2021 MSGP. You must provide information to support a conclusion that your facility's discharges are not expected to result in benchmark or numeric effluent limit exceedances that will adversely affect listed species or their critical habitat:

☐ My facility has not had any exceedances under the 2015 MSGP of any required benchmark(s) or numeric effluent limits. I comply with the applicable monitoring requirements and have not had any exceedances.

☐ My facility has had exceedances of one or more benchmark(s) or numeric effluent limits under the 2015 MSGP, but I have addressed them during my coverage under the 2015 MSGP, or in my evaluation of controls to avoid adverse effects in (A) above. Describe all actions (including specific controls) that you will implement to ensure that the pollutants in your discharge(s) will not result in likely adverse effects from future exceedances.

☐ Check if your facility has had exceedances of one or more benchmarks or numeric effluent limits under the 2015 MSGP and you have not been able to address them to avoid adverse effects from future exceedances, or if you are a new discharger or a new source but you are not sure if you can avoid adverse effects from possible exceedances. You must check in Section VI that you are unable to make a determination of no likely adverse effects. You must submit your completed form to EPA for assistance in determining your eligibility for coverage. You may not file your NOI for permit coverage until you are able to make a determination that your discharges will avoid adverse effects on listed species and designated critical habitat.

SECTION VI. VERIFICATION OF PRELIMINARY EFFECTS DETERMINATION

Based on Steps I – V of this form, you must verify your preliminary determination of effects on listed species and designated critical habitat from your discharges and/or discharge-related activities:

- ☐ Following the applicable Steps in I – V above, I have provided information supporting a preliminary determination that my discharges and/or discharge-related activities are not likely to adversely affect listed species and designated critical habitats.
- ☐ Following the applicable Steps in I – V above, I am **not** able to provide information supporting a preliminary determination that my discharges and/or discharge-related activities are not likely to adversely affect listed species and designated critical habitats.

Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle initial, Last Name

Title

Signature:_____ Date:

E-mail:

SECTION VII CRITERION C ELIGIBILITY FORM SUBMISSION INSTRUCTIONS

Only if the applicable EPA Regional Office has granted you a waiver from electronic reporting, you must submit this completed form to EPA at msgpesa@epa.gov, including any attachments and any additional information that demonstrates how you will avoid or eliminate adverse effects to listed threatened and endangered species or designated critical habitat (e.g., specific controls you will implement to avoid or eliminate adverse effects). **Any missing or incomplete information may result in a delay of your coverage under the permit**.

If you have made a preliminary determination that your discharges and/or discharge-related activities are not likely to adversely affect listed species and critical habitat, this form must be submitted a minimum of 30 days prior to submitting your NOI for permit coverage under criterion C. Please note that during either the 30-day *Criterion C Eligibility Form* review period prior to your NOI submission, or within 30 days after your NOI submission and before you have been

authorized for permit coverage, EPA may advise you that additional information is needed, or that there are additional measures you must implement to avoid likely adverse effects.

If you are unable to make a preliminary determination that your discharges and/or discharge-related activities are not likely to adversely affect listed species and critical habitat, this worksheet must be submitted to EPA, but you may not file your NOI for permit coverage until you have received a determination from EPA that your discharges and/or discharge-related activities are not likely to adversely affect listed species and critical habitat.

Attachment 1

Include a **map and a written description** of the action area of your facility, as required in Step 2. You may choose to include the map that is generated from the FWS' on-line mapping tool IPaC (the *Information, Planning, and Consultation System*) located at http://ecos.fws.gov/ipac/.

The written description of your action area that accompanies your action area map must explain your rationale for the extent of the action area drawn on your map. For example, your action area written description may look something like this:

> *The action area for the (name of your facility)'s stormwater discharges extends downstream from the outfall(s) in (name of receiving waterbody) (# of meters/feet/kilometers/miles). The downstream limit of the action area reflects the approximate distance at which the discharge waters and any pollutants would be expected to cause potential adverse effects to listed species and/or critical habitat because (insert rationale). The action area does/does not extend to the (name of receiving waterbody)'s confluence with (name of confluence waterbody) because (insert rationale).*

Note: If your action area written description will be highly site-specific, depending on the expected effects of your facility's discharges and discharge-related activities, receiving waterbody characteristics, etc.

Attachment 2

List or attach the list(s) of species and critical habitat in your action area on this sheet, as required in Step 3. You must include a list for applicable listed NMFS and USFWS species and critical habitat. If there are listed species and/or critical habitat for only one Service, you must include a statement confirming there are no listed species and/or critical habitat for the other Service. For USFWS species, include the USFWS Official Species List full printout from your IPaC query (including the consultation code and event code at the top of the FWS printout).

Note: If your Official Species List from the USFWS indicated no species or critical habitat were present in your action area, include the consultation code and event code that can be found at the top of your Official Species List in your NOI basis statement. If an Official Species List was not available on IPaC, list the contact date, the ecological services field office and the name of the Service staff with whom you corresponded to identify the existence of any USFWS species or critical habitat present in your action area.

Agency Consultation Letters

U.S. Department
of Transportation
**MARITIME
ADMINISTRATION**

1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

Michael Tosatto
Regional Administrator
Pacific Islands Regional Office
NOAA/NMFS
1601 Kapiolani Boulevard, Suite 1110
Honolulu, HI 96814

August 22, 2012

SUBJECT Port Authority of Guam Port Modernization Project Federal Threatened and Endangered Species Determination

Mr. Tosatto:

The United States Department of Transportation, Maritime Administration (MARAD) is in the process of preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; Council on Environmental Quality Regulations (40 Code of Federal Regulations [CFR] 1500–1508); DOT Order 5610.1c; and MARAD MAO 600-1 to identify and assess the potential impacts associated with the proposed Port Authority of Guam Port Modernization Project (Project). MARAD seeks National Marine Fisheries Service (NMFS) concurrence with the determination that although Federal Threatened and Endangered Species may be affected by the subject action, it is not likely to be adversely affected.

The proposed action for the Project is to modernize, improve, and reconfigure the Port's existing 52-acre Terminal Yard and develop a 19-acre Expansion Area immediately east of the Terminal Yard with new cargo storage facilities in order to increase cargo-handling capacity and operating efficiency (Attachment 1, Figures 1-1, 1-2). The overall purpose of the Project is to update facilities and reconfigure operations in order to create sufficient capacity to support projected cargo handling demand, while maintaining ongoing Port operations.

All proposed work would be done above and out of the water. The only project component with any direct impact on marine waters would be the replacement of one existing storm water outfall, and the installation of two additional stormwater outfalls. The outfalls would be constructed to include treatment systems (oil-water separators). The current outfall is untreated. The new outfalls would require permitting by the U. S. Environmental Protection Agency under the National Pollutant Discharge Elimination System (NPDES).

Based on the agencies' responses to the letters of inquiry regarding federally threatened and endangered species, as well as follow-up communication, the federally threatened and endangered species under NMFS jurisdiction that are expected to occur in the action area are: the green turtle (*Chelonia mydas*) – a federally threatened species, and the hawksbill turtle (*Eretmochelys imbricata*) – a federally endangered species. The anticipated prevalence of these species on and near the site is summarized below.

Sea Turtles (green turtle and hawksbill turtle) – Guam's Division of Aquatic Wildlife Resources (DAWR) has maintained a bimonthly aerial survey program that confirms the year-round presence of a resident population of green sea turtles in Guam's nearshore waters. Sightings include low numbers of turtles observed throughout Apra Harbor (DAWR unpublished data). Grimm and Farley (2008) report that hawksbills are frequently sighted in the nearshore waters surrounding Guam. However, they are less common than green sea turtles. According to Wiles *et al.* (1995), hawksbills represent about 13% of turtles sighted around Guam. Aerial turtle survey information obtained from 1992 to 2009 by DAWR indicated that the nearest record of nesting is at the Sea Plane Ramp located approximately 4,000 feet west of the site, and known nesting by both species occurs at Spanish Steps at the west end of Orote Peninsula (DAWR 2004; Grimm and Farley 2008). Although neither turtle nests at the project site, both inhabit Apra Harbor in low numbers, and as such either species may utilize marine waters in the project area to forage, shelter, or they may swim through the area to reach other nearby habitats.

Proposed Action

The Proposed Action would not be expected to result in significant direct or indirect impacts to federally threatened and endangered species during construction or operation of the proposed Project.

Construction Effects

Based on the planned above- and near-water work, with the absence of any in-water work, the stressors expected by the proposed action on in-water sea turtles is limited to: Disturbance from human activity and equipment operation, and exposure to wastes and discharges.

Disturbance from human activity and equipment operation: Sea turtles that are exposed to project-related activity may experience a startle reaction. The reaction could range from one extreme where an animal calmly approaches and investigates the activity, to an opposite reaction of panicked flight, where an animal injures itself in an attempt to flee. However, sea turtles typically avoid human activity in Apra Harbor. Thus, the most likely effect of this interaction would be a moderate to high energy avoidance behavior leading to the animal rapidly leaving project areas without injury. The project best management practices (BMP) require contractors to reduce the likelihood of this interaction by watching for and avoiding sea turtles. Based on that expectation, we have determined that disturbances related to the proposed action would be infrequent and non-injurious, resulting in insignificant effects on the ESA-listed sea turtles.

Exposure to wastes and discharges: Construction wastes may include plastic trash and bags that may be ingested and cause digestive blockage or suffocation, or if large enough, along with discarded sections of ropes and lines, may entangle marine life. Equipment spills and discharges likely consist of hydrocarbon-based chemicals such fuel oils, gasoline, lubricants, hydraulic

fluids and other toxicants, which could expose protected species to toxic chemicals. Depending on the chemicals and their concentration, exposure could result in a range of effects, from avoidance of an area to death. Local and Federal regulations prohibit the intentional discharge of toxic wastes and plastics into the marine environment. Additionally, the project BMPs includes measures intended to prevent the introduction of wastes and toxicants into the marine environment. Based on this, we expect that discharges and spills are unlikely to occur, but will be infrequent, small, and quickly cleaned if they do occur. Therefore, we have determined that exposure to construction wastes and discharges that may result from this action will result in insignificant effects on ESA-listed sea turtles.

Operational Effects

Significant impacts to federally threatened and endangered species would not be expected during operation of the Project, as none of these species are expected to seasonally or permanently inhabit the site.

With operation of the Port facilities under the Proposed Action, there would be a long-term increase in activity levels (related to increases in vessel and vehicular traffic), noise, and light at the Port relative to existing conditions. The increase in activity levels, noise, and light could impact federally threatened and endangered species (if any) on and in the vicinity of the site. However, the site currently is an active commercial port and activity levels, noise, and light onsite are already relatively high. Therefore, the incremental increase in these levels with the Proposed Action would not be expected to result in significant impacts on federally threatened and endangered species.

Mitigation Measures

The following mitigation measures are proposed by the Proponent to address potential impacts to federally threatened and endangered species during construction of the Proposed Action:

<u>During Construction</u>

- The site would be surveyed for Marianas common moorhen prior to vegetation clearing associated with construction of the storm water outfalls, to determine the status of Marianas common moorhen. If nests are located, clearing would not be completed until birds and nestlings leave on their own volition.
- Engineering controls (i.e. light focusing reflectors, deflective shrouds, and fence screens) would be installed to minimize stray light from construction activities from reaching adjacent habitat areas.

In conclusion, based on the effects analyses provided above, the MARAD has concluded that the potential stressors posed by the proposed action would result in insignificant impacts, or the likelihood of impacts would be discountable, for ESA-listed sea turtles. As such, MARAD has determined that the proposed action may affect, but is not likely to adversely affect any ESA listed marine species under NMFS jurisdiction, and we request your written concurrence with that determination under Section 7 of the ESA.

Thank you for your consideration of this request. If you have any questions, please call Mr. Daniel Yuska of my staff at 202-366-0714.

Sincerely,

for Michael C. Carter
Director, Office of Environment

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Pacific Islands Regional Office
1601 Kapiolani Blvd., Suite 1110
Honolulu, Hawaii 96814-4700
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SEP 1 2 2012

Mr. Michael C. Carter
Director, Office of Environment
U.S. Department of Transportation
Maritime Administration
1200 New Jersey Avenue, S.E.
Washinton, D. C. 20590

Dear Mr. Carter:

This letter responds to your August 22, 2012 letter regarding the proposal by the U.S. Department of Transportation, Maritime Administration (MARAD) and the Port Authority of Guam to modernize the commercial port, on the island of Guam. In the letter, MARAD determined that the proposed action is not likely to adversely affect endangered or threatened species under National Marine Fisheries Service (NMFS) jurisdiction, and requested our concurrence under section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. §1531 et seq.), with that determination.

Proposed Action/Action Area: The action is described in your letter with its attachments (MARAD 2012). In summary, the proposed action consists of MARAD funding the Port Authority of Guam to perform above water work to modernize, improve, and reconfigure the existing 52-acre Terminal Yard and to develop a new 19-acre Expansion Area with new cargo storage facilities. The only project component with direct impacts on the marine environment would be the replacement of the single existing storm water outfall, and the installation of two new additional storm water outfalls. All three outfalls would be equipped with oil-water separators. The outfalls would require permitting under the U. S. Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES). All work would occur above water, and the project includes comprehensive BMP that include requirements to minimize and control erosion, sedimentation, and discharges. The action area for this project is estimated to be the in-water area within 50-yards around project-related activities, and the in-water extent of any plumes that may result from mobilized sediments or discharges of wastes or toxic chemicals such as fuels and/or lubricants associated with the machinery used for this activity.

Listed Species/Critical Habitat: MARAD determined that green sea turtles (*Chelonia mydas*) and hawksbill sea turtles (*Eretmochelys imbricata*) are the only ESA-listed species under NMFS

jurisdiction that occur within the action area for the proposed action. Detailed information to describe the biology, habitat, and conservation status for sea turtles can be found in the recovery plans and other sources at http://www.nmfs.noaa.gov/pr/species/turtles/.

Critical Habitat: There is no designated critical habitat for any listed marine species within or adjacent to the action area. Therefore, this action would have no effect on designated critical habitat.

Analysis of Effects: In order to determine that a proposed action is not likely to adversely affect listed species, NMFS must find that the effects of the proposed action are expected to be insignificant, discountable, or beneficial as defined in the joint USFWS-NMFS Endangered Species Consultation Handbook: (1) insignificant effects relate to the size of the impact and should never reach the scale where take occurs; (2) discountable effects are those that are extremely unlikely to occur; and (3) beneficial effects are positive effects without any adverse effects (USFWS & NMFS 1998). This standard, as well as consideration of the probable duration, frequency, and severity of potential interactions, was applied during the analysis of effects of the proposed action on ESA-listed marine species, as is described in the MARAD consultation request. MARAD determined that disturbance from human activity and equipment operation and exposure to wastes and discharges would result in insignificant effects on ESA-listed sea turtles. Based on consideration of the record, NMFS agrees with MARAD that the proposed action would have insignificant impacts on the sea turtles considered in this consultation.

Conclusion: NMFS concurs with your determination that funding the Port Authority of Guam to perform the proposed Port Modernization Project at the Guam Commercial Port is not likely to adversely affect ESA-listed marine species or their designated critical habitat. Our concurrence is based on the finding that the effects of the proposed action are expected to be insignificant, discountable, or beneficial as defined in the joint USFWS-NMFS Endangered Species Consultation Handbook (USFWS-NMFS 1998) and summarized at the beginning of the Analysis of Effects section above. This concludes your consultation responsibilities under the ESA for species under NMFS's jurisdiction. However, this consultation focused solely on compliance with the ESA. Any additional compliance review that may be required of NMFS for this action (such as assessing impacts on Essential Fish Habitat) would be completed by NMFS Habitat Conservation Division in separate communication, if applicable.

ESA Consultation must be reinitiated if: 1) a take occurs; 2) new information reveals effects of the action that may affect listed species or designated critical habitat in a manner or to an extent not previously considered; 3) the identified action is subsequently modified in a manner causing effects to listed species or designated critical habitat not previously considered; or 4) a new species is listed or critical habitat designated that may be affected by the identified action.

If you have further questions please contact Donald Hubner on my staff at (808) 944-2233. Thank you for working with NMFS to protect our nation's living marine resources.

Sincerely,

Michael D. Tosatto
Regional Administrator

cc: Patrice Ashfield, ESA Section 7 Program Coordinator, USFWS, Honolulu
Tony Montgomery, Coastal Conservation, USFWS, Honolulu

NMFS File No. (PCTS): I/PIR/2012/03725
PIRO Reference No.: I-PI-12-1026-LVA

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U.S. Fish and Wildlife Service and National Marine Fisheries Service. 1998. Endangered Species Consultation Handbook. Procedures for Conducting Consultation and Conference Activities Under Section 7 of the Endangered Species Act.
http://www.nmfs.noaa.gov/pr/pdfs/laws/esa_section7_handbook.pdf

U.S. Department
of Transportation
**MARITIME
ADMINISTRATION**

1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

Dan Polhemus
Administrator
U.S. Fish and Wildlife Service
Pacific Islands Ecoregion
300 Ala Moana Boulevard
Room 3-122, Box 50088
Honolulu, HI 96850

August 22, 2012

SUBJECT: Port Authority of Guam Port Modernization Project Federal Threatened and Endangered Species Determination

Mr. Polhemus:

The United States Department of Transportation, Maritime Administration (MARAD) is in the process of preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; Council on Environmental Quality Regulations (40 Code of Federal Regulations [CFR] 1500–1508); DOT Order 5610.1c; and MARAD MAO 600-1 to identify and assess the potential impacts associated with the proposed Port Authority of Guam Port Modernization Project (Project). MARAD seeks United States Fish and Wildlife Service (USFWS) concurrence with the determination that although Federal Threatened and Endangered Species may be affected by the subject action, it is not likely to be adversely affected.

The proposed action for the Project is to modernize, improve, and reconfigure the Port's existing 52-acre Terminal Yard and develop a 19-acre Expansion Area immediately east of the Terminal Yard with new cargo storage facilities in order to increase cargo-handling capacity and operating efficiency (Attachment 1, Figures 1-1, 1-2). The overall purpose of the Project is to update facilities and reconfigure operations in order to create sufficient capacity to support projected cargo handling demand, while maintaining ongoing Port operations.

Based on the agencies' responses to the letters of inquiry regarding federally threatened and endangered species, as well as follow-up communication, the federally threatened and endangered species on and in the vicinity of the site are: the green turtle (*Chelonia mydas*) – a

federally threatened species; hawksbill turtle (*Eretmochelys imbricata*) – a federally endangered species; and Marianas common moorhen *(Gallinula chloropus guami)* – a federally endangered species. The anticipated prevalence of these species on and near the site is summarized below.

- *Sea Turtles* (green turtle and hawksbill turtle) – Due to lack of habitat, there is a low likelihood of either of the sea turtles *(C. mydas* and *E. imbricata)* nesting or foraging onsite, particularly in the location of the two new proposed outfalls in the Expansion Area. Aerial turtle survey information obtained from 1992 to 2009 by DAWR indicated that the nearest record of nesting is at the Sea Plane Ramp located approximately 4,000 feet west of the site. Neither turtle species is likely to nest onsite, because of the lack of sandy beaches along the shoreline. No sea turtles were observed in the vicinity of the site during either the June 2010 biological survey or the December 2010 and January 2011 marine surveys for this EA.
- *Marianas common moorhen* – The Marianas common moorhen *(G. chloropus guami)* is unlikely to forage or nest onsite due to the lack of appropriate habitat and protected nesting areas. The Marianas common moorhen was not observed during the June 2010 field survey.

Proposed Action

The Proposed Action would not be expected to result in significant direct or indirect impacts to federally threatened and endangered species during construction or operation of the proposed Project.

Construction Effects

Significant impacts to federally threatened and endangered species (i.e. the hawksbill turtle- *E. imbricata*, green turtle - *C. mydas*, and Marianas common moorhen - *G. chloropus guami)* would not be expected during construction activities for the proposed Project, as there is little likelihood that these species seasonally or permanently inhabit the site.

However, to minimize the potential to impact federally threatened and endangered species (if any), construction activities would be conducted in compliance with Guam EPA (GEPA) and DAWR requirements to minimize potential disturbance from construction during bird migration periods, and direct impacts (i.e. for installation of the proposed storm water outfalls) would be avoided during active bird nesting. Engineering controls would be installed to minimize stray construction lighting from reaching adjacent habitat areas. Therefore, construction activities would not be expected to result in significant adverse effects on federally threatened and endangered species.

Operational Effects

Significant impacts to federally threatened and endangered species would not be expected during operation of the Project, as none of these species are expected to seasonally or permanently inhabit the site.

With operation of the Port facilities under the Proposed Action, there would be a long-term increase in activity levels (related to increases in vessel and vehicular traffic), noise, and light at the Port relative to existing conditions. The increase in activity levels, noise, and light could impact federally threatened and endangered species (if any) on and in the vicinity of the site.

However, the site currently is an active commercial port and activity levels, noise, and light onsite are already relatively high. Therefore, the incremental increase in these levels with the Proposed Action would not be expected to result in significant impacts on federally threatened and endangered species.

Mitigation Measures

The following mitigation measures are proposed by the Proponent to address potential impacts to federally threatened and endangered species during construction of the Proposed Action:

<u>During Construction</u>

- The site would be surveyed for Marianas common moorhen prior to vegetation clearing associated with construction of the storm water outfalls, to determine the status of Marianas common moorhen. If nests are located, clearing would not be completed until birds and nestlings leave on their own volition.
- Engineering controls (i.e. light focusing reflectors, deflective shrouds, and fence screens) would be installed to minimize stray light from construction activities from reaching adjacent habitat areas.

In conclusion, The Maritime Administration has determined that while the Proposed Action may temporarily affect Federal Threatened and Endangered Species, the effects would not result in significant impacts. MARAD seeks USFWS written concurrence with this determination.

Thank you for your consideration of this request. If you have any questions, please call Mr. Daniel Yuska of my staff at 202-366-0714.

Sincerely,

for Michael C. Carter
Director, Office of Environment

Savercool, Dan

To: PAG EA Admin Record
Subject: FW: 2012-I-0422 Port of Guam Modernization Project Section 7 Consultation

From: Jodi_Charrier@fws.gov [mailto:Jodi_Charrier@fws.gov]
Sent: Friday, September 14, 2012 6:01 PM
To: Yuska, Daniel (MARAD)
Subject: RE: 2012-I-0422 Port of Guam Modernization Project Section 7 Consultation

Hello Daniel,

Thank you for providing the survey.

We can agree to the modification of #2. Although the area is highly industrialized, we like to recommend adding as little to current ambient light as possible. Also, though no turtles nest in the immediate vicinity, they are definitely found in waters nearby and the brighter our shores and night-time horizons, the more potential for disorientation. It is my understanding that shielding lights or installing shielded lights is not cost prohibitive when compared to standard lighting. However, I will not slow down the consultation process for this detail.

I will edit the measure and draft the letter today. You should receive it within 30 days. No additional or official correspondence is needed.

Aloha,
Jodi Charrier
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Fish & Wildlife Biologist
Pacific Islands Fish and Wildlife Service
300 Ala Moana Boulevard
Room 3-122, Box 50088
Honolulu, Hawaii 96850-5000
Ph: 808-792-9400
Fax: 808-792-9580

<Daniel.Yuska@dot.gov>

09/14/2012 08:39 AM

To <Jodi_Charrier@fws.gov>
cc <tino_aguon@hotmail.com>, <jeff.quitugua@yahoo.com>, <dsavercool@eaest.com>
Subject RE: 2012-I-0422 Port of Guam Modernization Project Section 7 Consultation

Jodi,

Thank you for the email. We can agree and comply with the conditions below, however we would like to propose one modification. Regarding condition #2, sea turtle-friendly lighting, we propose that we use engineering controls (i.e. light focusing reflectors, deflective shrouds, or fence screens) to minimize stray light from construction activities that may reach adjacent habitat areas. Our reasoning is that results from biological surveys conducted as part of this project show there are no beaches in the project area, no turtle nesting areas, and no foraging habitat. Essentially, the area is highly industrialized and has served as an active port for over 60 years. Please let me know if our proposal is acceptable.

As a matter of procedure, would you prefer we edit our initial consultation letter to reflect the conditions and re-submit or will an email confirmation suffice?
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

As discussed yesterday, I have attached the biological survey of the project site and surrounding area. Please let me know if there is anything else you need. Because of our time difference, feel free to reach me on work cell at 202-281-5474. I have cc'ed our environmental consultant on this email so we can get you any additional information expeditiously.

Thanks for your assistance,
Dan

From: Jodi_Charrier@fws.gov [Jodi_Charrier@fws.gov]
Sent: Thursday, September 13, 2012 4:26 PM
To: Yuska, Daniel (MARAD)
Cc: tino_aguon@hotmail.com; jeff.quitugua@yahoo.com
Subject: 2012-I-0422 Port of Guam Modernization Project Section 7 Consultation

Aloha Mr. Yuska,

Nice to finally catch up with you via phone this morning. As mentioned, we received your request for concurrence with your NLAA determination for the Port of Guam Modernization Project in our office on August 27. As mentioned this morning, we have 30 days from the day that we receive all of the data necessary to complete our analysis to complete the consultation. I will do my best to expedite.

The following are our standard recommendations to avoid and minimize impacts to sea turtles and Mariana moorhen. If it is amenable with your agency to include these as nondiscretionary conservation measures in your Section 7 consultation, we can send a concurrence letter and finish the Section 7 process.

1. Pre-construction surveys will be completed one week prior to the onset of work by a biologist experienced in the identification of the moorhen by sight and vocalization and experienced with implementation of the Service protocol survey methodology to ensure no nesting moorhen are present. If nesting moorhen are present within 984 ft (300 m), clearing and construction will be postponed until chicks have fledged and the moorhen has left voluntarily. If work stops for more than one week, pre-construction surveys will be repeated to ensure that no moorhen have begun nesting. Guam Division of Aquatic and Wildlife Resources (DAWR) personnel will be contacted at 671 735-3955 if moorhen are detected at any time prior to or during construction.

2. Sea turtle-friendly lighting will be installed for any replaced or proposed lighting. This will reduce the direct and ambient lighting of the beach and will reduce disorientation of nesting or hatchling sea turtles. This lighting will follow guidelines found in the technical report by The Florida Fish and Wildlife Conservation Commission found on-line here:
http://www.sescolighting.com/turtlelighting/Sea%20Turtle%20Booklet.pdf

3. Any construction-related debris that may pose an entanglement hazard to marine protected species must be removed from the project site when it is not actively being used and at the conclusion of the construction work.

4. NMFS's standard best management practices regarding sediment control, pollution and erosion will be followed.

5. All best management practices and conservation measures will be reviewed with all workers and made available on the project site. This includes species and habitat specific measures, the erosion control plan, spill prevention and control plan and the Hazard Analysis and Critical Control Points plan.

6. A litter control program shall be instituted at the entire project site. All workers ensure their food scraps, paper wrappers, food containers, cans, bottles, and other trash from the project area are deposited in covered or closed trash containers. The trash containers shall be removed from the project area at the end of each working

day.

Thank you,
Jodi Charrier
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Fish & Wildlife Biologist
Pacific Islands Fish and Wildlife Service
300 Ala Moana Boulevard
Room 3-122, Box 50088
Honolulu, Hawaii 96850-5000
Ph: 808-792-9432
Fax: 808-792-9580
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United States Department of the Interior

FISH AND WILDLIFE SERVICE

Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

JUN 13 2013

In Reply Refer To:
2012-I-0422

Mr. Michael C. Carter
U.S. Department of Transportation
Maritime Administration
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

Subject: Informal Section 7 Consultation on the Proposed Guam Port Modernization Project, Guam

Dear Mr. Carter:

We received your letter dated August 22, 2012, requesting our concurrence with your determination that the proposed Guam Port Modernization Project may affect, but is not likely to adversely affect the federally endangered Mariana common moorhen (*Gallinula chloropus guami*; moorhen) and hawksbill turtle (*Eretmochelys imbricata*), and the threatened green turtle (*Chelonia mydas*). This letter also addresses biosecurity concerns regarding the brown treesnake (*Boiga irregularis*). In early October 2012, Service staff notified MARAD that a brown treesnake biosecurity plan needed to be developed, approved and incorporated into the project description as part of the section 7 consultation. Since that time, MARAD has worked with the Service (both invasive species and section 7 staff), Port of Guam Authority (PAG), and the U.S. Department of Agriculture Animal and Plant Inspection Service, Wildlife Services (USDA) to develop a sound brown treesnake biosecurity plan. MARAD submitted a draft version of the plan in early December, 2012. The final version was accepted in May, 2012

The findings and recommendations in this consultation are based on: (1) your August, 22 2012, consultation request; (2) a meeting held in our office on June 4, 2012, (3) phone call and email exchanges between Jodi Charrier, Dawn Greenlee, Kevin Foster, Domingo Cravalho, and Earl Campbell, (U.S. Fish and Wildlife Service (Service)) and Daniel Yuska (The United States Department of Transportation, Maritime Administration (MARAD)) and other information available to us. A complete administrative record is on file in our office. This response is in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*).

Project Description
MARAD is proposing to reconfigure and expand the Jose D. Leon Guerrero Commercial Cargo Port (Port) at Piti, Guam. The Port is planning to update facilities and reconfigure operations to support projected increased cargo handling demand and to maintain ongoing Port operations. Expansion of the existing 52-acre terminal will include the development of a 19-acre area immediately east of the terminal yard. Elements of the Guam Port Modernization Project include construction of a new break-bulk terminal area and new entrance and exit gates, demolition and refurbishment of buildings, and installation of oil and water separators in the eight existing storm water outfalls, and construction of two new outfalls.

Invasive Species
The brown treesnake was accidentally introduced to the island of Guam shortly after World War II. It has colonized the island at densities reaching 32 individuals per acre and is directly responsible for the extinction of 10 of 12 native forest birds historically found on Guam (USDA 2011). The brown treesnake poses a risk to biodiversity, natural resources, food security, economic development, human health, and ecosystem services on Guam as well as other Pacific islands. The cryptic nature and extreme abundance on Guam creates a significant risk of dispersal via civilian and Department of Defense (DoD) cargo transferred from the island to other ports.

The increased cargo traffic due to the Guam Port Modernization Project will increase the likelihood that the brown treesnake may be transported from Guam to other locations. The introduction of this highly invasive snake to other islands would be devastating to native fauna, particularly listed species. As part of the proposed action, PAG has committed to developing a HACCP plan, assuring all incoming and outbound cargo is inspected, and securing the funding to do so.

During Construction: A Hazard Analysis and Critical Control Point Plan (HACCP) or similar plan will be created for vegetation removal, construction activities, and increased maritime traffic resulting from the proposed Port Modernization Project. A HACCP plan is a tool designed to prevent the accidental spread of non-native invasive species by eliminating or reducing risk through pathway analysis and critical control point planning. The HACCP plan will incorporate measures to ensure there is no inadvertent transport of invasive species into and out of Guam.

During Port Operation: Most outbound freight arrives at the Port in the form of sealed shipping containers and comes from privately owned freight forwarding companies. Currently, USDA inspects containers at the freight-forwarding company properties. However, there is concern that uninspected containers are transported to the Port and co-mingled with previously inspected containers. PAG will actively work with all cooperating freight forwarding companies in the brown treesnake inspection program to ensure inspections are complete. Prior to entry, all containers arriving to the Port via roads must be cleared at the security gate. Containers without proof of inspection documentation will be refused at the gate and not allowed to enter the Port.

Existing levels of brown treesnake interdiction efforts conducted by USDA will be increased to address increases in commercial cargo exports to U.S. states and territories, and other locations resulting from the Port Modernization Project. PAG, in consultation with the Guam Customs and Quarantine Agency, DAWR, DoD, and other pertinent agencies, agrees to develop a

mechanism to ensure necessary funding is provided for increased brown treesnake interdiction efforts by USDA. The mechanism will be developed no later than 12 months after the start of the Port Modernization Project. The amount of funding necessary will be determined by comparing the amount of commercial cargo handled by the Port over the 60-month period immediately before the Port Modernization Project begins in relation to the current level of interdiction effort required by USDA (number of traps, number of inspections, etc.). This amount will represent the baseline condition for future brown treesnake interdiction efforts to be compared against. If commercial cargo handled by the Port decreases below the baseline level, then additional funding will not be required for that year. PAG will re-evaluate funding needs every 5 years. During this 5-year period, a working group consisting of members from PAG, USDA, the Service, and other Guam agencies, will meet annually to discuss the status of commercial cargo movement and interdiction efforts.

In addition to agreeing to fund that portion of the increase in brown treesnake interdiction measures required due to construction and increased maritime traffic related to the Port Modernization Project, PAG will employ an iterative adaptive management process, consistent with the brown treesnake interdiction commitment made by DoD (Service 2010). The adaptive management process will establish a system of reporting, monitoring, and threshold metrics that can be used to guide the appropriate level of brown treesnake interdiction.

Avoidance and Minimization Measures
The following measures identified in your letter will be implemented at the project site to avoid and minimize effects to the species listed above. These conservation measures are considered part of the project description. Any changes to, modifications of, or failure to implement these conservation measures may result in the need to reinitiate this consultation.

1. Pre-construction surveys will be completed one week prior to the onset of work to ensure no nesting moorhen are present. These surveys will be conducted by a biologist experienced in the identification of the moorhen by sight and vocalizations and experienced with implementation of the Service survey protocol methodology. If nesting moorhen are present within 300 meters (m) (984 feet [ft]) of the project, clearing and construction will be postponed until chicks have fledged and the moorhen have left voluntarily. If work stops for more than one week, surveys will be repeated to ensure no moorhen have initiated nesting. Guam Division of Aquatic and Wildlife Resources (DAWR) personnel will be contacted at (671) 735-3955 if moorhen are detected at any time prior to or during construction.

2. Engineering controls (i.e. light focusing reflectors, deflective shrouds, or fence screens) will be used to minimize stray light from construction activities that may reach adjacent turtle habitat.

3. Construction work will follow the Environmental Protection Plan (EPP) developed for the project and tailored to the specific construction methods. Although no in-water work is involved, the EPP measures will control discharges and manage spills from heavy equipment operating at the site near fresh and marine waters. Containment booms and absorbent pads will be readily available onsite for cleaning up lubricant or petroleum spills. To minimize erosion, sedimentation, and other adverse impacts to aquatic resources and nearby coral reef ecosystems, environmental protection measures will be

installed prior to construction or demolition activities. These will include Standard Best Management Practices (BMPs) as identified in the enclosed list.

4. All tools, gear, and construction scrap generated from this project will be removed upon completion of work to prevent the attraction of invasive pests.

5. No project-related materials will be stockpiled in the intertidal zone, reef flats, or stream channels.

Affected Species

The Mariana Common Moorhen

The Mariana common moorhen occurred historically on the islands of Guam, Tinian, Saipan, and Pagan (Baker 1951; Service 1991; Stinson et al. 1991). Archaeological evidence also indicates they were present on Rota between 1,500 to 2,000 years ago (Butler 1988). The most recent survey information indicates there are approximately 90 moorhen on Guam, 154 on Saipan, 41 on Tinian, and only 2 individuals on Rota (Takano and Haig 2004). Currently, the two main threats to the moorhen are: (1) loss and degradation of wetland habitat, including filling, alteration of hydrology, invasion of habitat by non-native plants, and unrestricted grazing of domestic and feral ungulates; and 2) predation by introduced species (Service 1991; Service 1996).

Moorhen are opportunistic breeders and may be attracted to ephemeral water bodies. The 19-acre expansion area consists of scrub forest and wet areas that may contain suitable habitat for moorhen. No moorhen were detected during a June 2010, survey. Due to the implementation of pre-construction monitoring for moorhen, lack of moorhen presence in recent years, and curtailing project activities if a moorhen is nesting within 300 m (984 ft), we concur the proposed action may affect, but is not likely to adversely affect the moorhen.

Green and Hawkbill Turtles

Green turtle - The biology and ecology of this species is summarized in the *Recovery Plan for U.S. Pacific Populations of the Green Turtle* (*Chelonia mydas*) (NMFS and Service 1998a) and the five-year Status Review (2007a) that indicate nesting may occur on the island of Guam, but not in high numbers. In addition to nesting, green turtles may also use beaches to haul out and bask, although this behavior has never been documented in Guam (Kelly 2009; Wusstig 2009). Nesting activity on Guam occurs throughout the entire year and peaks between April and July (Grimm and Farley 2008).

Hawksbill turtle - The biology and ecology of this species is summarized in the *Recovery Plan for U.S. Pacific Populations of the Hawksbill Turtle* (*Eretmochelys imbricata*) (NMFS and Service 1998b) and five-year Status Review (2007b). Hawksbill turtles are frequently sighted in the near-shore waters surrounding Guam (Grimm and Farley 2008), though the population is thought to be declining, with only 5 to 10 females estimated to nest annually (NMFS and Service 2007b). Hawksbill turtles were reported nesting in June and July at Tarague Beach, Guam; however, this is based on only one year of data (Wusstig, 2008a). Between 1991 and 1994, hawksbill turtles nested in Sumay Marina, Apra Harbor, Guam, in October, December, February, and March (Wusstig, 2008b). In 2008, four nesting attempts at Adotgan Dikiki, Guam were attributed to the hawksbill turtle (Grimm and Farley 2008).

According to aerial surveys conducted by DAWR from 1992 to 2009, the nearest record of nesting turtles is at the Sea Plane Ramp, located approximately 4,000 feet west of the project site. There are no suitable nesting beaches and there have been no reported sea turtle nesting activities in the immediate vicinity of the project. Therefore, we concur with your determination the proposed project may affect, but is not likely to adversely affect green or hawksbill turtles.

Summary

Based on the project description, including the implementation of the conservation measures you provided, we concur with your determination that the project may affect, but is not likely to adversely affect the Mariana moorhen, and hawksbill or green turtles. In addition, your agreement to develop a HACCP Plan and implement increased BTS interdiction adequately addresses our concerns regarding invasive species, and therefore, we conclude your project is not likely to adversely affect other listed species. Unless the project description changes, or new information reveals that the effects of the proposed action may affect listed species in a manner or to an extent not considered, or a new species or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Act is necessary.

If you have any questions or concerns regarding this consultation, please contact Jodi Charrier, Fish and Wildlife Biologist (phone: 808-792-9423, email: jodi_charrier@fws.gov) or regarding invasive species, please contact Domingo Cravalho, Invasive Species Biologist (phone: 808-872-9445, e-mail: domingo_cravalho@fws.gov).

Sincerely,

for Loyal Mehrhoff
Field Supervisor

Enclosure(s): Brown treesnake Control Plan
Standard Best Management Practices

cc
Mr. Daniel Vice, U.S. Department of Agriculture, Guam
Mr. Celestino Aguon, Guam Department of Agriculture

Literature cited

Baker, R.H. 1951. The avifauna of Micronesia, its origin, evolution and distribution. University of Kansas Publications 3:1-359.

Butler, B.M. (ed.). 1988. Archaeological investigations on the north coast of Rota, Mariana Islands. Micronesian Archaeological Survey Report 23:1-482.

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National Marine Fisheries Service and U.S. Fish and Wildlife Service. (NMFS and Service). 1998a. Recovery Plan for U. S. Pacific Populations of the Green Turtle (*Chelonia mydas*). National Marine Fisheries Service, Silver Spring, MD. 97 pp. http://www.nmfs.noaa.gov/pr/pdfs/recover/turtle_green_pacific.pdf

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_____. 2007b. Hawksbill Sea Turtle (*Eretmochelys imbricata*). 5-Year Review: Summary and Evaluation. 93pp. https://www.nmfs.noaa.gov/pr/pdfs/species/hawksbill_5yearreview.pdf

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Takano, L.L. and S.M. Haig. 2004. Distribution and abundance of the Mariana subspecies of the common moorhen. Waterbirds 27(2):245-250.

USDA 2011.Brown Treesnake Containment Plan for Guam.

Wusstig, S. 2009. Electronic mail dated May 6, 2009, through May 13, 2009, regarding nesting and movement of green sea turtles detected on or near Guam.

_____. 2008a. Electronic mail dated March 5, March 18, and March 26, 2008.

_____. 2008b. Electronic mail dated March 27, 2008, providing information regarding sea turtle data for Guam.

U.S. Fish and Wildlife Service
Recommended Standard Best Management Practices

The U.S. Fish and Wildlife Service recommends that the measures below be incorporated into projects to minimize the degradation of water quality and minimize the impacts to fish and wildlife resources.

1. Turbidity and siltation from project-related work shall be minimized and contained within the vicinity of the site through the appropriate use of effective silt containment devices and the curtailment of work during adverse tidal and weather conditions.

2. Dredging/filling in the marine environment shall be scheduled to avoid coral spawning and recruitment periods and sea turtle nesting and hatching periods.

3. Dredging and filling in the marine/aquatic environment shall be designed to avoid or minimize the loss special aquatic site habitat (beaches, coral reefs, wetlands, etc.) and the function of such habitat shall be replaced.

4. All project-related materials and equipment (dredges, barges, backhoes, etc.) to be placed in the water shall be cleaned of pollutants prior to use.

5. No project-related materials (fill, revetment rock, pipe, etc.) should be stockpiled in the water (intertidal zones, reef flats, stream channels, wetlands, etc.) or on beach habitats.

6. All debris removed from the marine/aquatic environment shall be disposed of at an approved upland or ocean dumping site.

7. No contamination (trash or debris disposal, non-native species introductions, attraction of non-native pests, etc.) of adjacent habitats (reef flats, channels, open ocean, stream channels, wetlands, beaches, forests, etc.) shall result from project-related activities. This shall be accomplished by implementing a litter-control plan and developing a Hazard Analysis and Critical Control Point Plan (HACCP – see http://www.haccp-nrm.org/Wizard/default.asp) to prevent attraction and introduction of non-native species.

8. Fueling of project-related vehicles and equipment should take place away from the water and a contingency plan to control petroleum products accidentally spilled during the project shall be developed. Absorbent pads and containment booms shall be stored on-site, if appropriate, to facilitate the clean-up of accidental petroleum releases.

9. Any under-layer fills used in the project shall be protected from erosion with stones (or core-loc units) as soon after placement as practicable.

10. Any soil exposed near water as part of the project shall be protected from erosion (with plastic sheeting, filter fabric etc.) after exposure and stabilized as soon as practicable (with native or non-invasive vegetation matting, hydroseeding, etc.).

F. HISTORIC PROPERTIES DOCUMENTATION

Historic Properties Eligibility Determination

PORT AUTHORITY OF GUAM
ATURIDAT I PUETTON GUAHAN
Jose D. Leon Guerrero Commercial Port
GOVERNMENT OF GUAM
1026 Cabras Highway, Suite 201
Piti, Guam 96925

FELIX P. CAMACHO
Governor of Guam

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Lieutenant Governor

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Webpage: www.portofguam.com

December 15, 2010

Mr. Joe Duenas
State Historic Preservation Office
Guam Historic Resources Division
490 Chalan Palasyo
Agana Heights, Guam 96910

Subject: Port Authority of Guam Terminal Yard Reconfiguration Maintenance and Repair Project Section 106 Concurrence

Happy Holidays Mr. Duenas:

The Port Authority of Guam (PAG) is undertaking the above-referenced project to address much needed improvements to its facilities and is preparing a NEPA Environmental Assessment (EA) to address potential project-related impacts. The Maritime Administration (MARAD) is the lead agency for the NEPA process. As a federal undertaking, the project will comply with Section 106 of the National Historic Preservation Act (NHPA). PAG is considering potential impacts to historic resources (defined as cultural resources deemed eligible for nomination to the National or Guam Register of Historic Places (NRHP/GRHP) which may be affected by the project. Please review this letter and if in concurrence with the determinations provided, sign and date the letter as provided on page 2.

Project Description

This project will reconfigure and expand the Port terminal yard to enhance its cargo handling capacity. To help achieve efficient use of the site, the project will include demolition, expansion or refurbishment of buildings and construction of new buildings; installation of utilities (water, sewer, stormwater and fire protection systems and high-mast lights); and installation of one new 36-inch stormwater outfall and one new 30-inch stormwater outfall into Apra Harbor. Other project elements include paving of currently unpaved portions of the terminal yard; upgrades to existing terminal yard pavement; installation of security infrastructure; new gates and parking areas; and new cargo handling and equipment systems. The proposed terminal plan layout and details of the breakbulk yard and proposed terminal buildings are shown in Figures 1 and 2, respectively.

The terminal yard will be redesigned to accommodate separate break-bulk and container operations and will allow for wheeled and grounded container storage. Gate and Terminal Operating Systems will be installed to control the movement and tracking of increased cargo volumes and will add to overall port operating efficiency. A new break bulk terminal will be constructed on ten acres of the West Terminal Yard, using the Berth F-4 frontage for waterside

access. Most of the demolition, reconfiguration and expansion changes to the buildings will occur on the west side of the site and are adjacent to the expanded break-bulk terminal (see Figure 2).

As shown in Figures 3, 4 and 5, two new stormwater outfalls will originate at the southeastern portion of the site and terminate atop riprap before discharge into Apra Harbor (approximately 100 cubic yards (CY) of rip-rap will be placed at each outfall (for a total of 200 CY) and will cover a total of approximately 1530 square feet (0.035 acres) in regulated wetland areas. The maximum water depth at the location of the rip-rap is approximately 1.5 feet below Mean Higher High Water (MHHW). At low tide, the rip-rap will be aerially exposed.

Approximately 40 acres of unpaved area will be re-graded in constructing the expanded terminal yard areas. Concurrent with this re-grading, several thousand feet of utilities (water, electric, sanitary sewer, storm sewer, communications) infrastructure will be installed. The depth of re-grading will range between 0 feet and 20 feet. Following re-grading, utility trench depths will range from 3 feet to 10 feet. The location and details of the proposed high mast lights are shown in Figures 6 through 9. Footings for the high-mast lights will be installed at a depth of 17 feet.

The Area of Potential Effect
the Area of Potential Effect (APE) for this project is within the proposed construction footprint. This APE accommodates the anticipated proposed staging areas and other temporary impacts necessary during construction.

Historic Properties
Identification of historic properties included consulting a number of sources. These sources include:

- Consultation with the Guam Historic Preservation Office,
- GIS files of historic site locations on Guam,
- *Soil Survey of Territory of Guam* of 1988 by the U.S. Department of Agriculture,
- *Jose D. Leon Guerrero Commercial Port of Guam Master Plan Update 2007 Report,* and
- *Cultural Resources Reconnaissance, Cabras Island, Apra Harbor, Territory of Guam* - April 1977

The Port of Guam was constructed starting in 1966, with a peak of construction activity between 1967 and 1969. The Port started providing service in 1969. As construction is slated to be complete by 2013, a fifty-year period would include properties built before 1963. Buildings constructed after 1963 are considered out of period. Notable, relatively unmodified buildings, such as the Port Administration Building (1967-1968), Control Tower (1968-1969), and the Port Police Station (post-1970) were built after this date. There have been several expansion projects since construction, which have impacted the historic integrity of any resources in the Port. Since Port buildings were constructed in or after 1966, they are considered out-of-period , and not historic properties as defined in 36 CFR 800.

No archaeological sites are documented within the APE for this project. Further, it is unlikely that the APE holds undocumented sites, as most of the area has been subject to recent commercial and military development. Much of the area is underlain with coral and rock at shallow depth, and does not hold potential for significant subsurface deposits.

Findings of Effect
Since there are no known historic properties within the APE, we believe that a finding of No Historic Properties Affected is appropriate, pursuant to 36 CFR 800.4(d)(1). It also is unlikely that any undocumented historic properties will be encountered. If any properties are identified during construction, PAG will consult with the Guam SHPO.

If you have any questions or concerns, please contact me by phone at 671-477-5931 or via email at rjagustin@portguam.com.

Si Yu'os Ma'ase,

ENRIQUE J.S. AGUSTIN
General Manager

I, the undersigned, concur with the APE and findings of effect stated above for the Port Authority of Guam Terminal Yard Reconfiguration Maintenance and Repair Project

Joe Duenas, State Historic Preservation Officer _____ Date

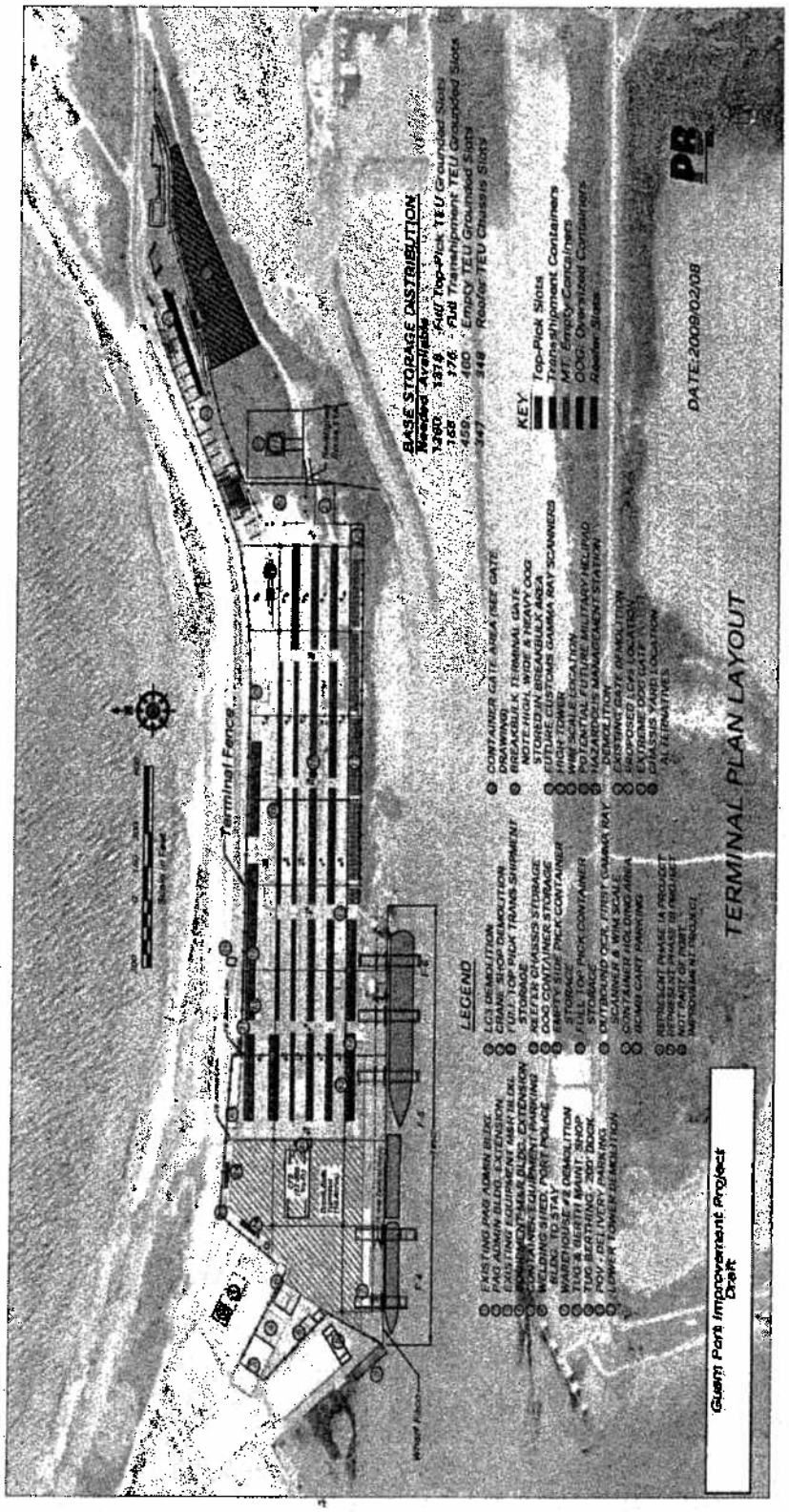


Figure 1. Terminal Plan Layout

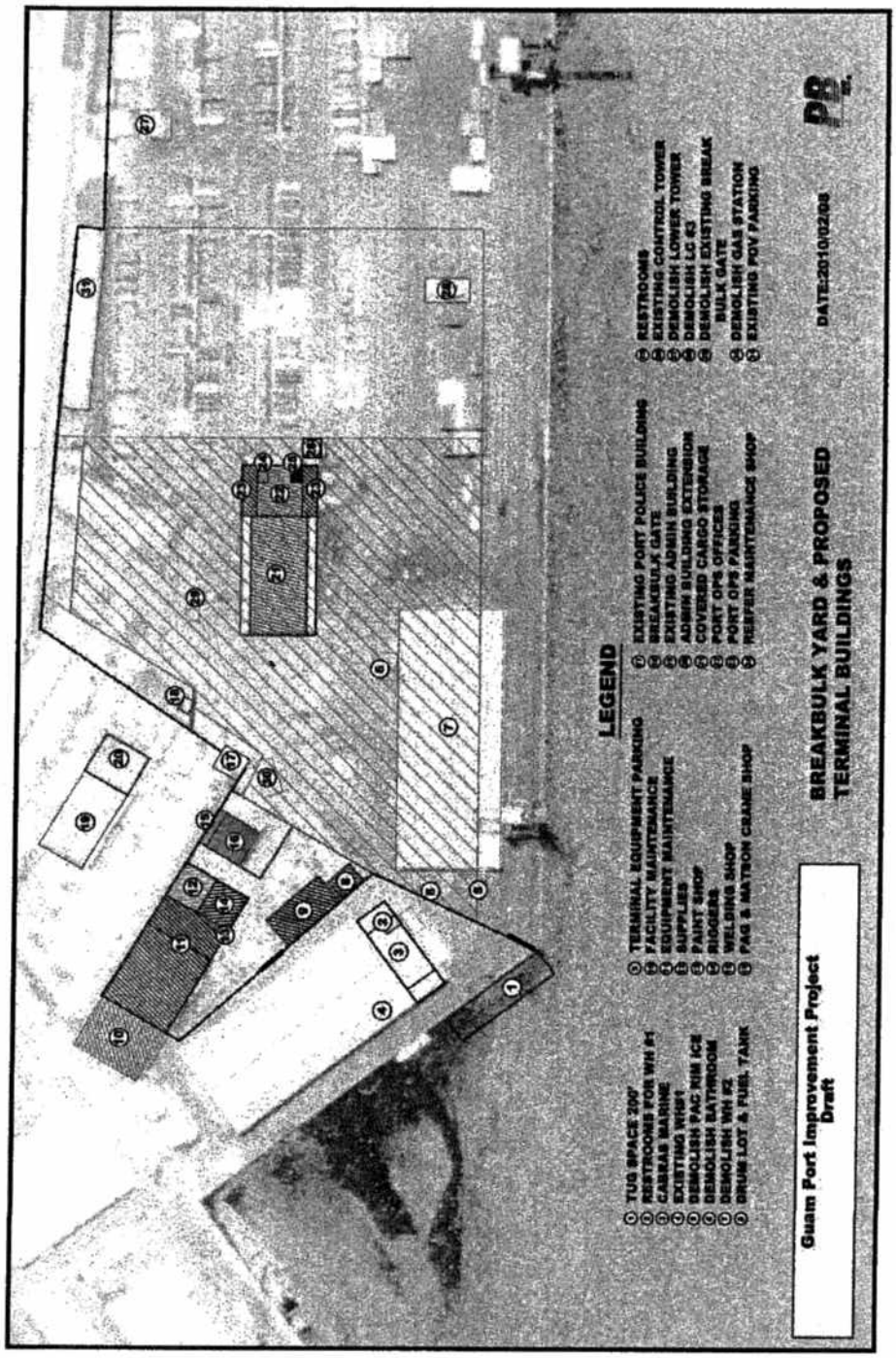


Figure 2. Breakbulk Yard and Proposed Terminal Buildings

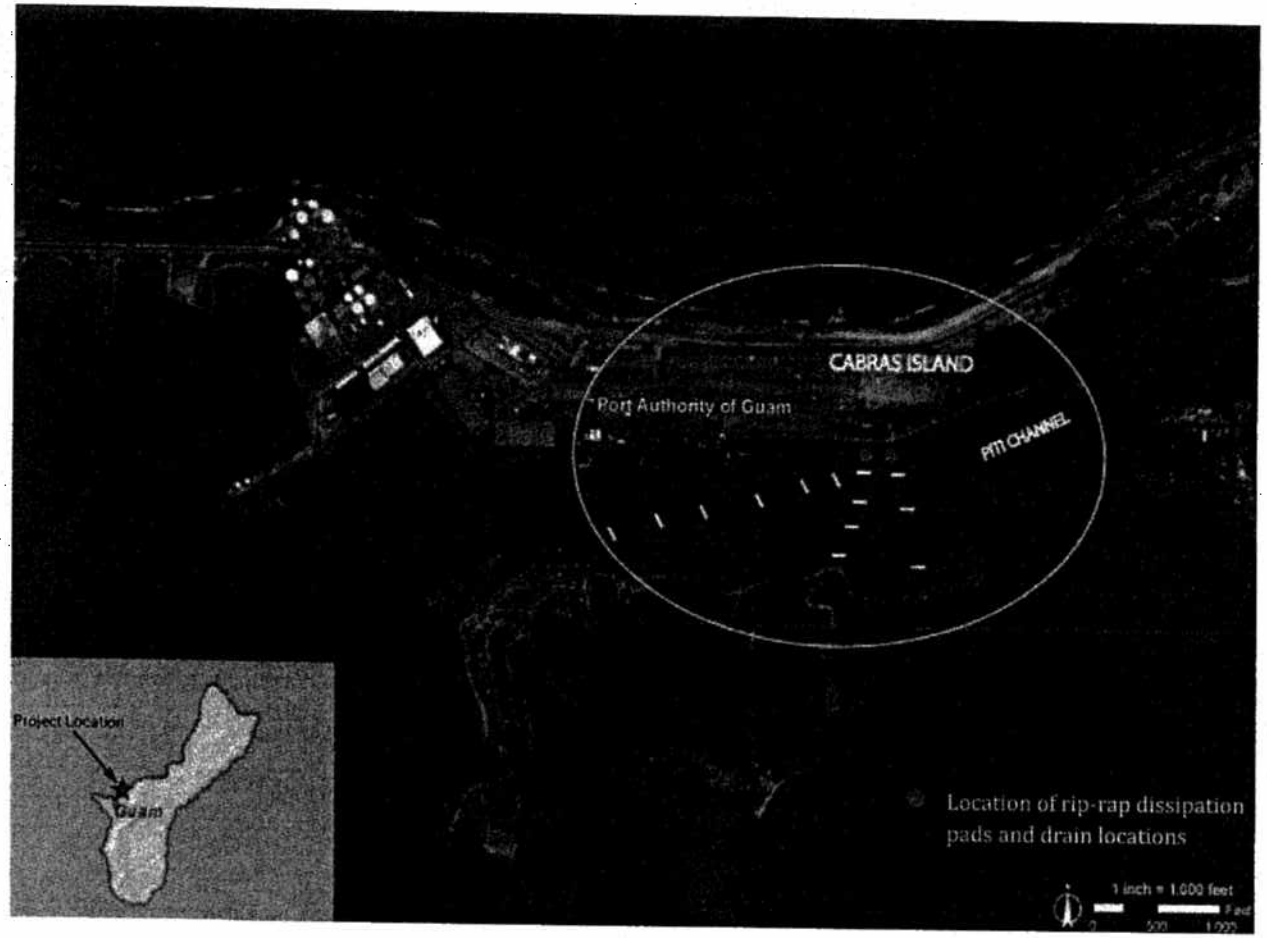


Figure 3. Aerial photograph of Port Authority of Guam with annotated outfall drain locations

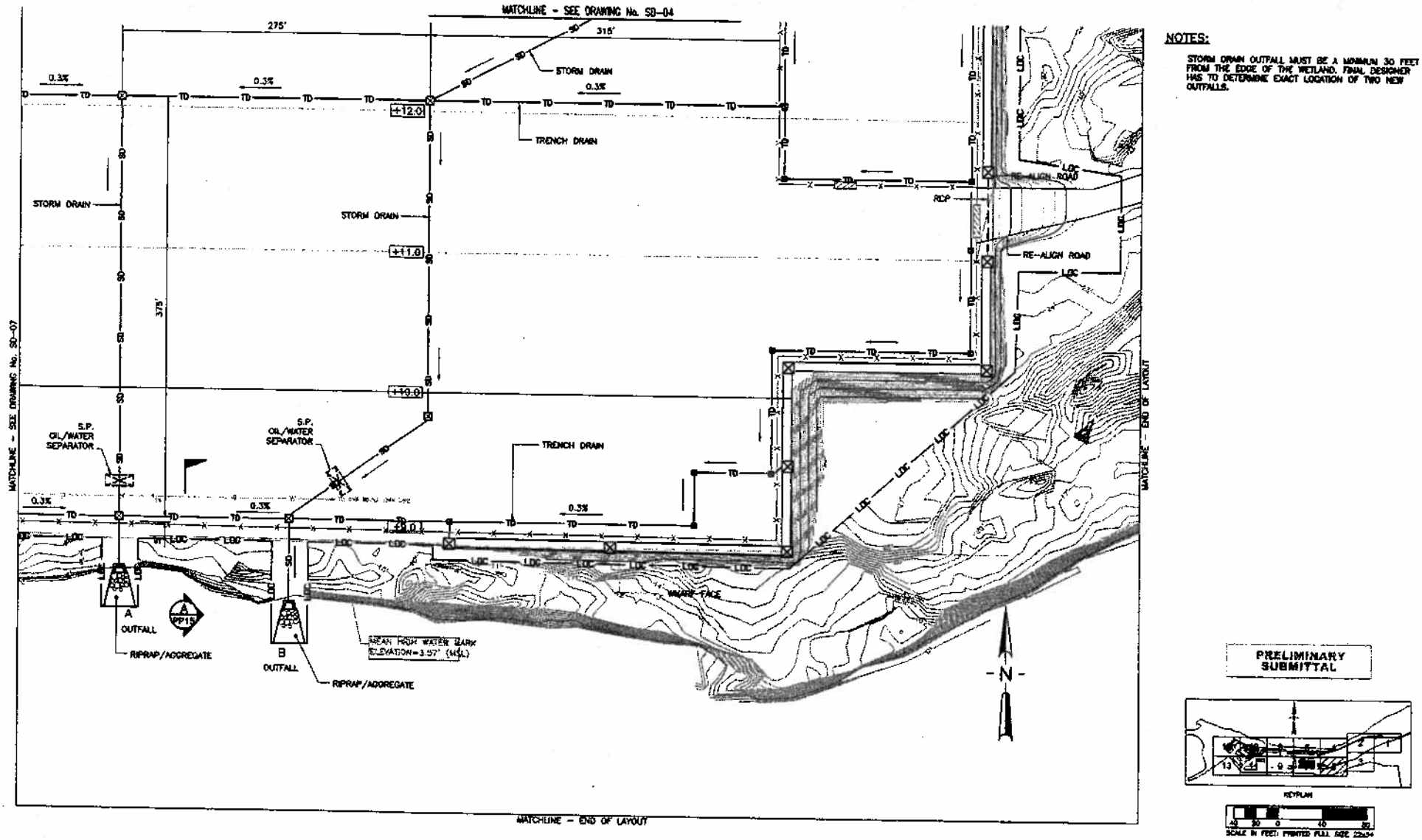
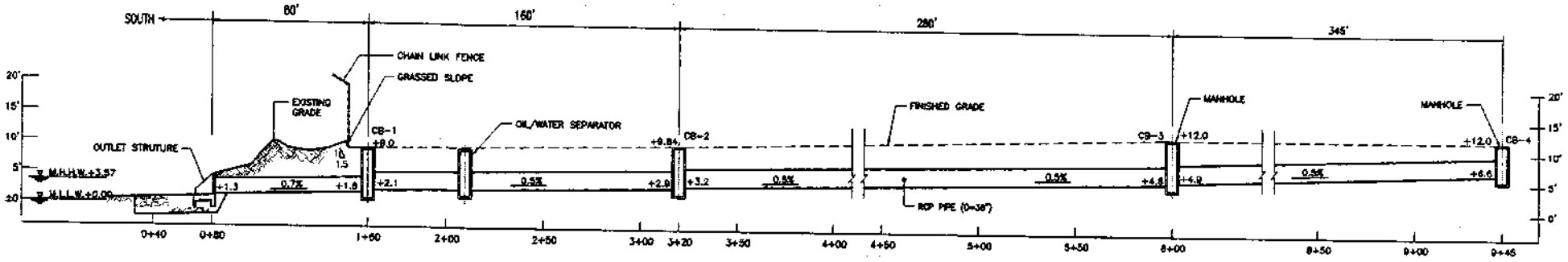
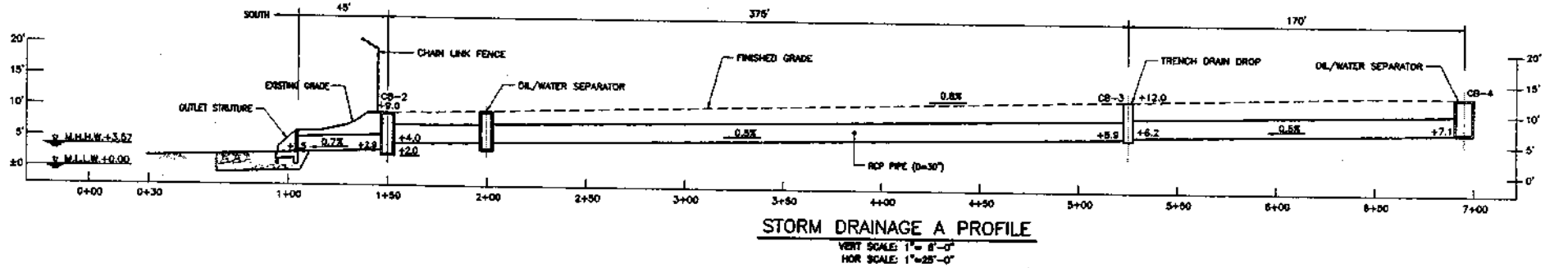


Figure 4. Outfall Location Plan





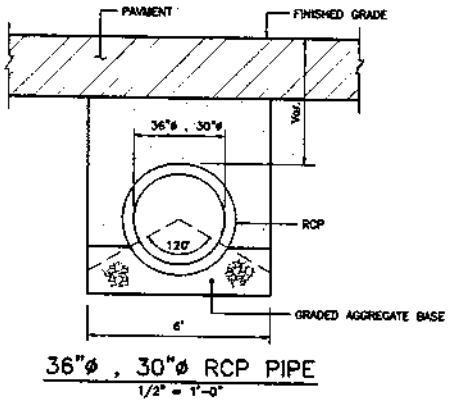


Figure 5. Storm Drain and Outfall Profile

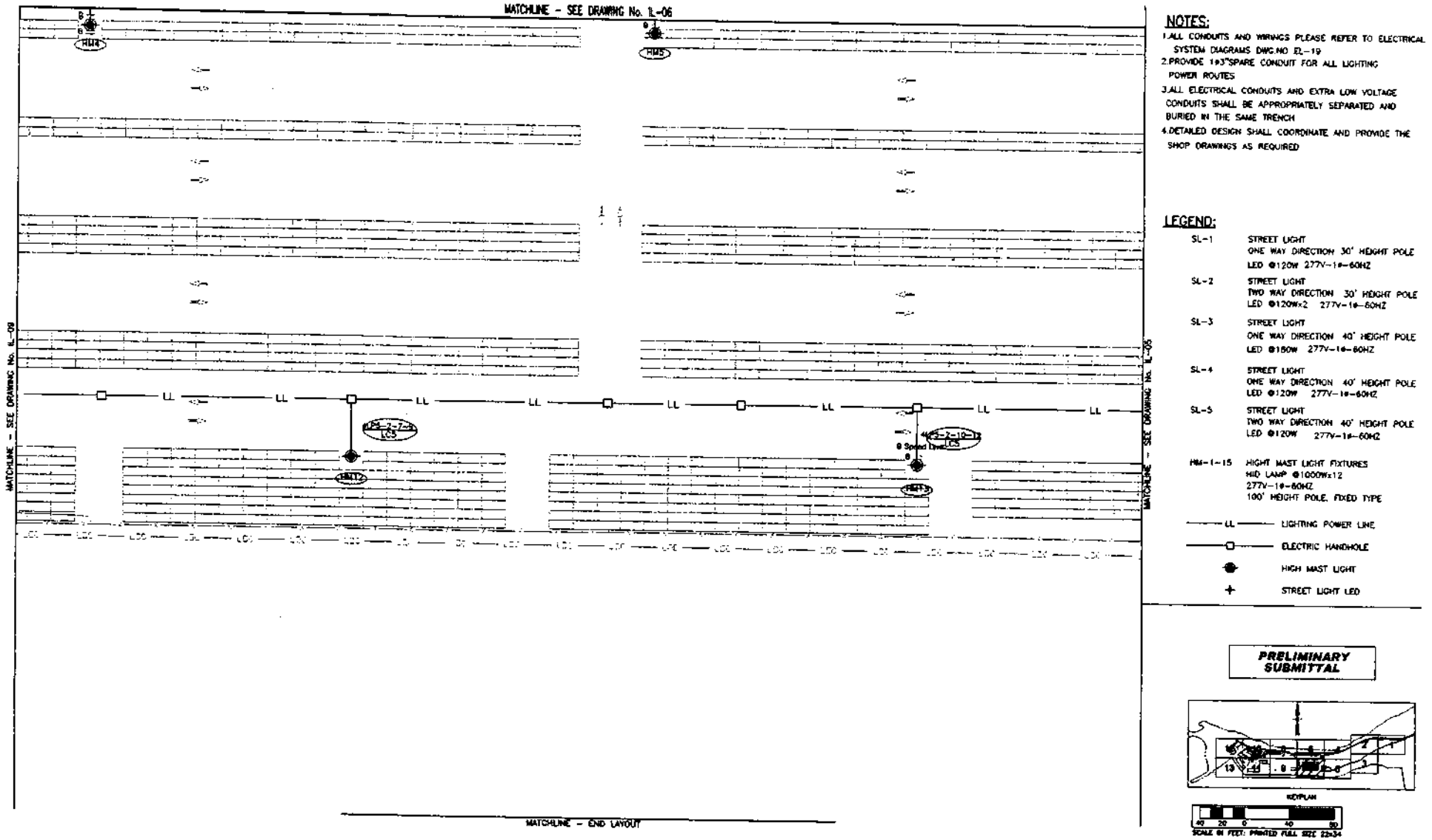
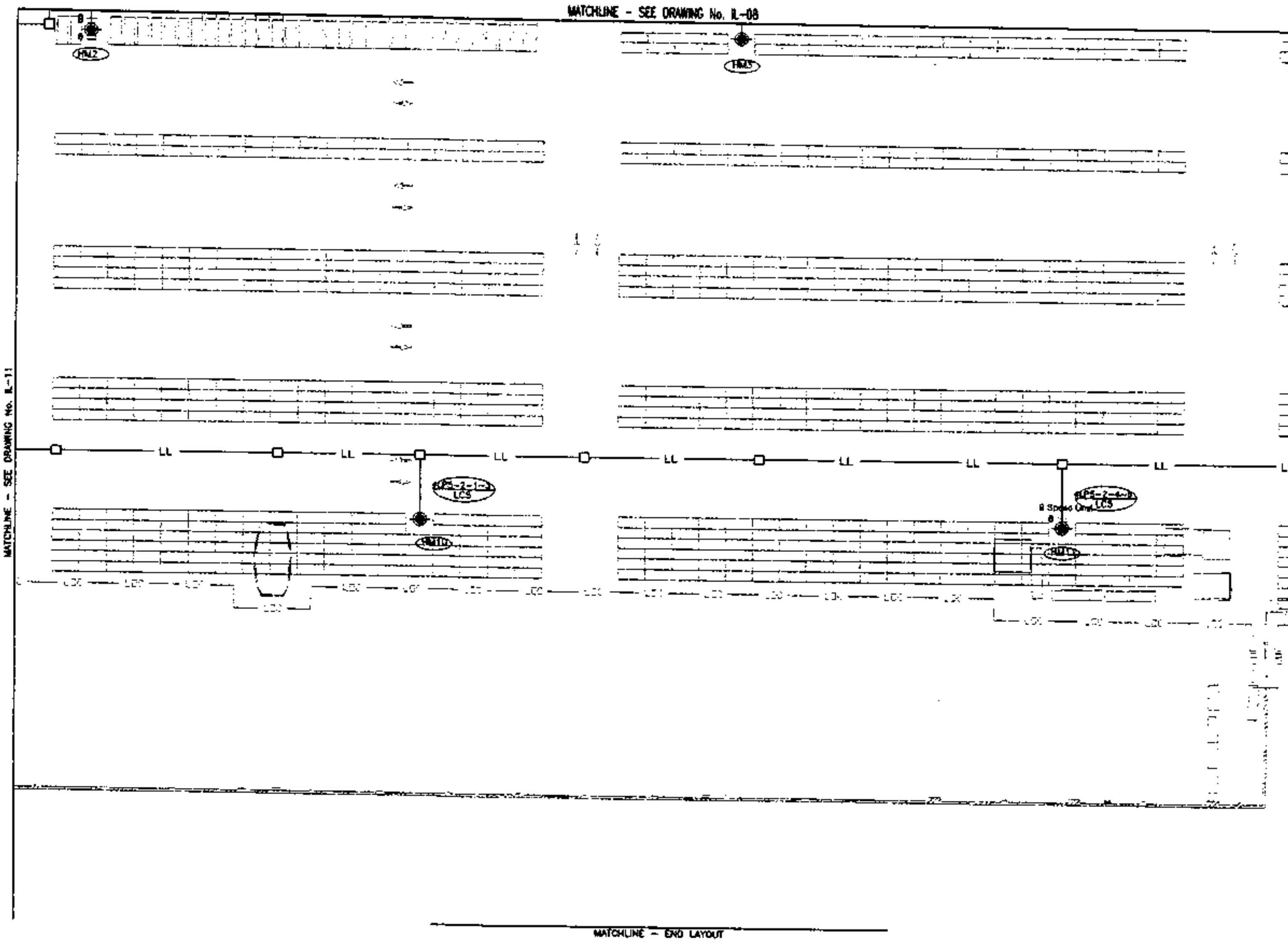


Figure 6. Location of High Mast Lighting



NOTES:

1. ALL CONDUITS AND WIRINGS PLEASE REFER TO ELECTRICAL SYSTEM DIAGRAMS DWG.NO EL-19
2. PROVIDE 1#3"SPARE CONDUIT FOR ALL LIGHTING POWER ROUTES
3. ALL ELECTRICAL CONDUITS AND EXTRA LOW VOLTAGE CONDUITS SHALL BE APPROPRIATELY SEPARATED AND BURIED IN THE SAME TRENCH
4. DETAILED DESIGN SHALL COORDINATE AND PROVIDE THE SHOP DRAWINGS AS REQUIRED

LEGEND:

SL-1	STREET LIGHT ONE WAY DIRECTION 30' HEIGHT POLE LED @120W 277V-1ø-60HZ
SL-2	STREET LIGHT TWO WAY DIRECTION 30' HEIGHT POLE LED @120Wx2 277V-1ø-60HZ
SL-3	STREET LIGHT ONE WAY DIRECTION 40' HEIGHT POLE LED @180W 277V-1ø-60HZ
SL-4	STREET LIGHT ONE WAY DIRECTION 40' HEIGHT POLE LED @120W 277V-1ø-60HZ
SL-5	STREET LIGHT TWO WAY DIRECTION 40' HEIGHT POLE LED @120W 277V-1ø-60HZ
HM-1~15	HIGHT MAST LIGHT FIXTURES HID LAMP @1000Wx12 277V-1ø-60HZ 100' HEIGHT POLE, FIXED TYPE
—— LL ——	LIGHTING POWER LINE
——□——	ELECTRIC HANDHOLE
●	HIGH MAST LIGHT
✦	STREET LIGHT LED

PRELIMINARY SUBMITTAL

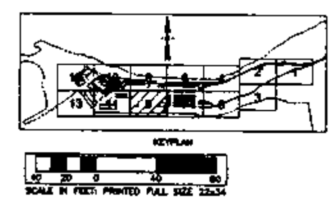


Figure 7 Location of High Mast Lighting

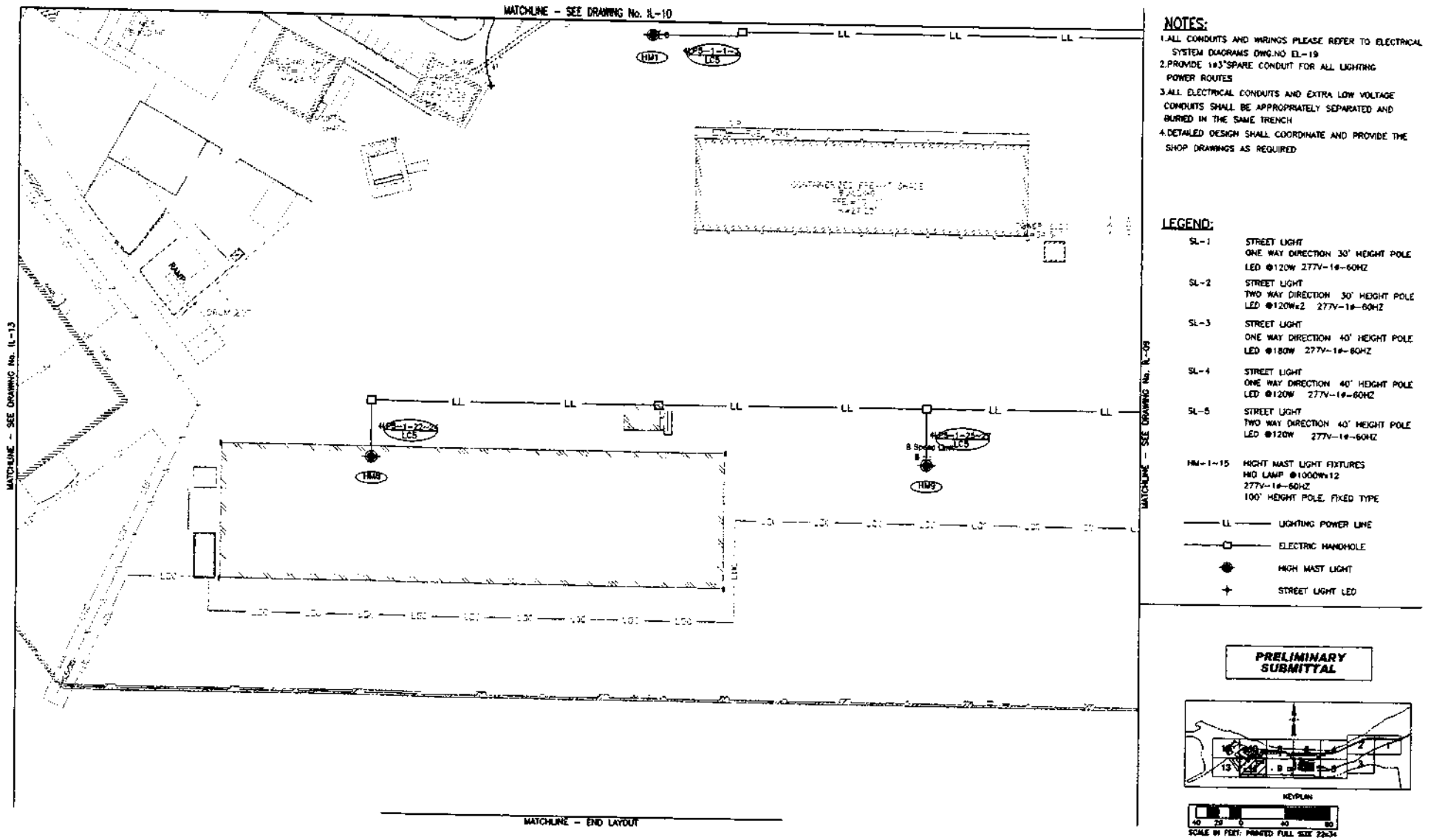
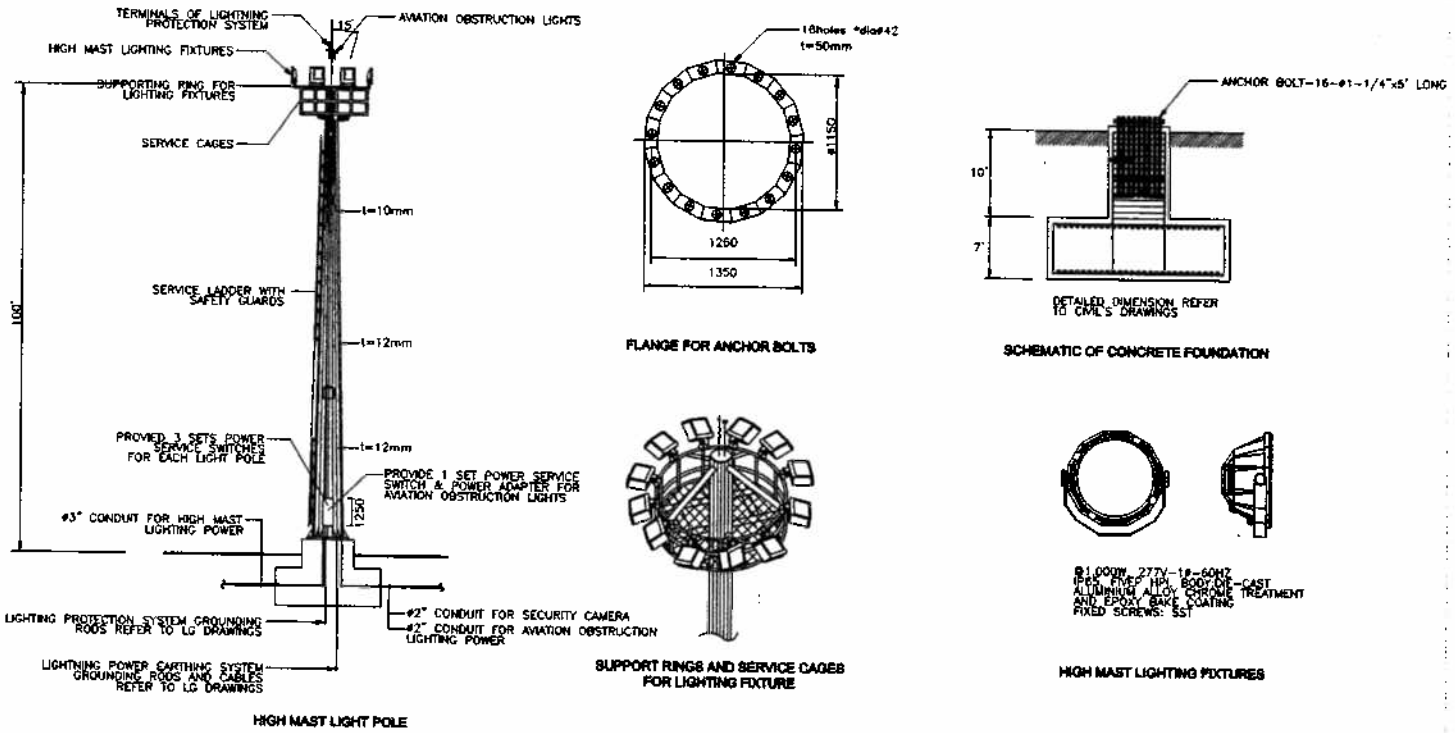


Figure 8. Location of High Mast Lighting



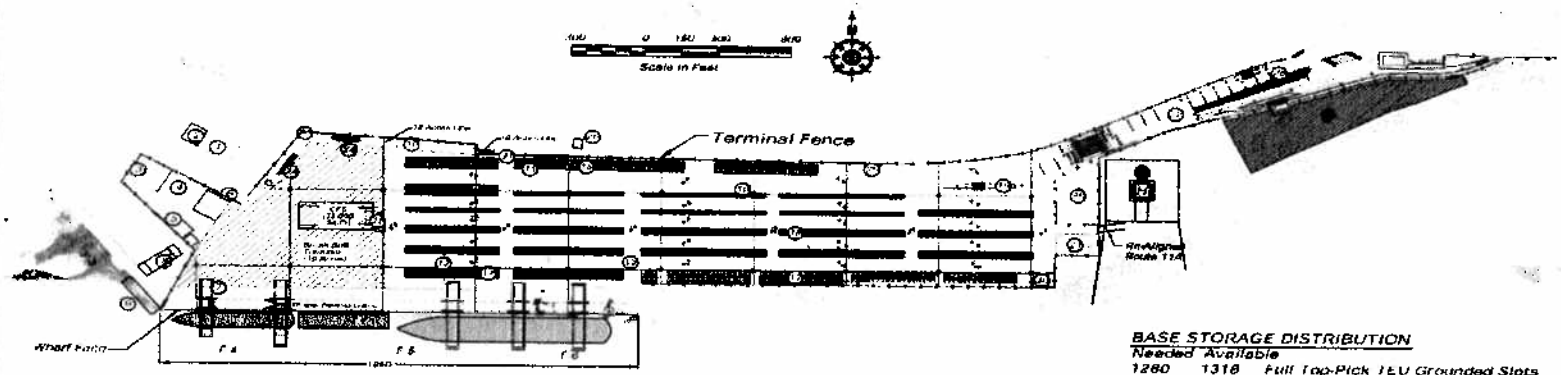
NOTES:

1. HM-1-15 HIGHT MAST LIGHT FIXTURES
   HID LAMP @1000Wx12, 277V-1ø-60HZ
   100' HEIGHT POLE, FIXED TYPE
2. LIGHT POLES SHALL BE CARBON STEEL CONSTRUCTION WITH HOT DIPPED GALVANIZED AND WEATHER SHIELD COATING,RUST-GRIP,FOR CORROSIVE RESISTED
3. ANCHOR BOLTS SHALL BE CARBON STEEL WITH HOT DIPPED GALVANIZED AND WEATHER SHIELD COATING,RUST-GRIP,FOR CORROSIVE RESISTED
4. TERMINALS OF THE LIGHTNING PROTECTION SYSTEM, AVIATION OBSTRUCTION LIGHTS AND CCTV CAMERAS SHALL BE INSTALLED AND MOUNTED AT TOP OF LIGHT POLE. THE DETAILED DESIGN HAVE TO COORDINATE, AS REQUIRED
5. PROVIDE 3 SETS OF LIGHTING POWER SERVICE SWITCHES FOR EACH LIGHT POLE.
6. DURING CONSTRUCTION OF CONCRETE FOUNDATION, THE CONTRACTORS SHALL INSTALL NECESSARY EMBEDDED CONDUITS AND GROUNDING RODS AS REQUIRED BY OTHER SYSTEM
7. PROVIDE 1 SETS POWER SERVICE SWITCH & POWER ADAPTER FOR AVIATION OBSTRUCTION LIGHTS.
8. AVIATION OBSTRUCTION LIGHT:
   *TYPE: LED,RED
   *NO. LEDS: 300 MOS
   *INTENSITY OF EACH LED: 250-300mCD.
   *NO. OF CIRCUITS: 5 IN PARALLEL
   *TOTAL MACP: 80-90 CANDELA
   *TOTAL POWER CONSUMPTION: 15W AT 277V
   *POWER ADAPTER: 277V-1ø-50HZ/24V/48VDC
   *PROTECTION: IP55
   *MATERIAL OF CONSTRUCTION: CAST ALUMINNIUM
   *TRANSPARENT PART: CLEAR GLASS DOME
   *GASKET: NEOPRENE

PRELIMINARY SUBMITTAL

HIGH MAST LIGHT

Figure 9. High Mast Lighting Detail



LEGEND

- EXISTING PAG ADMIN BLDG
- PAG ADMIN BLDG. EXTENSION
- EXISTING EQUIPMENT M&R BLDG.
- EQUIPMENT M&R BLDG. EXTENSION
- CONTAINER EQUIPMENT PARKING
- WELDING SHED, PORT POLICE BLDG. TO STAY
- WAREHOUSE #2 DEMOLITION
- TUG & BERTH MAINT. SHOP
- TUG BERTHING - 200' DOCK
- POV - DELIVERY PARKING
- LOWER TOWER DEMOLITION
- TC3 DEMOLITION
- CRANE SHOP DEMOLITION
- FULL TOP PICK TRANS-SHIPMENT STORAGE
- REEFER CHASSIS STORAGE
- OOG CONTAINER STORAGE
- EMPTY SIDE PICK CONTAINER STORAGE
- FULL TOP PICK CONTAINER STORAGE
- OUTBOUND OCR, FIRST GAMMA RAY SCANNER & WIM SCALE
- CONTAINER HOLDING AREA
- BOMB CART PARKING
- REPRESENT PHASE 1A PROJECT
- REPRESENT PHASE 1B PROJECT
- NOT PART OF PORT IMPROVEMENT PROJECT
- CONTAINER GATE AREA (SEE GATE DRAWING)
- BREAKBULK TERMINAL GATE NOTE: HIGH, WIDE & HEAVY OOG STORED IN BREAKBULK AREA
- FUTURE CUSTOMS GAMMA RAY SCANNERS
- HIGH TOWER
- WIM SCALE LOCATION
- POTENTIAL FUTURE MILITARY HELIPAD
- HAZARDOUS MANAGEMENT STATION DEMOLITION
- EXISTING GATE DEMOLITION
- PROPOSED LOPS LOCATION
- EXTREME OOG GATE
- CHASSIS YARD LOCATION ALTERNATIVES

BASE STORAGE DISTRIBUTION

Needed	Available	
1280	1318	Full Top-Pick TEU Grounded Slots
155	176	Full Transhipment TEU Grounded Slots
459	460	Empty TEU Grounded Slots
347	348	Reefer TEU Chassis Slots

KEY

- Top-Pick Slots
- Transshipment Containers
- MT: Empty Containers
- OOG: Oversized Containers
- Reefer Slots

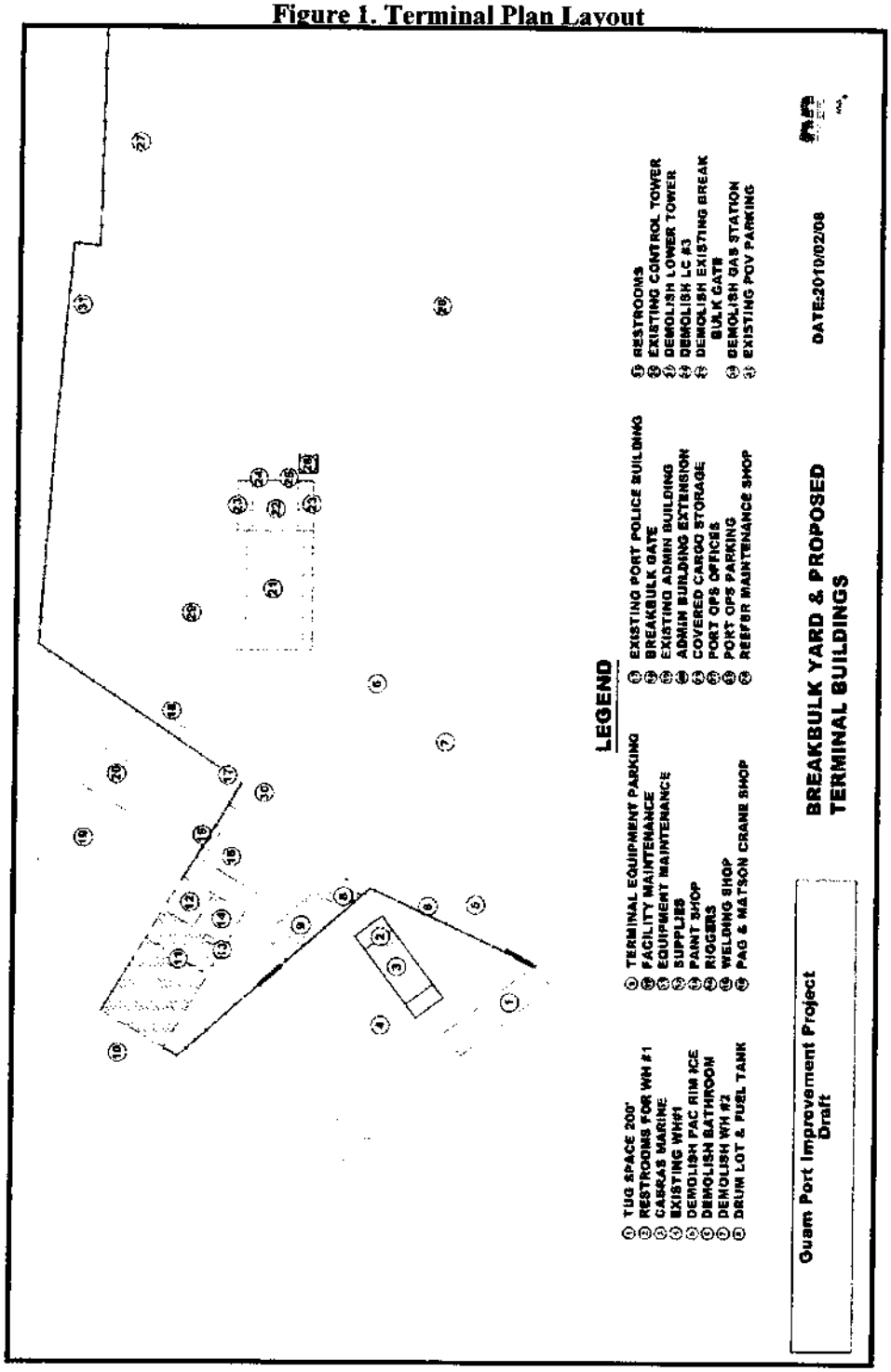
DATE: 2009/02/08

PB

Guam Port Improvement Project
Draft

TERMINAL PLAN LAYOUT

Figure 1. Terminal Plan Layout



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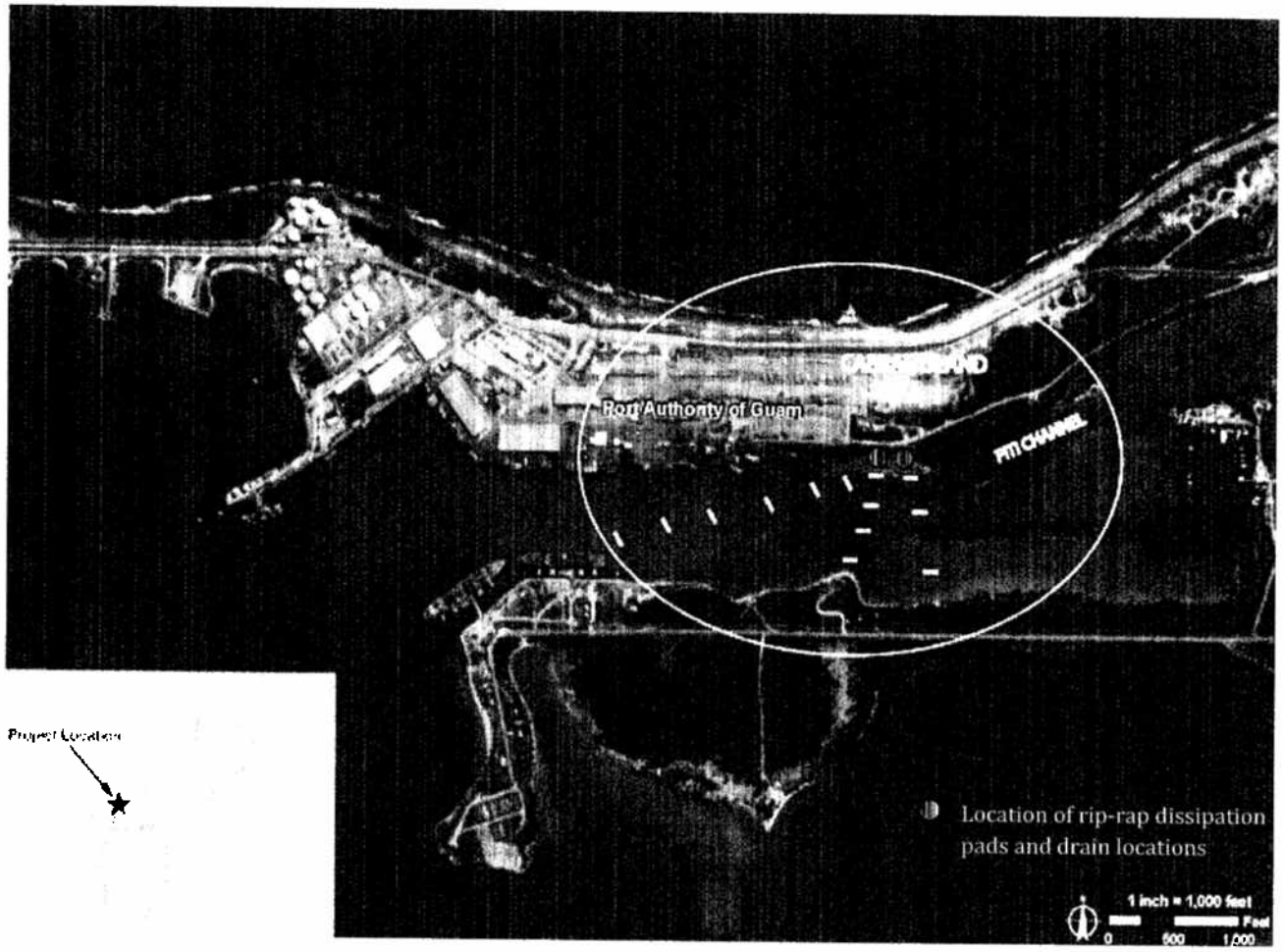

Figure 3. Aerial photograph of Port Authority of Guam with annotated outfall drain locations

Department of Parks and Recreation
Government of Guam
490 Chalan Palasyo
Agana Heights, Guam 96910
Director's Office: (671) 475-6296/7
Facsimile: (671) 477-0997
Parks Division: (671) 475-6288/9
Guam Historic Resources Division: (671) 475-6294/5
Facsimile: (671) 477-2822

Edward J.B. Calvo
Governor

Raymond S. Tenorio
Lt. Governor

Peter S. Calvo
Acting Director

Dot

In reply refer to:
RC09-5225

1/28/11
Port Authority of Guam
General Manager's Office
RECEIVED

January 19, 2011

Mr. Enrique J.S. San Agustin
General Manager
Port Authority of Guam
Jose D. Leon Guerrero Commercial Port
Government of Guam
1026 Cabras Highway, Suite 201
Piti, Guam 96915

Subject: Section 106 Project Review: Port Authority of Guam Terminal Yard Reconfiguration Maintenance and Repair Project, Piti, Guam

We reviewed for the above project and have the following comments:

We concur with your determination of "No Historic Property Affected," however, you will need the services of an archaeologist if there is an inadvertent discovery of historic properties during the project undertaking. Additionally, during the permitting process, we will issue a Certificate of Approval with stipulations that the Port Authority of Guam document photo structures within the project area that are 25 years or older and submitted to the Guam Historic Resources Division to assist in this effort you may contact William Hernandez, HP Specialist at 475-6349.

If you have any questions, please contact our office at 475-6294/6295 or fax us at 477-2822.

Sincerely,

Peter S. Calvo
Acting Director

Co-Signature:

Lynda Bordallo Aguon
Guam (State) Historic Preservation Officer

cc: BSP