Naval Facilities Engineering Systems Command Pacific
JBPHH HI

Final

Phase I Environmental Site Assessment
Yap Seaport

ISLAND OF YAP FEDERATED STATES OF MICRONESIA

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Prepared for NAVFAC Pacific by
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EXECUTIVE SUMMARY

Naval Facilities Engineering Systems Command, contracted with AECOM Technical Services, Inc. (AECOM) to perform a Phase I Environmental Site Assessment (ESA) of the commercial property located at the Yap Seaport, Yap, Federated States of Micronesia (FSM). This Phase I ESA was performed in general conformance with the scope and limitations of ASTM International (ASTM) Designations E1527-21, *Standard Practice for ESAs: Phase I ESA Process* (ASTM E1527-15) (ASTM 2021), and E2600-15, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions* (ASTM E2600-15) (ASTM 2015). Exceptions to, or deletions from, this practice are described in this report.

The subject property is an approximately 20-acre portion of land situated within the town of Colonia, located on the island of Yap in the Federated States of Micronesia, approximately 500 miles southwest of Guam. Colonia is situated on the eastern coast of Yap, adjacent to Chamorro Bay. The subject property comprises the main harbor area and the road that encircles Chamorro Bay.

Historical aerial photographs indicate that the subject property, including the road encircling Chamorro Bay, was already partially developed by 1976. The 1976 historical aerial photograph does not show a significant portion of the port portion of the subject property. The absence of such delineation suggests that this specific section of the port was subsequently filled and developed post-1976.

The site visit, conducted from July 13 to July 18, 2023, encompassed a visual inspection of two primary portions of the subject property: the port area and the road area encircling Chamorro Bay. Within the port area there is an approximately 6.2-acre fenced area enclosed by an 8-foot chain link fence. In the fenced area there are three buildings, one of which was observed to be under renovation during the site visit. This building serves as a warehouse and administrative office for Waab Transportation Company. Additionally, there is the Division of Sea Transportation maintenance shop, as well as a structurally deteriorated building that formerly served as a processing facility for tuna canning operations. Most buildings were constructed of a steel frame with concrete masonry walls and metal roofing panels. The remaining portion of the port area, covering approximately 14 acres, encompasses governmental structures, including but not limited to the Yap State Government and Administration Building and the Yap State Legislature office; as well as the Yap State Public Library, the Yap Fishing Authority, a facility currently dedicated to recycling activities, an automotive salvage yard, and the wastewater treatment facility. The road encircling Chamorro Bay spans approximately 1.2 miles long and is completely paved. During the site visit, no visual evidence of potable water wells, monitoring wells, dry wells, septic tanks, or leach fields was identified on the road section of the subject property.

During the site visit, AECOM identified visual evidence of discolored soil and stressed vegetation surrounding four unlabeled drums located outside the former tuna processing facility. The discoloration was accompanied by a faint petroleum odor emanating from the soil. Additionally, AECOM observed medium to heavy staining on the concrete floor throughout the Division of Sea Transportation maintenance shop. No significant cracks were observed on the floor; however, floor drains, and channel drains were observed in the vicinity. No visual evidence of significant corrosion was identified on the floors or walls of most buildings within the subject property with the exception of the former tuna processing facility, which exhibited considerable deterioration. The corrugated aluminum sheet roof displayed significant degradation and detachment, with a section of the roof having already collapsed.

AECOM identified Yap Cooperative Association (YCA) Rufan's Gas Station, situated immediately adjacent to the subject property, featuring two steel aboveground storage tanks (ASTs) containing diesel and unleaded gasoline within concrete secondary containment; however, secondary containment for a third AST housing kerosene was lacking. Additionally, AECOM identified Colonia's primary fuel farm, Vital FSM PetroCorp, located directly adjacent to the subject property situated in a downgradient direction. The facility contains two International Organization for Standardization (ISO) tanks, each containing approximately 5,700 gallons of jet A-1 fuel, a 100,000-gallon gasoline AST, and a 500,000-gallon diesel AST. All ASTs are situated within concrete secondary containment berms. Although the fuel farm does not have any documented releases or spills, the facility is considered a potential hazard for the subject property due to the bulk storage of petroleum products and location directly adjoining the subject property.

Based on the above-described activities, no controlled recognized environmental conditions (CRECs) or historical RECs (HRECs), were identified in connection with the subject property.

The following on-site RECs were identified during this assessment:

- The release of a suspected petroleum substance from four empty and unlabeled 55-gallon drums near the former tuna processing facility building is a REC, in AECOM's opinion. The approximately 20 square-foot stained area had a petroleum odor, and no vegetation was growing within the staining. Furthermore, the empty drums suggest that a significant volume of product may have leaked.
- Extensive oil staining at the Division of Sea Transportation maintenance shop, encompassing an area of approximately 200 square feet, is considered a REC, in AECOM's opinion. Petroleum hydrocarbons have likely leached to underlying soil and entered floor and trench drains.
- The underground fuel pipeline that transports fuel from the PetroCorp fuel farm to the port is present throughout the subject property. It could not be determined during this Phase I ESA whether the pipeline is regularly leak tested, the leak testing methods, and testing results. Based on this lack of information, the pipeline represents a material threat of a potential future release and a REC, in AECOM's opinion.
- Seven fuel tanks previously utilized by the U.S. Coast Guard on the subject property are considered a REC, in AECOM's opinion. The ASTs could only be observed from a distance during the site visit because of overgrown dense vegetation and the surrounding terrain; however, they appeared to be slightly corroding. It was not ascertainable from interviews whether any fuel remains in the ASTs and abandonment documentation was not available.
- Three piles of metal debris, primarily consisting of abandoned automobiles and automotive parts are present in the salvage yard within the subject property. The piles measured approximately 7,000, 1,500, and 1,300 square feet. In addition, a deteriorated 20-foot metallic tank marked as "unleaded gas," was identified and exhibited substantial corrosion and perforations. The condition of such an abandoned tank may indicate a release of hazardous substances or petroleum products into the surrounding environment. The piles have not been previously investigated, and it is unknown whether metals or other contaminants are present at concentrations that represent a hazard to human or ecological health; therefore, this finding is considered a REC in AECOM's opinion.
- A stockpile of automobile and other equipment batteries at the Recycling Center is a REC, in AECOM's opinion. These batteries were situated on a concrete floor atop a substantial pool of liquid, reportedly identified as rainwater by personnel on site. Although no significant floor cracks were observed, various floor drains were observed in the vicinity of the batteries.

The following offsite RECs were identified during this assessment:

- The Vital FSM PetroCorp fuel farm, is directly adjacent and south of the subject property. Although the fuel farm does not have any documented releases or spills, the facility is considered a REC for the subject property due to the bulk storage of petroleum products and location directly adjoining the subject property.

The following non-ASTM scope concerns were identified during this assessment:

- Asbestos-containing material (ACM) is likely present in buildings within the subject property based on the fact that many building materials in Yap are imported from Asia where standards pertaining to ACM may differ from the United States.
- Lead-based paint (LBP) is likely present in buildings within the subject property based on the fact that many building materials in Yap are imported from Asia where standards pertaining to LBP may differ from the United States.
- World War II (WWII) era munitions and explosives of concern and unexploded ordnance are likely present in marine areas adjoining the subject property. Although the munitions do not represent a REC for the subject property, according to the ASTM definition of a REC, future dredging or other construction work that could disturb the ocean floor should account for potential explosive hazards.

The following significant data gaps were identified in connection with the subject property:

- AECOM was unable to observe seven abandoned fuel tanks on the subject property previously utilized by the U.S. Coast Guard. The ASTs could not be visually inspected up close due to the overgrown nature of the surrounding terrain; however, they appeared to be slightly corroded, yet no visible holes were observed in any of the ASTs from a distance. Precise abandonment dates and related abandonment documentation was not available. Based on the lack of documentation regarding the abandonment of such fuel tanks, the ASTs are considered a REC. Additional information would likely assist the environmental professional in determining whether a REC exists.

The following de minimis conditions (DMCs) were identified during this assessment:

- A shipping container managed by Waab Transportation Company of unknown origin was observed leaking small quantities of a viscous, yellowish substance. The Port Officer at the Division of Sea Transportation Office was not aware of the contents of the container; however, due to the localized nature of the release, AECOM considers this staining a DMC.
- Four small oil stains (less than 2 square feet each) observed at the Yap Fishing Authority maintenance shop. Given the localized nature, AECOM considers this staining a DMC.

Based on the above-described activities, it is AECOM's opinion that an additional environmental assessment is warranted at this time to assess the on-site and off-site concerns.

CONTENTS

ACRONYMS AND ABBREVIATIONS

ACM	asbestos-containing material
AECOM	AECOM Technical Services, Inc.
AST	aboveground storage tank
ASTM	ASTM International (2002)
AUL	activity use limitation
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Act Information System
CFR	Code of Federal Regulations
cm	centimeter
CREC	controlled recognized environmental condition
DMC	de minimis condition
EDR	environmental data resources
EP	environmental professional
ESA	environmental site assessment
HREC	historical recognized environmental condition
HVAC	heating, ventilation, and air conditioning (system)
ISO	International Organization for Standardization
km	kilometer
LBP	lead-based paint
MEC	munitions and explosives of concern
NAPL	non-aqueous phase liquid
NAVFAC	Naval Facilities Engineering Systems Command
PCB	polychlorinated biphenyl
PFAS	per- and polyfluoroalkyl substances
REC	recognized environmental condition
SEMS	Superfund Enterprise Management System
U.S.	United States
UXO	unexploded ordnance
VEC	vapor encroachment condition
VES	vapor encroachment screening
WWII	World War II
WWTP	wastewater treatment plant
YCA	Yap Cooperative Association
YFA	Yap Fishing Authority
YSPSC	Yap State Public Service Corporation

1. Introduction

1.1 PURPOSE

This Phase I Environmental Site Assessment (ESA) was performed pursuant to AECOM Technical Services, Inc.'s (AECOM's) written proposal, dated April 14, 2023, for the site addressed as Yap Seaport (herein referred to as the "subject property"). This assessment was performed in advance of the potential acquisition of the subject property.

The purpose of this Phase I ESA is to provide the Client with information for use in evaluating recognized environmental conditions (RECs) associated with the subject property. Per ASTM International (ASTM), Designation: E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-15) (ASTM 2021), potential findings can include RECs, historical RECs (HRECs), controlled RECs (CRECs), de minimis conditions (DMCs), and significant data gaps as follows:

- A REC is defined by the ASTM standard as "(1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment." The term includes hazardous substances or petroleum products even under conditions in compliance with laws.
- A HREC is defined as a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority and meeting unrestricted use criteria established by a regulatory authority or authorities without subjecting the subject property to any required controls.
- A CREC is defined as a REC affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (activity and use limitations or other property use limitations).
- DMCs are conditions related to a release that generally do not present a threat to human health or the or the environment and generally would not be subject to enforcement action if brought to the attention of the appropriate governmental agencies.
- A significant data gap is a data gap that affects the ability of the environmental professional to identify a REC.

In addition, a Tier 1 vapor encroachment screening (VES) is completed as part of this assessment. This screening is conducted in general accordance with ASTM E1527-15, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions* (ASTM 2021). The objective of the VES is to evaluate if a VEC exists or not.

This Phase I ESA is based on a review of existing conditions, reported pre-existing conditions, and observed operations at the subject property and adjacent properties.

1.2 SCOPE OF WORK

The Phase I ESA included a site visit, interviews, regulatory research, historical review, and a review and an environmental database analysis of the subject property. In conducting the Phase I ESA, AECOM assessed the subject property for visible signs of possible contamination, researched public records for the subject property and adjacent properties (as applicable), and conducted interviews with

persons knowledgeable about the subject property. Non-scope services per ASTM E1527-21 (ASTM 2021), such as per- and polyfluoroalkyl substances (PFAS), asbestos-containing material, (ACM) and lead-based paint (LBP) concerns are further discussed in Section 5.6.

This project was performed in general accordance with ASTM E1527-21 (ASTM 2021) and AECOM's proposal, dated April 14, 2023. Conclusions reached in this report are based upon the assessment performed and are subject to limitations set forth in Sections 1.3, 1.4, and 1.5 below.

1.3 STUDY LIMITATIONS

This report describes the results of AECOM's Phase I ESA to identify the presence of conditions materially affecting the subject facility and/or property within the limits of the established scope of work as described in AECOM's proposal.

As with any due diligence assessment, there is a certain degree of dependence upon oral information provided by facility or site representatives, which is not readily verifiable through visual observations or supported by any available written documentation. AECOM shall not be held responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed by facility or site representatives at the time this assessment was performed. In addition, the findings and opinions expressed in this report are subject to certain conditions and assumptions, which are noted in the report. Any party reviewing the findings of the report must carefully review and consider all such conditions and assumptions.

This report and all field data and notes were gathered and/or prepared by AECOM in accordance with the agreed upon scope of work and generally accepted engineering and scientific practice in effect at the time of AECOM's assessment of the subject property. The statements, findings, and opinions contained in this report are only intended to give approximations of the environmental conditions at the subject property.

As specified in ASTM E1527-21 (ASTM 2021), it is incumbent that the Client and any other parties who review and rely upon this report understand the following inherent conditions surrounding any Phase I ESA:

- *Uncertainty Not Eliminated:* No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a subject property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with a subject property, and this practice recognizes reasonable limits of time and cost (Section 4.5.1 of ASTM E1527-21) (ASTM 2021).
- *Not Exhaustive:* "All appropriate inquiries" does not mean an exhaustive assessment of a property. There is a point at which the cost of information or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of this practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an ESA and the reduction of uncertainty about unknown conditions resulting from additional information (Section 4.5.2 of ASTM E1527-21) (ASTM 2021).
- *Comparison with Subsequent Inquiry:* It should not be concluded or assumed that an investigation was not AAI merely because the inquiry did not identify RECs in connection with a subject property. ESAs must be evaluated based on the reasonableness of judgments made at the time and under the circumstances in which they were made. Subsequent ESAs should not be considered valid standards to judge the appropriateness of any prior assessment based on hindsight, new information, use of developing technology or analytical techniques, or other factors (Section 4.5.4 of ASTM E1527-21) (ASTM 2021).

A similar set of inherent limitations exist in cases where the Phase I ESA included a screening-level assessment of vapor migration or vapor encroachment; such an assessment is a required part of a Phase I ESA when ASTM E1527-21 (ASTM 2021) is employed. According to ASTM E2600-15 (ASTM 2015), the following limitations apply:

- *Uncertainty Not Eliminated in Screening:* No VES can wholly eliminate uncertainty regarding the identifications of VECs in connection with the target property. Screening is intended to reduce, but not eliminate, uncertainty regarding whether or not a VEC exists in connection with the property (Section 4.5.1 of ASTM E2600-15) (ASTM 2015).
- *Not Exhaustive:* The guide is not meant to be an exhaustive screening. There is a point at which the cost of information obtained, or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of real estate transactions. One of the purposes of this guide is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing a VES and the reduction of uncertainty about unknown conditions resulting from additional information (Section 4.5.2 of ASTM E2600-15) (ASTM 2015).
- *Comparison with Subsequent Investigations:* It should not be concluded or assumed that an investigation was not adequate because the investigation did not identify VECs in connection with a property. The VES must be evaluated based on the reasonableness of judgments made at the time and under the circumstances in which they were made. Subsequent VESs should not be considered valid bases to judge the appropriateness of any prior screening if based on hindsight, new information, use of developing technology or analytical techniques, or similar factors (Section 4.5.4 of ASTM E2600-15) (ASTM 2015).

This report was prepared pursuant to an agreement between Naval Facilities Engineering Systems Command (NAVFAC), Pacific (Client) and AECOM and is for the exclusive use of the Client. No other party is entitled to rely on the conclusions, observations, specifications, or data contained herein without first obtaining AECOM's written consent and provided any such party signs an AECOM-generated Reliance Letter. A third party's signing of the AECOM Reliance Letter and AECOM's written consent are conditions precedent to any additional use or reliance on this report.

The passage of time may result in changes in technology, economic conditions, site variations, or regulatory provisions, which would render the report inaccurate. Reliance on this report after the date of issuance as an accurate representation of current site conditions shall be at the user's sole risk.

1.4 REPORT VIABILITY

According to ASTM E1527-21 (ASTM 2021), an ESA "meeting or exceeding this practice is presumed to be viable when it is conducted within 180 days of acquisition of the subject property (or, for transactions not involving an acquisition such as a lease or refinance, the date of the intended transaction). The dates of the components presented in 4.6.2(i), (iii), (iv), and (v) for interviews, review of government records, visual inspections, and declaration by environmental professional, shall be identified in the report. Completion of searches for recorded environmental cleanup liens (4.6.2(ii)) is a user responsibility; however, if the user has engaged the environmental professional to conduct these searches, then that date shall also be identified in the report." Table 1 lists the dates of completion for pertinent components of this Phase I ESA.

Table 1: Completion Dates for Phase I ESA Components

Component	Date of Issuance/Completion
Interviews with Owners, Operators and Occupants	July 19, 2023
Environmental Database Report	N/A
Visual Inspection of the Subject Property and Adjoining Properties	July 15, 2023
Declaration by Environmental Professional	November 9, 2023
Issuance of Report	November 10, 2023
Report Viability Expiration Date [a]	January 19, 2024

N/A not applicable
[a] The 180-day viability date is based on the earliest referenced resource noted in the table above.

1.5 DATA GAPS

Per ASTM E1527-21 (ASTM 2021):

- A data gap is defined as a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information.
- A data gap is considered a significant data gap if other information and/or professional experience raises reasonable concerns involving the effects of that data gap on the ability of the environmental professional to render an opinion regarding whether conditions exist that are indicative of RECs or CRECs.

The following data gaps (to include site-specific limitations) were encountered during the course of this assessment:

- As specified in the agreed upon scope of work, a title search and environmental lien search were not conducted as part of this Phase I ESA. The user was not aware of environmental liens or activity use limitations that have been placed on the subject property. Federal, tribal, state, and local government records were not all practically reviewable because coverage for Yap was not available from standard resources that search various government databases to identify on-site and/or offsite sources of concern that have the potential to impact soil and/or groundwater at the subject property. This data failure is not expected to represent a significant data gap because the island has not undergone significant development since World War II (WWII) and many of the existing land uses have remained unchanged since the 1950s and 1960s. Therefore, the other information sources used during this Phase I assessment (e.g., site inspection, interviews, aerial photos, and historical maps) were sufficient for identifying RECs related to the subject property.
- With the exception of a set of FSM-owned engineering drawings of the Yap Fishing Authority (YFA) buildings, federal, tribal, state, and local government records and databases were not practically reviewable because coverage for the Federated States of Micronesia was not available from standard resources that search various government databases, such as environmental data resources (EDR). Therefore, offsite properties that may represent an environmental concern for the subject property could only be evaluated by the site visit, interviews and historical aerial photographs. This constitutes a data gap.
- AECOM was unable to closely observe seven abandoned fuel tanks on the subject property previously utilized by the United States (U.S.) Coast Guard. The aboveground storage tanks (ASTs) could only be inspected from approximately 100 feet away due to the overgrown vegetation surrounding the tanks. Based on visual observation, each tank is estimated to be approximately 30,000 gallons in size. No containment berm is present around the tanks. At

the time of the visual inspection, the tanks appeared to be slightly corroding; however, no evidence of holes or other perforations were visible. After interviewing Mr. Jordan Mautaman, Yap State Environmental Protection Agency (EPA) Pollution Control Specialist and Mr. Constantine Yow, General Manager at YFA, the type of fuel the ASTs held historically is unclear. It is unknown if the fuel is still present in the tanks. Mr. Mautaman and Mr. Yow were not aware of any release associated with the ASTs. Precise abandonment dates and related abandonment documentation were not available. Based on the lack of documentation regarding the abandonment of such fuel tanks, this significant data gap is considered a REC. Additional information would likely assist the environmental professional in determining whether a REC or CREC exists. Such conditions warrant further investigation to determine if contamination exists and the potential impact on soil and groundwater quality.

2. Site Description

2.1 Site Location and Parcel Description

The subject property is an approximately 20-acre parcel of land situated within the town of Colonia, located on the island of Yap in the Federated States of Micronesia, approximately 500 miles southwest of Guam. Colonia is situated on the eastern coast of Yap, adjacent to Chamorro Bay. The subject property comprises the main harbor area and the road that encircles Chamorro Bay (Figure 1 and Figure 2).

The subject property is bordered to the north partially by the ocean, as well as a combination of residential, commercial, and governmental properties, including the U.S. Postal Service, the fire department, the police station, Bank of Guam, and Yap Cooperative Association (YCA), which primarily encompasses a general store and its warehouse, as well as other small retail stores. The subject property is predominantly bordered to the east by the ocean. The subject property is bordered to the south by the ocean, as well as residential and commercial development including Oceania Hotel and Restaurant Bar, ESA Bay View Hotel and wholesale warehouse, YCA Rufan's Gas Station, Vital FSM PetroCorp (Colonia's primary fuel farm). The subject property is bordered to the west by commercial development including Aces Mart, as well as residential structures. The approximate location of the subject property is illustrated on Figure 2.

2.2 Site Ownership

The ownership history of the subject property is summarized in Table 2. Yap's history is marked by a population initially comprising migrants from Indonesia and the Philippines, who later developed into indigenous Yapese communities. In the 1500s, the island had its first encounters with Portuguese and Spanish explorers, initiating intermittent trading between Yapese inhabitants and Europeans (Oliver 1989). German influence on Yap strengthened when German settlers established the first permanent trading station, Godeffroy & Son. By 1874, their holdings encompassed significant land, a cotton plantation, and a ship repair operation. The island saw a shift in sovereignty when Spain initially claimed it in 1874, until Germany eventually acquired it in 1899 (Boecker 1993).

World War I marked the beginning of the Japanese administration following their acquisition of the island from Germany, leading to a rapid influx of Japanese settlers and substantial development. The island became a strategic location, experiencing military activities and eventually being captured by the U.S. during WWII. The island was eventually placed under the U.S. Trust Territory of the Pacific Islands (TTPI) and, after the period of Navy administration, gained self-governance within the Federated States of Micronesia in 1986 (Boecker 1993). According to Mr. Yow, after the establishment of the Yapese government, the fenced area within the Subject Property is collaboratively managed by the Sea Transportation Office and the stevedoring Waab Transportation Company.

Table 2: Summary of Ownership History

Year	Ownership History
Pre-historic	Yap is populated by migrants from Indonesia and the Philippines and later develops into indigenous Yapese communities.
1500s	First contact with Portuguese and Spanish.
1800–1860	Intermittent trading between Yapese and Europeans. Residents from the outer islands of Yap began making regular voyages of their own during this time to Guam and the Marianas.
1869	Germans establish the first permanent trading station, Godeffroy & Son, under the management of Alfred Teten. By 1874 its holdings included 3,000 acres of land, a cotton plantation and a ship repair operation.
1874	Spain claims sovereignty over Yap.
1899	Germany acquires Yap from Spain.
1914	World War I begins. Japanese Administration of Yap begins after Japan acquires control of the island from Germany.
1920–1940	Rapid Japanese settlement occurs in Yap. The population of Japanese in Yap jumps from 97 to 1,933.
1941	World War II begins.
1944	Allies begin bombing Colonia, the Japanese airfield at the southern end of the island, and the airfield under construction in Tomil. The island is rapidly turned into a massive staging area. Over 1,000 ships are at one point anchored in the Ulithi Lagoon.
1945	The island of Yap is captured by the United States during World War II.
1947	The island of Yap is placed under U.S. Trust Territory of the Pacific Islands (TTPI), administered by the Navy.
1952	Navy administration ends. Interior Department takes over the island on June 21st, and King W. Chapman is named Yap's first civilian administrator.
1986	Gained self-governance within the Federated States of Micronesia, replacing the TTPI.
Late 1980s	The port of Yap is operated through the State Government Department of Public Works and Transportation. The fenced area within the subject property is collaboratively managed by Waab Transportation Company and the Sea Transportation Office.

Note: This table was developed based on information provided in the References in Section 10.
TTPI Trust Territory of the Pacific Island, United States

2.3 SITE VISIT

The purpose of the site visit was to supplement the documentary record, including interviews, historical aerial photos and maps, and other components of this Phase I ESA. The site walk included observing the subject property to the extent practicable. A site visit checklist is presented in Appendix B.5, and representative photos of the subject property are presented in Appendix A.

Mr. Max Ulloa-Martinez and Ms. Olivia Shively of AECOM's Honolulu, Hawaii office visited the subject property from July 13 to July 18, 2023. Ms. Elaine Lampitoc of NAVFAC Pacific accompanied Mr. UlloaMartinez and Ms. Shively during the site visit. Where accessible, the site visit consisted of walking over areas of the subject property, the perimeter of the property, and portions of the surrounding area.

In addition to the site visit, people with knowledge of the subject property and surrounding areas were interviewed to obtain further information. Interview records are provided in Appendix B.4.

- *Mr. Tino Siugwemal:* Yap Sea Transportation Office, Port Officer
- *Ms. Mary Jane Falfen:* YFA, Assistant General Manager
- *Mr. Hanson Palemar:* YFA, Assistant General Manager
- *Mr. Constantine Yow:* YFA, General Manager
- *Mr. Jeff Marbey:* Yap State Historic Preservation Office, Chief Officer

- *Mr. Jordan Mautaman:* Yap State Environmental Protection Agency, Pollution Control Specialist
- *Mr. James Lukan:* Waab Transportation Company, General Manager
- *Mr. John Rumwol:* Vital FSM Petroleum Corporation, Officer in Charge
- *Mr. Francis Choay:* Yap Fire Department, Fire Lieutenant
- *Mr. Joseph Sowuth:* YCA Rufan's Gas Station, Supervisor
- *Mr. Harry Speicher:* Pacific Lineman Training, President
- *Mr. Paul Moon:* Aces Store, Local Businessowner

Site-related limiting conditions encountered during this assessment were previously summarized in Section 1.4. The following sections summarize the results of the site visit.

2.3.1 Site and Facility Description

The subject property is comprised of two distinct areas: the port area and the road encircling Chamorro Bay (Figure 2) (note, the port portion of the subject property is shaded in yellow and road portion of the subject property only includes the road itself and not the area encompassed by the road). Within the port area there is an approximately 6.2-acre fenced area enclosed by an 8-foot chain link fence. The stevedoring Waab Transportation Company and the Division of Sea Transportation operate and maintain the fenced area, which services international cargo vessels, fuel tankers, and longline fishing vessels. Within the wharf inside the fenced area, there are four berths covering an approximate distance of 800 linear feet. Refined fuel imported from international vessels l is off-loaded at the port, then pumped via an underground pipeline running through the subject property and the main street of Colonia to the Vital FSM PetroCorp fuel farm. The pipeline is marked on the main road. Within the fenced area there are three buildings, one of which was observed to be under renovation during the site visit and designed to serve as a warehouse and administrative office for Waab Transportation Company. Additionally, there is the Division of Sea Transportation maintenance shop, as well as a structurally deteriorated building that formerly served as a processing facility for tuna canning operations. Most buildings were constructed of a steel frame with concrete masonry walls and metal roofing panels.

The remaining portion of the port area, covering approximately 14 acres, encompasses governmental structures, including but not limited to the Yap State Government and Administration Building and the Yap State Legislature office; as well as the Yap State Public Library, the YFA, a facility currently dedicated to recycling activities, an automotive salvage yard, and the wastewater treatment facility. More historical information for the subject property, including historical aerial descriptions are presented in Section 4.1.

During the site visit, no visual evidence of potable water wells, monitoring wells, dry wells, septic tanks, or leach fields was identified on the port section of the subject property. Approximately 70 percent of the fenced area within the Subject Property is paved with concrete albeit uneven and water pooling occurs. Outside of the fenced area, the Subject Property is mostly unpaved. There is a wastewater treatment plant (WWTP) located on the easternmost point of the port area portion of the subject property. The WWTP is further discussed in Section 2.3.10.

The road encircling Chamorro Bay is approximately 1.2 miles long and is completely paved. During the site visit, no visual evidence of potable water wells, monitoring wells, dry wells, septic tanks, or leach fields was identified on the road section of the subject property. The general layout of the subject property is illustrated on Figure 3 and Figure 4, and site photographs are provided in Appendix A.

2.3.2 Surrounding Properties

AECOM identified YCA Rufan's Gas Station, adjoining the subject property, situated in a cross-gradient direction to the south of the road portion of the subject property. The gas station contains two (2) steel ASTs—one currently holding 3,700 gallons of diesel and the other holding 4,010 gallons of unleaded gasoline—both housed within a concrete secondary containment. Additionally, a 320-gallon kerosene AST was noted lacking secondary containment measures. Within the premises of the service station, two 4,000-liter (International Organization for Standardization (ISO) tanks were present and observed in good condition. Additionally, the site contained approximately 31 empty drums, previously storing diesel, which were washed of their contents for future re-use. According to Mr. Sowuth, service station supervisor, the drum-cleaning process involves pressure washing the drums with water. The pressure washing is completed on a concrete surface; however, rinse water is allowed to drain off the pavement and infiltrate into unpaved areas and the concrete surface contains numerous cracks. Furthermore, given the proximity of these activities to the nearby channel, there is a potential risk of runoff containing contaminants entering the adjacent Chamorro Bay. According to Mr. Sowuth, no major leaks or spills from the ASTs have occurred at this facility.

The Vital FSM PetroCorp facility adjoins the subject property to the south. The facility was inaccessible for inspection as part of this Phase I ESA; however, Mr. Rumwol, the officer in charge since 2018, was interviewed regarding the facility. According to Mr. Rumwol, the facility contains two ISO tanks each containing approximately 5,700 gallons of jet A-1 fuel, a 100,000-gallon gasoline AST, and a 500,000-gallon diesel AST. Additionally, there are three other ASTs that are empty and currently not being used. An oil-water separator is present on-site, as well as twenty 55-gallon drums containing residual products drained from the primary fuel line. All ASTs are situated within concrete secondary containment berms. Mr. Rumwol indicated that tightness tests are routinely conducted on all ASTs and a leak detection system is installed and operating. Although AECOM was not able to observe any of the secondary containment berms closely, Mr. Rumwol indicated no major leaks or spills have occurred from the ASTs at the facility.

During an interview with Mr. Mautaman, a pollution control specialist at Yap State EPA, AECOM identified an approximately 1,500-square-foot area adjoining the subject property that was previously used for chemical storage. The types and volume of such chemicals was unknown to Mr. Mautaman. AECOM inspected the concrete slab in the area where the chemical storage was reported; however, did not note evidence of a chemical release (e.g., staining, odors, or stressed vegetation).

Based on an interview with Mr. Yow, a 10-foot torpedo was retrieved from the coastline, roughly 0.5 miles south-southwest from the recycling center around May 2023. No further information was available from Mr. Yow regarding the torpedo. Munitions and explosives of concern (MEC) and unexploded ordnance (UXO) remaining from WWII represent an explosive and health hazard.

AECOM did not identify any dry cleaners in the immediate vicinity (500 feet) of the subject property. In addition, no sensitive receptors such as day care centers, schools, or hospitals were identified as being located adjacent to the subject property. The closest sensitive receptor to the adjacent site is the Pacific Ocean.

2.3.3 Petroleum Products and Hazardous Materials

The storage of petroleum products and hazardous substances was observed at the port area of the subject property during the site visit. No petroleum products or hazardous substances were observed within the road area of the subject property bordering Chamorro Bay. At the port area of the subject property, upwards of 90, 55-gallon drums of petroleum products and hazardous substances were observed, including:

- Sixty-seven 55-gallon drums at the former tuna processing facility. Thirty-eight of the 55-gallon drums were observed in an enclosed room on a concrete floor, lacking spill pallets (Appendix A, Photos 1 and 2). Two 55-gallon metal drums were observed with corrosion and a dark colored oily substance present at their base. Only 10 of the 55-gallon drums contained labeling—Mobil Gard 525, 412, ADL 40, and 300 C—indicative of diesel engine oil. Based on gently touching each drum, it was suspected that all 38 drums in the room contained some amount of fluid (i.e., none were suspected to be empty).
- Twenty 55-gallon drums were observed along the exterior wall on the northeast corner of the former tuna processing facility building. The drums appeared in good condition without corrosion or evidence of leaking; however, are not covered, directly on the ground surface, and do not contain labeling indicating their contents. Based on gently touching each drum, it was suspected that all 21 drums contained some amount of fluid (i.e., none were suspected to be empty).
- Eight empty and unlabeled metal 55-gallon drums were observed approximately 30 feet to the northeast of the northeast corner of the former tuna processing facility building. The drums were not covered and directly on the ground surface (Appendix A, Photos 3 and 4). Dark, oil staining, with a petroleum odor was observed at the base of four of the drums (approximately 50 square feet in area). No vegetation was observed growing in the stained soil area, although the surrounding area contained grass and other shrubs. Mr. Siugwemal, port officer at the Division of Sea Transportation, was not aware of the drums, their prior contents, or their origin.
- Twenty drums located within the Division of Sea Transportation maintenance shop (Appendix A, Photos 5–7). With the exception of six 55-gallon drums that are utilized for daily maintenance and repair activities, the drums were observed to be empty. None of the drums were labeled and all were uncovered and on concrete pavement. Extensive oil staining, estimated to be approximately 200 square feet in total area, was observed on the pavement throughout maintenance shop. Spilled fluids have likely infiltrated floor and trench drains at the shop, which discharge to the ocean (Appendix A, Photos 8 and 9).
- Seven propane gas tanks ranging in size from 10–25 gallons and three hydraulic fluid 55-gallon drums were also observed throughout the Division of Sea Transportation maintenance shop. Only one of the hydraulic oil containers was labeled Mobil NUTO H 68; however, the maintenance shop personnel confirmed the other two drums also contain hydraulic fluid. The propane tanks appeared in good condition and no evidence of a release was observed around the tanks; however, staining was observed under the 55-gallon hydraulic fluid drums (Appendix A, Photo 6).
- Five drums at the YFA maintenance shop. The drums appeared in good condition without corrosion or evidence of leaking; however, were not labeled and are being stored uncovered. Based on gently touching each drum, it was suspected that all 5 drums contained some amount of fluid (i.e., none were suspected to be empty).

In addition to the 55-gallon drums summarized above, other petroleum and hazardous substances observed during the site visit included:

- An underground fuel pipeline is present within the port area of the subject property (Figure 3). The pipeline is used to transport mainly gasoline and diesel fuel offloaded by tanker barges at the port to the Vital PetroCorp fuel farm, located approximately 200 feet to the southeast of the Chamorro Bay road portion of the subject property. Mr. Rumwol, the officer in charge, was unaware of any releases from the pipeline. It could not be determined whether the pipeline is regularly leak tested, the leak testing methods, and testing results. Based on this lack of information, the pipeline represents a material threat of a potential future release. A monitoring well was observed in a parking lot adjacent to the fuel pipeline. Mr. Mautaman was unaware of the purpose of the monitoring well and whether it is associated with the fuel pipeline.
- A yellow-tinged liquid leaking from the corner of an 8-foot by 20-foot shipping container managed by Waab Transportation Company was observed (Appendix A, Photo 10). No apparent odor emanating from liquid was noted. Mr. Siugwemal, and Mr. Lukan, general manager of Waab Transportation Company, were interviewed and both were unaware of the origin, ownership or contents of such container, how long it has been present or when it will be removed from the premises. The presence of ground staining raises concerns regarding potential historical activities that may have involved the handling, storage, or disposal of hazardous materials. Potential releases, particularly in areas of cracks, suggests the possibility of substances seeping into the ground over time. Furthermore, the presence of unidentified shipping containers raises concerns about potential hazardous materials stored on-site. The leaking shipping container, in particular, may signify a potentially larger release of substances that could have environmental implications, if not addressed.

The RECs identified pertaining to petroleum products and hazardous materials are summarized below:

- The release of a suspected petroleum substance from four empty and unlabeled 55-gallon drums near the former tuna processing facility building is considered a REC, in AECOM's opinion.
- Extensive oil staining at the Division of Sea Transportation maintenance shop, encompassing an area of approximately 200 square feet is considered a REC, in AECOM's opinion.
- The underground fuel pipeline that transports fuel from the PetroCorp fuel farm to the port and the lack of information regarding leak testing frequency, leak testing methods and testing results is considered a REC, in AECOM's opinion.

2.3.4 Hazardous Waste

No hazardous waste, with the exception of lead-acid batteries, was observed at the subject property (Appendix A, Photo 15). An accumulation of vehicle and other equipment batteries was observed at the Recycling Center. These batteries were situated directly on a concrete floor without secondary containment. Clear liquid was pooled beneath the batteries at the time of the site inspection. On-site Recycling Center personnel indicated that the liquid is rainwater that leaks into the building. It was unknown how long the batteries had been accumulating at the Recycling Center. There were no obvious signs of leakage from the batteries situated at the front of the pile (i.e., presence of blueish-green corrosion and crystalline deposits around the battery casing). Although no major floor cracks were observed, various floor drains were observed in the vicinity of the batteries which discharge to the ocean.

Based on the presumed quantities, the lead-acid battery pile represents a material threat of a release and is considered a REC.

2.3.5 Polychlorinated Biphenyls

Polychlorinated biphenyl (PCB)-containing dielectric fluids have been widely used as coolants and lubricants in transformers, capacitors, and other electric equipment due to their insulating and nonflammable properties. Based on the 2007 National Implementation for the Stockholm Convention on Persistent Organic Pollutants, "almost all of the PCB containing transformer units have been identified and removed from service" throughout the Federated States of Micronesia; however, some PCB-containing transformers may remain because their replacement was impractical without causing disruption to electrical service (Government of the Federated States of Micronesia 2007).

During the site visit, one decommissioned pad-mounted transformer was observed on the subject property next to the former tuna processing facility. No labeling was observed on the transformer indicating PCB content. Staining indicative of a release was not identified at the base of the transformer.

Additionally, pole-mounted transformers were observed throughout the subject property including the port area and the road encircling Chamorro Bay. Labeling indicating PCB content was not discernable due to the height of the transformers. Staining was not identified at the poles or at base of the poles. Mr. Speicher, president at Pacific Lineman Training, stated most transformers were replaced in Yap following Typhoon Sudal in 2004 and there are no PCB-containing transformers left on the subject property. The local electric utility company, Yap State Public Service Corporation (YSPSC), owns these transformers and would be responsible for a release regardless of PCB content.

No other hydraulic equipment (e.g., trash compactors and lifts) was identified on the subject property.

2.3.6 Aboveground Storage Tanks

Several ASTs are present at the port area of the subject property:

- A 10,000-liter diesel AST constructed of steel is present at the YFA facility (Appendix A, Photo 16). The AST is situated above a concrete containment basin. The installation date of the AST was unknown by YFA staff; however, the 1987 Yap Fishing Harbor Preparation Project drawings identify an "oil tank" would be installed (i.e., the AST was presumably installed after 1987). Mr. Yow and Ms. Falfen, the assistant general manager at YFA, indicated that other than a minor leak that was reported and repaired in 2022, no significant releases have been recorded from the AST. The 2022 leak was entirely contained within the concrete containment basin.
- Four 20-foot ISO tanks containing liquified petroleum gas were observed inside the fenced area of the port area portion of the subject property (Figure 3). The ISO ASTs are managed by the Sea Transportation Office. Mr. Siugwemal indicated the ASTs are temporarily stored at the port pending their subsequent transportation. Mr. Siugwemal was uncertain of the specific duration of time the ASTs have been in storage. During the site inspection, the tanks appeared in good condition without evidence of corrosion and no evidence of leaks or releases were observed below the tanks.
- Seven ASTs of an approximate 30,000-gallon capacity, previously utilized by the U.S. Coast Guard, were observed approximately 100 feet north of the Recycling Center (Appendix A, Photos 23 and 24). The ASTs were not directly accessible during the site visit due to dense vegetation. Based on observation from approximately 100 feet away, the ASTs appeared to be slightly corroding but did not contain any visible holes. No evidence of a release (e.g., stressed vegetation) were observed around the ASTs. Mr. Mautaman was unaware of when the ASTs were decommissioned and if any fuel remains in the tanks. AECOM inquired about any

environmental reports concerning the decommissioning of such ASTs, but no response was received. It is unknown if the ASTs still contain fuel or if they have any secondary containment. Such conditions warrant further investigation to determine the extent of any contamination and the potential impact on soil and groundwater quality. In AECOM's opinion, the ASTs are considered a REC because these conditions are reasonably likely to contribute to tank integrity failure and lead to a future release that might result in impact to public health or the environment.

2.3.7 Underground Storage Tanks

Visual evidence of underground storage tanks (e.g., vent pipes and fill ports) was not identified during the site visit. Mr. Yow and Mr. Mautaman indicated that no underground storage tanks are located on the subject property or have historically been located there.

2.3.8 Solid Waste

According to Mr. Yow, solid waste collection services are provided by contractors to the Department of Public Works and Transportation. In addition, in Colonia, commercial waste and household waste are also collected by private companies for a charge or fee, including the subject property.

During the site visit, AECOM observed three non-contiguous piles of abandoned automobiles and automotive parts located within the port area of the subject property, approximately 200 feet northwest of the Recycling Center (Appendix A, Photo 21) (Figure 3). The piles measured approximately 7,000, 1,500, and 1,300 square feet and are located directly on the ground surface. No evidence of distressed vegetation or petroleum odor was noted in the vicinity. Based on historical aerial photos, the vehicle stockpiles have been present since 2019. According to Mr. Mautaman, these piles have not been previously investigated for environmental hazards due to releases of petroleum and other hazardous substances. Adjacent to the piles, AECOM identified a deteriorated 20-foot metallic tank marked as "unleaded gas," exhibiting substantial corrosion and perforations (Appendix A, Photo 22). The tank appeared to be disposed scrap metal awaiting relocation. The tank was empty, no petroleum odors were noted, and no signs of distressed vegetation were observed.

Another waste stockpile was observed on the southeast point of the port area of the subject property during the site visit (Appendix A**,** Photo 19). The pile consisted of construction and demolition (C&D) debris, such as concrete, metal rebar, and wall insulation, and was estimated to be approximately 1,000 square feet in area. A portion of the pile was observed to be eroding into the adjacent ocean. The C&D debris pile has been present since at least 2022 based on historical aerial photographs.

In addition to the vehicle and C&D debris piles, scrap metals are also being stockpiled along the exterior north and east walls of the Recycling Center. Based on historical photos, the scrap metal pile has been present since 2017. The stockpile is approximately 1,500 square feet and includes abandoned vehicle parts, tires, empty corroded drums, glass bottles, and household trash. The waste materials are either on concrete pavement or directly on unpaved ground (Appendix A, Photo 18). Mr. Mautaman mentioned that the scrap metal pile has not been investigated for environmental hazards due to releases of petroleum and other hazardous substances.

2.3.9 Water

According to Mr. Yow, the port receives its potable water supply from the YSPSC. The YSPSC sources drinking water from the Gitan Dam and two deep well systems (Haga et al. 2012).

No potable water wells were identified at the subject property during the site visit or reported by Mr. Mautaman.

2.3.10 Wastewater

Wastewater generated within Colonia, including the subject property, is managed via the main municipal WWTP on Yap, which was constructed in 1974. The plant consists of an Imhoff tank system with two lines designed for concurrent operation; however, only one line is currently being used due to the relatively low-intermittent flow entering the plant from only about 300 household connections. The unmetered inflow is thought to be somewhat less than the design flow of 170,000 gallons per day (Rouse 2015).

Based on an article by the University of Guam, the centralized WWTP on Yap includes primary treatment consisting of a limited removal of suspended solids. Partially treated effluent from the tank is then discharged to the ocean (Rouse 2015).

Mr. Yow stated the effluent wastewater originating from the subject property is directly conveyed to the wastewater treatment facility. Additionally, Mr. Mautaman is unaware of any breaches from the sewer line at the subject property.

No septic tanks were observed at the subject property or identified through interviews.

2.3.11 Stormwater

Stormwater from the subject property drains via sheet flow to the numerous stormwater catchment basins, trench drains, and floor drains located throughout the paved portions of the subject property. In the port portion of the subject property, all stormwater flows directly to the ocean. In the road portion of the subject property, all stormwater flows directly to Chamorro Bay. No major staining was identified in the vicinity of the storm drains with the exception of the medium to heavy staining observed in the Division of Sea Transportation maintenance shop, located in the fenced area of the port portion of the subject property.

2.3.12 Heating and Cooling

The majority of the subject property buildings are cooled by split window air conditioning systems. No heating systems were observed in the subject property at the time of the site visit.

3. Environmental Setting

3.1 TOPOGRAPHY

Yap is made up of four main islands: Marbaaq, Gagil-Tamil, Maap, and Rumung. Colonia is situated along the eastern coast of Marbaaq. The four islands are separated by relatively narrow water features, and the islands are surrounded by a common coral reef. Yap was formed from an uplift of the Philippine Sea Plate and is referred to as a "high" island as opposed to atolls. The land is mostly rolling hills, with densely vegetated valleys and savanna interiors. Mangrove swamps line much of the shore, although there are beaches on the northern and western sides of the islands. Excluding the reef area, the Yap Main Islands are approximately 24 kilometers (km) long, 5–10 km wide, and 98 km^2. The highest elevation is 178 meters at Mount Taabiywol in Fanif municipality on Marbaaq (Federated States of Micronesia 1988).

Both the port area and road area of the subject property are situated at sea level. During the site visit, most of the fenced area was observed to be paved and relatively flat. The remaining area of the port was unpaved and slopes toward the ocean to the southeast. The road portion of the subject property was observed to be crowned at the middle and slightly slopes down at either end. This design helps prevent the accumulation of water on the road surface, reducing the risk of flooding.

3.2 SOIL/GEOLOGY

The Yap formation, which underlies the northern three-fourths of the island of Yap and the prominent ridge in western Gagil-Tamil, consists of pre-Miocene metamorphosed mafic-ultramafic rocks. The Yap formation is composed of greenschist (actinolite) and amphibolite facies, which weather to fat clay; and intruded serpentine dikes and sills (1 to 10 feet thick), which weather to ferruginous clay. These geological features might be related to the slow ascending history of the Yap island arc system. Strong hydrothermal alteration, associated with the eruption of the Tomil volcanics, plays a role in producing poor soils over a wide area of the Yap islands, where vegetation does not develop. However, kaolinite is a predominant clay mineral in the alteration zone. Sulfur isotopic ratios near the coast are generally low, and the samples from the channel close to the populated area show extremely low values. The ratio might be useful in the evaluation of the natural environment, as well as in the assessment of destructive impact on the environment by human activities (Shade, Anthony, and Takasaki 1992).

A significant portion of the port area of the subject property is reclaimed land. Although it is unknown what the fill material consists of, based on visual observation in the southeasternmost coastline of the subject property (in close vicinity of the C&D debris pile) is expected to consist of gravel, coral, and rocks.

3.3 GROUNDWATER/HYDROLOGY

The water table below the subject property is expected to be at the approximate elevation of sea level (i.e., between 10–20 feet at the subject property).

Most of the recoverable groundwater in Yap is in weathered rock, talus and alluvium, or artificial land fill. The groundwater reservoirs are generally larger in low-lying areas than in the upland areas. The low-lying areas are widest near the mouth of stream valleys and in gently sloping areas.

Weathered rock in the Tomil Volcanics provides a permeable aquifer in which groundwater is stored in significant quantities. Between 1979 and 1982, 15 exploratory wells and 13 production wells were sited and drilled under the supervision of Tom Nance of Lyon Associates (Shade, Anthony, and Takasaki 1992). Records of the wells indicate that the thickness of the volcanic aquifers of southern Marbaaq and the central valley of Gagil-Tamil Island range from about 50 to 70 feet and 90 to 140 feet, respectively, and individual well yields are approximately 25 gallons per minute and 50 gallons per minute, respectively.

4. Site and Area History

Historical information for the subject property and surrounding properties is based on AECOM's review and analysis of the following historical sources:

- Historical aerial photographs dated 1976, 2005, 2008, 2013, 2014, 2016, 2017, 2018, 2019, and 2022
- Topographic map dated 1983

4.1 SUBJECT PROPERTY

A historical aerial photograph from 1976 (Appendix B.1) from the University of Hawaii at Manoa archives was reviewed, along with aerial images spanning from 2005 through 2022 (Appendix B.2) and a topographic map from 1983 (Appendix B.3).

Historical aerial photographs indicate that the subject property, including the road encircling Chamorro Bay, was already partially developed by 1976. Visible structures include the Yap State Government and Administration Building, smaller structures in its vicinity, and the WWTP (Appendix B.1, Photo 1). The majority of the port area of the subject property is not yet in existence in the 1976 photo (i.e., the area is still ocean) and subsequently not illustrated in the 1983 topographic map. According to Mr. Yow, land reclamation and the construction of most of the port's buildings were completed in the 1980s. A review of the Yap Fishing Harbor Preparation Project at the Yap Fisheries Authority indicates that the FYA building was constructed after 1988.

The 2005 aerial image shows the majority of the buildings in the subject property as they were observed during the site visit. The YFA is visible, as well as the recycling center, the tuna processing facility, the Yap State Public Library, and the Waab Transportation company-operated structures. The 2005 aerial image also depicts the southeasternmost point of the subject property vacant, with the exception of a mound of discernible debris, possibly abandoned vehicles. The 2008 aerial image shows the same area without the mound; however, signs of coastal erosion are visible, as two major accumulations of water are discernible in the vicinity.

The 2008 aerial image depicts the southeasternmost point of the subject site (200 feet southeast of the Recycling Center) more eroded than the 2005 aerial image. In addition, the 2014 aerial image depicts a dredged small dock with two docked vessels. In the 2017 aerial image, the scrap metal pile adjacent to the Recycling Center in now visible. The 2019 aerial image depicts the abandoned vehicle piles beginning to accumulate. The 2022 aerial image depicts the Yap State Public Library building demolished as compared to the 2019 aerial image which depicts the structure standing.

No RECs were identified based on the historical review.

4.2 ADJOINING PROPERTIES AND SURROUNDING AREA

The 1976 aerial photograph presents a portion of the adjoining properties and surrounding properties to consist of mostly undeveloped wooded land to the north, west, and south of the road portion of the subject property, with the exception of small structures to the south of the road. The port portion of the subject property consists of ocean to the north, east and south. Adjacent to the road are multiple structures visible, including the structure currently used by ESA Bay View hotel and wholesale, a feature where present-day Pine Bar and Grill restaurant stands, the Yap Living Museum, and other residential structures.

No historical offsite sources of concern were identified.

4.3 PREVIOUSLY PREPARED ENVIRONMENTAL REPORTS

AECOM inquired about any existing environmental reports associated with the subject property from Mr. Mautaman, but no response was received.

5. Database and Records Review

5.1 USER-PROVIDED INFORMATION

Section 6 of ASTM E1527-21 states that certain tasks, which will help to determine the possibility of RECs associated with the subject property, are generally conducted by the Phase I ESA report user. This includes the following: reviewing title records for environmental liens or activity and land use limitations and considering awareness of any specialized knowledge (e.g., information about previous ownership or environmental litigation), experience related to RECs at the subject property, or significant reduction in the purchase price of the subject property. Per the agreed scope-of-work, information related to these

items should be provided by the Phase I ESA report user to AECOM. To assist the user in gathering information that may be material to identifying RECs, AECOM has provided the Client (the users) with the User Questionnaire from ASTM E1527-21; however, at this time the completed form has not been returned for inclusion in this report. This data gap is not expected to represent a significant limitation to this investigation based on other documentation reviewed as part of the Phase I ESA.

5.2 LAND TITLE AND JUDICIAL RECORDS FOR ENVIRONMENTAL LIENS AND ACTIVITY AND USE LIMITATIONS

Information pertaining to environmental liens or activity and use limitation was not provided to AECOM by the user (i.e., the client), nor was AECOM contracted to obtain information pertaining to environmental liens or activity and use limitations. In addition, information regarding Yap was not available from standard resources that search various government databases, such as Environmental Data Resources, therefore, information regarding deed restrictions or activity and use limitations due to release of a hazardous material was not reasonably ascertainable during the timeframe of this assessment. This is not expected to represent a significant limitation to the investigation based on other documentation reviewed as part of this investigation.

5.3 DATABASE INFORMATION

A comprehensive review of federal, tribal, state, and local government records was not practical because coverage for the Federated States of Micronesia was not available from standard resources that search various government databases, such as EDR. In lieu of EDR, AECOM reviewed individual databases for potential environmental concerns within or around the subject property. These databases are discussed in Section 5.5.

5.4 VAPOR ENCROACHMENT SCREENING

AECOM conducted a Tier 1 VES as part of this assessment. This screening was conducted in general accordance with ASTM E2600-15 (ASTM 2015). The objective of the VES was to evaluate whether:

1. A VEC exists.
2. Is likely to exist.
3. Cannot be ruled out.
4. Can be ruled out because it does not exist or is not likely to exist.

5.4.1 Subject Property

As discussed in Section 2.3.3, numerous 55-gallon drums containing petroleum products were observed around the port area of the subject property during the site visit. Evidence of leaks from the drums were present including stained soil and pavement, stressed vegetation, and petroleum odors. In particular, the area of stained soil (estimated to be 20 square feet) to the northeast of the former tuna processing facility building is a VEC. The drums around and above the stained soil were completely empty and corroded and the soil had a distinct petroleum odor. Vapor encroachment would likely be a concern if a structure were to be constructed over the area in the future.

Extensive oil staining on the pavement within the Division of Sea Transportation maintenance shop is considered a VEC. The staining covers an area of approximately 200 square feet and is suspected to have resulted from several years of leaks and spills based on the extent and weathered appearance of the stains. Since the pavement is not regularly cleaned, petroleum hydrocarbons have likely infiltrated the concrete and impacted underlying soil. A VEC may exist should a structure be constructed on the concrete or directly on the underlying soil (i.e., the existing pavement is first removed) in the future.

The Vital PetroCorp underground fuel pipeline, which runs from the port area of the subject property to the Vital PetroCorp fuel farm, is also considered a potential VEC. As previously discussed, documentation of pressure testing and other leak detection was not available for review. The pipeline is used to transport gasoline, which contains shorter chain hydrocarbons that are more volatile and a greater vapor concern. Subsurface releases from the pipeline may represent a VEC because: (1) the pipeline is used to transport fuels (e.g., gasoline) with shorter carbon ranges that are more volatile and (2) the majority of the port area of the subject property consists of fill soils (gravel, rocks, etc.) that are less restrictive to vapor migration.

5.4.2 Off-site

A site-specific environmental database report was not available for this subject site. However, to conduct the VES of the nearby area, AECOM utilized information collected during its site visit and review of previously prepared environmental reports to identify the following two types of sites:

1. Offsite properties that are impacted by chlorinated volatile organic compounds and/or semivolatile organic compounds and are located within approximately 1,750 feet of the subject property.
2. Offsite properties that are impacted by petroleum hydrocarbons and are located within approximately 525 feet of the subject property.

Neither of these types of sites are present around the subject property within the specified distances.

5.5 AGENCY FILE REVIEW

5.5.1 Local

Information pertaining to the subject property was not available from the local, county, and state levels.

5.5.2 County

Information pertaining to the subject property was not available from the local, county, and state levels.

5.5.3 State

Information pertaining to the subject property was not available from the local, county, and state levels.

5.5.4 Federal

AECOM searched the U.S. Environmental Protection Agency's Envirofacts (EPA 2022) and Superfund Enterprise Management System (SEMS) (EPA 2023) online databases. The SEMS database replaced the Comprehensive Environmental Response, Compensation and Liability Act Information System (CERCLIS) which has since been retired. SEMS includes the same data fields and content as CERCLIS. The Envirofacts database retrieves information obtained from 17 national systems, including the CERCLIS, Superfund program (National Priorities List sites), hazardous waste sites, and potentially hazardous waste sites. The Federated States of Micronesia are not included in either database.

5.6 NON-ASTM CONCERNS

Per- and polyfluoroalkyl substances (PFAS), asbestos, lead-based paint (LBP), UXO, and radon are not included in the Phase I ESA methodology specified in ASTM E1527-21 but are included in AECOM's scope of work. The presence or absence of these materials is described in this section.

5.6.1 Per- and Polyfluoroalkyl Substances

During the site visit of the Yap State Fire Department, which adjoins the road portion of the subject property around Chamorro Bay, AECOM observed approximately 40, 5-gallon plastic containers of Ansulite, a 6 percent aqueous film-forming foam concentrate (Figure 4). The containers were on the lawn on the rear (north side) of the fire station building. Two containers had small cracks. Mr. Choay, Yap State Fire Lieutenant, indicated that the containers were expired and were being temporarily stored pending proper disposal. The duration of the storage of such containers was not identified during the site visit. Furthermore, Mr. Choay was unaware of any leaks or spills from the containers. Mr. Choay also indicated that there has been no occasion necessitating the use of the foam throughout his tenure of five years with the fire department. Based on this information, the presence of per- and polyfluoroalkyl substances at the subject property cannot be ruled out.

5.6.2 Asbestos-Containing Material

Asbestos is a group of naturally occurring fibrous minerals often found in building materials used in the United States until 1980; however, the Federated States of Micronesia rely on Asian imports for building materials, where the standards pertaining to the fabrication of ACMs may differ from the United States.

Historical aerial photos dated 1976 indicate the subject property was already partially developed before 1980 including the Yap State Government and Administration Building and smaller structures in its vicinity. These structures may contain ACM due to the year of their construction.

Furthermore, the 1988 Yap Fishing Harbor Preparation Project report (Federated States of Micronesia 1988), which included design drawings of the YFA buildings, indicated that ceiling and wall cement boards contain asbestos. This indicates that even structures erected post-1980 have the potential to contain asbestos. Because it is not known whether ACM abatement was completed at the subject property, the existence of ACM within the subject property cannot be ruled out.

5.6.3 Lead-Based Paint

LBP was banned from use in the United States in 1978. Many homes built prior to 1978 are likely to contain LBP. The deterioration of LBP from these structures represents a risk if paint chips and dust are inadvertently ingested, particularly by children. Historical aerial photos dated 1976 indicate the subject property was already partially developed. Furthermore, the Federated States of Micronesia rely on Asian imports, where the standards pertaining to the use of LBP may differ from the United States. Based on this information, the presence of LBP at the subject property cannot be ruled out.

5.6.4 Unexploded Ordnance

World War II era MEC and UXO are commonly found throughout Yap. The subject property has been developed since the 1940s including the road around Chamorro Bay and land reclamation to form the majority of the port area in the 1980s. The presence of MEC and UXO within the subject property is therefore not expected because they would have been disturbed during the development of the area.

MEC and UXO are more likely present in marine areas surrounding the subject property. According to Mr. Yow, a 10-foot torpedo was retrieved from the coastline, approximately 0.5 mile southwest of the subject property in May 2023. According to Mr. Yow, WWII era MEC and UXO are commonly found in the waters surrounding Yap. Although the munitions do not represent a REC for the subject property according to the ASTM definition of a REC, future dredging or other construction work that could disturb the ocean floor should account for potential explosive hazards.

5.6.5 Radon

Radon is a naturally occurring radioactive gas that comes from the breakdown of naturally-occurring radioactive elements (such as uranium and thorium) in soils and rocks. As part of the radioactive decay process, radon gas is produced. The gas moves up through the soil to the surface, where it can enter structures through cracks and other holes in the foundation. Radon can accumulate in structures above limestone and could be a concern in Yap.

6. Findings and Opinions

AECOM performed a Phase I ESA of the subject property in conformance with the scope and limitations of ASTM E1527-21 (ASTM 2021), which meets the requirements of Title 40, Code of Federal Regulations (CFR) Part 312 and is intended to constitute all appropriate inquiry for purposes of the landowner liability protections. Any exceptions to, or deletions from, this practice are described in Sections 1.3 through 1.5 of this report.

The following sections summarize the findings of this Phase I ESA and the opinions of the environmental professional.

6.1 RECOGNIZED ENVIRONMENTAL CONDITIONS

Based on the above-described activities, no CRECs or HRECs, were identified in connection with the subject property.

The following on-site RECs were identified during this assessment:

- The release of a suspected petroleum substance from four empty and unlabeled 55-gallon drums near the former tuna processing facility building is a REC, in AECOM's opinion. The approximately 20 square-foot stained area had a petroleum odor and no vegetation was growing within the staining. Furthermore, the empty drums suggest that a significant volume of product may have leaked.
- Extensive oil staining at the Division of Sea Transportation maintenance shop, encompassing an area of approximately 200 square feet, is considered a REC, in AECOM's opinion. Petroleum hydrocarbons have likely leached to underlying soil and entered floor and trench drains.
- The underground fuel pipeline that transports fuel from the port to the PetroCorp fuel farm is present throughout the subject property. It could not be determined during this Phase I ESA whether the pipeline is regularly leak tested, the leak testing methods, and testing results. Based on this lack of information, the pipeline represents a material threat of a potential future release and a REC, in AECOM's opinion.
- Seven fuel tanks previously utilized by the U.S. Coast Guard on the subject property are considered a REC, in AECOM's opinion. The ASTs could only be observed from a distance during the site visit because of overgrown dense vegetation and the surrounding terrain; however, they appeared to be slightly corroded. It could not be determined from interviews whether any fuel remains in the ASTs and abandonment documentation was not available.

- Three piles of metal debris, primarily consisting of abandoned automobiles and automotive parts are present in the salvage yard within the subject property. The piles measured approximately 7,000, 1,500, and 1,300 square feet. Nearby, a deteriorated 20-foot metallic tank marked as "unleaded gas," exhibiting substantial corrosion and perforations, was also identified. The condition of such an abandoned tank may indicate a release of hazardous substances or petroleum products into the surrounding environment. The piles have not been previously investigated, and it is unknown whether metals and other contaminants are present at concentrations that represent a hazard to human or ecological health; therefore, this finding is considered a REC in AECOM's opinion.
- A stockpile of automobile and other equipment batteries at the Recycling Center is a REC, in AECOM's opinion. These batteries were situated on concrete floor atop a substantial pool of liquid, reportedly identified as rainwater by personnel on site. Although no significant floor cracks were observed, various floor drains were observed in the vicinity of the batteries.

The following offsite RECs were identified during this assessment:

- The fuel farm at Vital FSM PetroCorp, is directly adjacent to and south of the subject property. Although the fuel farm does not have any documented releases or spills, the facility is considered a REC for the subject property due to the bulk storage of petroleum products and location directly adjoining the subject property.

Additional investigation of the RECs may be appropriate to detect the presence of hazardous substances or petroleum products.

6.2 CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS

Based on the above-described activities, no CRECs were identified in connection with the subject property.

6.3 HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS

Based on the above-described activities, no HRECs were identified in connection with the subject property.

6.4 VAPOR ENCROACHMENT CONDITIONS

The following VECs were identified during this assessment:

- The petroleum staining observed near four empty 55-gallon drums to the northeast of the former tuna processing facility building is a VEC. The soil had a distinct petroleum odor. Vapor encroachment would likely be a concern if a structure were to be constructed over the area in the future.
- Extensive oil staining on the pavement within the Division of Sea Transportation maintenance shop is considered a VEC. The staining covers an area of approximately 200 square feet and is suspected to have resulted from several years of leaks and spills based on the extent and weathered appearance of the stains. Since the pavement is not regularly cleaned, petroleum hydrocarbons have likely infiltrated the concrete and impacted underlying soil. A VEC may exist should a structure be constructed on the concrete or directly on the underlying soil (i.e., the existing pavement is first removed) in the future.
- The Vital FSM PetroCorp underground fuel pipeline considered a potential VEC. Documentation of pressure testing and other leak detection was not available for review and the pipeline is used to transport gasoline, which contains shorter chain hydrocarbons that are

more volatile and a greater vapor concern. Subsurface releases from the pipeline may represent a VEC because: (1) the pipeline is used to transport fuels (e.g., gasoline) with shorter carbon ranges that are more volatile and (2) the majority of the port area of the subject property consists of fill soils (gravel, rocks, etc.) that are less restrictive to vapor migration.

6.5 DE MINIMIS CONDITIONS

The following DMCs were identified during this assessment:

- A shipping container managed by Waab Transportation Company of unknown origin was observed leaking small quantities of a viscous, yellowish substance. The Port Officer at the Division of Sea Transportation Office was not aware of the contents of the container; however, due to the localized nature of the release, AECOM considers this staining a DMC.
- Four small oil stains (less than 2 square feet each) observed at the YFA maintenance shop. Given the localized nature, AECOM considers this staining a DMC.

6.6 SIGNIFICANT DATA GAPS

ASTM E1527-21 (ASTM 2021) requires the environmental professional document significant data gaps, as well as any exceptions to, or deletions from the ASTM Practice E1527-21. A significant data gap is a data gap that affects the ability of the environmental professional to identify a REC.

The following significant data gaps were identified during this assessment:

- AECOM was unable to observe seven abandoned fuel tanks on the subject property previously utilized by the U.S. Coast Guard. The ASTs could not be visually inspected up close due to the overgrown nature of the surrounding terrain; however, they appeared to be slightly corroded, though no visible holes were observed in any of the ASTs from a distance. Precise abandonment dates and related abandonment documentation was not available. Based on the lack of documentation regarding the abandonment of such fuel tanks, the ASTs are considered a REC. Additional information would likely assist the environmental professional in determining whether a REC or exists.

Additional investigation may be appropriate to detect the presence of hazardous substances or petroleum products.

7. Conclusions

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527-21 of the Yap Seaport, Yap, Federated States of Micronesia, the subject property. Any exceptions to, or deletions from, this practice are described in Section 1.3 of this report. This assessment has revealed the following RECs, CRECs, and/or significant data gaps in connection with the subject property:

The following on-site RECs were identified during this assessment:

- The release of a suspected petroleum substance from four empty and unlabeled 55-gallon drums near the former tuna processing facility building is a REC, in AECOM's opinion. The approximately 20 square foot stained area had a petroleum odor and no vegetation was growing within the staining. Furthermore, the empty drums suggest that a significant volume of product may have leaked.

- Extensive oil staining at the Division of Sea Transportation maintenance shop, encompassing an area of approximately 200 square feet, is considered a REC, in AECOM's opinion. Petroleum hydrocarbons have likely leached to underlying soil and entered floor and trench drains.
- The underground fuel pipeline that transports fuel from the port to the PetroCorp fuel farm is present throughout the subject property. It could not be determined during this Phase I ESA whether the pipeline is regularly leak tested, the leak testing methods, and testing results. Based on this lack of information, the pipeline represents a material threat of a potential future release and a REC, in AECOM's opinion.
- Seven fuel tanks previously utilized by the U.S. Coast Guard on the subject property are considered a REC, in AECOM's opinion. The ASTs could only be observed from a distance during the site visit because of overgrown dense vegetation and the surrounding terrain; however, they appeared to be slightly corroded. It could not be determined from interviews whether any fuel remains in the ASTs and abandonment documentation was not available.
- Three piles of metal debris, primarily consisting of abandoned automobiles and automotive parts are present in the salvage yard within the subject property. The piles measured approximately 7,000, 1,500, and 1,300 square feet. Nearby, a deteriorated 20-foot metallic tank marked as "unleaded gas," exhibiting substantial corrosion and perforations, was also identified. The condition of such an abandoned tank may indicate a release of hazardous substances or petroleum products into the surrounding environment. The piles have not been previously investigated, and it is unknown whether metals and other contaminants are present at concentrations that represent a hazard to human or ecological health; therefore, this finding is considered a REC in AECOM's opinion.
- A stockpile of automobile and other equipment batteries at the Recycling Center is a REC, in AECOM's opinion. These batteries were situated on a concrete floor atop a substantial pool of liquid, reportedly identified as rainwater by personnel on site. Although no significant floor cracks were observed, various floor drains were observed in the vicinity of the batteries.

The following offsite RECs were identified during this assessment:

- The fuel farm, Vital FSM PetroCorp, is directly adjacent to and south of the subject property. Although the fuel farm does not have any documented releases or spills, the facility is considered a REC for the subject property due to the bulk storage of petroleum products and location directly adjoining the subject property.

The following non-ASTM scope concerns were identified during this assessment:

- ACM is likely present in buildings within the subject property based on the fact that many building materials in Yap are imported from Asia where standards pertaining to ACM may differ from the United States.
- LBP is likely present in buildings within the subject property based on the fact that many building materials in Yap are imported from Asia where standards pertaining to LBP may differ from the United States.
- WWII era MEC and UXO are likely present in marine areas adjoining the subject property. Although the munitions do not represent a REC for the subject property according to the ASTM definition of a REC, future dredging or other construction work that could disturb the ocean floor should account for potential explosive hazards.

The following significant data gaps were identified in connection with the subject property:

- AECOM was unable to observe seven abandoned fuel tanks on the subject property previously utilized by the U.S. Coast Guard. The ASTs could not be visually inspected up close due to the overgrown nature of the surrounding terrain; however, they appeared to be slightly corroded, though no visible holes were observed in any of the ASTs from a distance. Precise abandonment dates and related abandonment documentation was not available. Based on the lack of documentation regarding the abandonment of such fuel tanks, the ASTs are considered a REC. Additional information would likely assist the environmental professional in determining whether a REC or exists.

8. Recommendations

Based on the above-described activities, it is AECOM's opinion that an additional environmental assessment is warranted at this time to assess the on-site and off-site concerns.

9. Environmental Professional Statement

Mr. Dustin Goto was the Environmental Professional (EP) for this project. Mr. Goto's EP statement is below, and his resume is provided in Appendix C:

I declare that, to the best of my professional knowledge and belief, I meet the definition of an EP as defined in §312.10 of 40 CFR and that I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Signature:  Date: 5/20/2024

10. References

10.1 PERSONS INTERVIEWED

Choay, Francis. 2023. Yap Fire Department, Fire Lieutenant. Provided information regarding Yap Fire Station operations and 55-gallon containers of foam. July 17.

Falfen, Mary Jane. 2023. Yap Fishing Authority, Assistant General Manager. Provided information regarding Yap Fishing Authority facility and operations. July 14.

Lukan, James. 2023. Waab Transportation Company, General Manager. Provided information regarding Waab Transportation Company operations at the harbor. July 18.

Marbey, Jeff. 2023. Yap State Historic Preservation Office, Chief Officer. Provided information regarding YSHPO activities and information about the subject property. July 17.

Mautaman, Jordan. 2023. Yap State Environmental Protection Agency, Pollution Control Specialist. Provided information regarding EPA involvement in the subject property. July 18.

Moon, Paul. 2023. Ace's Store, Local Businessowner. Provided information regarding surrounding properties and local area history. July 15.

Palemar, Hanson. 2023. Yap Fishing Authority, Assistant General Manager. Provided information regarding Yap Fishing Authority facility and operations. July 14.

Rumwol, John. 2023. Vital FSM Petroleum Corp, Officer in Charge. Provided information regarding operations of FSM PetroCorp. July 17.

Siugwemal, Tino. 2023. Yap Sea Transportation Office, Port Officer. Provided information regarding port operations. July 13.

Sowuth, Joseph. 2023. YCA Rufan's Gas Station, Supervisor. Provided information regarding service station operations. July 15.

Speicher, Harry. 2023. Pacific Lineman Training, President. Provided information regarding transformers in Yap. July 15.

Yow, Constantine. 2023. Yap Fishing Authority, General Manager. Provided Yap and subject property history as well information regarding YFA operations and engineering drawings. July 14.

10.2 AGENCIES CONTACTED

Waab Transportation Company. 2023. Lukan, James, General Manager. Contacted to provide more information regarding drums in tuna canning facility and leaking shipping container. July 20.

Yap Fire Department. 2023. Choay, Francis Fire Lieutenant. Contacted to ask for more additional information with regards to the department operations. July 20.

Yap Sea Transportation Office. 2023. Siugwemal, Tino and Ytimai, Peter, Port Officer and Assistant Port Officer. Provided information regarding port operations July 14.

Yap State Historic Preservation Office. 2023. Marbey, Jeff, Chief Officer. Provided a book with background information about Yapese culture and society. July 16.

10.3 DOCUMENTS REVIEWED

ASTM International (ASTM). 2015. *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*. E2600-15. West Conshohocken, PA.

———. 2021. *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. E1527-21. West Conshohocken, PA.

Boecker, Rebecca Reid. 1993. *Yap State History*.

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Government of the Federated States of Micronesia. 2007. *Federated States of Micronesia National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants*. Food and Agriculture Organization of the United Nations. https://faolex.fao.org/docs/pdf/mic217847.pdf.

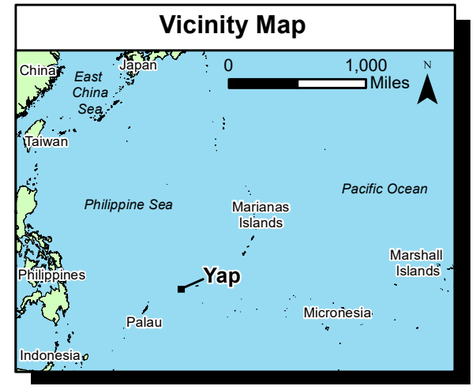
Haga, M., O. Hanada, N. Takahashi, N. Kusakabe, H. Gotoh, Y. Maeno, and M. Takezawa. 2012. "Development and Infrastructure of the Federated States of Micronesia." In *WIT Transactions on Ecology and The Environment*, 166:169–79. WIT Press. doi.org/10.2495/ISLANDS120141.

Oliver, Douglas L. 1989. *The Pacific Islands*. Third Edition. Honolulu, HI: University of Hawaii Press.

Rouse, Joseph D. 2015. "Development of the Environmentally Sustainable Methods for Treatment of Domestic Wastewater and Handling of Sewage Sludge on Yap Island." *Sustainability* 7: 12452–64. https://doi.org/0.3390/su70912452.

Shade, Patricia J., Stephen S. Anthony, and Kiyoshi J. Takasaki. 1992. "Ground-Water Resources Reconnaissance of the Yap Main Islands, Federated States of Micronesia." Water-Resources Investigations Report 90-4074. https://doi.org/10.3133/wri904074.

Figures



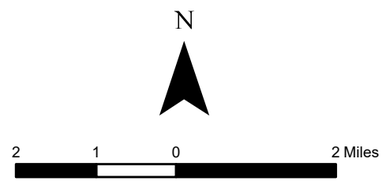
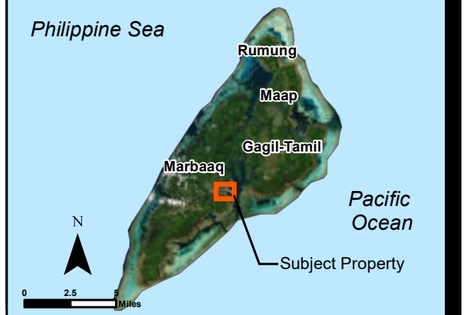


Figure 1
General Location Map
Environmental Site Assessment
Yap Port, Colonia, Yap Island,
Federated States of Micronesia

Location Map



Legend

Subject Property Boundary

Notes

1. Base Map: Google Earth 2023, downloaded 10/19/2023
2. Map Projection: WGS 1984 Web Mercator Auxiliary Sphere

N

0 210 420 840 Feet

Figure 2
Site Location Map
Environmental Site Assessment
Yap Port, Colonia, Yap Island,
Federated States of Micronesia

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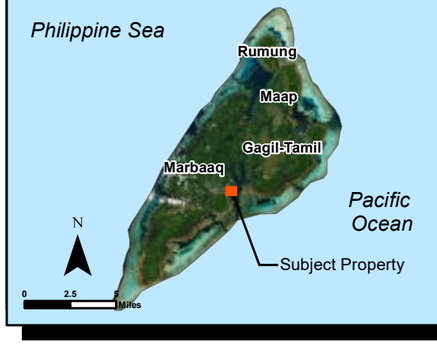
Location Map



Legend

- Fenced Area
- Subject Property Boundaries
- Buried Fuel Line (approx.)

Notes

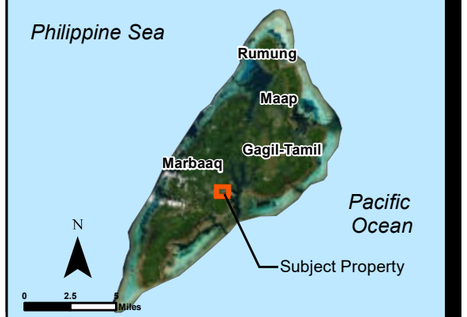
1. Base Map: Google Earth 2023, downloaded 10/19/2023
2. Map Projection: WGS 1984 Web Mercator Auxiliary Sphere

N

0 80 160 320 Feet

Figure 3
Site Features - Port Area
Environmental Site Assessment
Yap Port, Colonia, Yap Island,
Federated States of Micronesia

Location Map



Legend

- Subject Property Boundaries
- Buried Fuel Line (approx.)

Notes

1. Base Map: Google Earth 2023, downloaded 10/19/2023
2. Map Projection: WGS 1984 Web Mercator Auxiliary Sphere

N

0 140 280 560 Feet

Figure 4
Site Features - Road Area
Environmental Site Assessment
Yap Port, Colonia, Yap Island,
Federated States of Micronesia

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Appendix A:
Photolog

Photo 1: Thirty-eight 55-gallon metal drums observed in a room near the side entrance of the former tuna canning facility.

Photo 2: Close-up view of one of the drums leaking de minimis amounts of oily substance on the concrete floor.

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Photo 3: Four empty 55-gallon metal drums observed near the northeastern corner of the former tuna canning facility. Note stressed vegetation surrounding the drums. Photo is looking northwest.

Photo 4: Close-up view of one of the four drums suspected to have leaked oily contents. Distinct petroleum odor noted emanating from dark and moist soil.

Photo 5: Overview of the Division of Sea Transportation maintenance shop. Photo is looking west.

Photo 6: Closer look at three 55-gallon drums containing hydraulic oil. Note: Extensive staining observed on the concrete surface. This type of staining was observed throughout the premises. Photo is looking north.

Photo 7: Closer look at other area within the main port maintenance shop displaying concrete staining. Photo is looking northeast.

Photo 8: Runoff from washing activities at the maintenance shop heading toward a drainage channel nearby. Photo is looking northwest.

Photo 9: Drainage channel heading toward ocean. Photo is looking north.

Photo 10: Close-up view of shipping container managed by Waab Transportation Company of unknown origin observed leaking small quantities of a viscous, yellowish substance.

Photo 11: Storm drain channel which encircles the gated area within the port and leads toward the ocean. Photo is looking south.

Photo 12: Overview of the former tuna canning facility's northeast corner. Photo is looking southwest.

Photo 13: Overview of the front side of the Waab Transportation Company structure used as an office. The rear end is used as a warehouse. The building was under renovation during site visit. Photo is looking south.

Photo 14: Overview of the main wharf at the seaport with the berths visible on the left side. Note: Natural water pooling is visible. Photo is looking southeast.

Photo 15: Overview of a lead-acid battery pile located inside the Recycling Center observed sitting on a large puddle of rainwater. Approximately 200–300 batteries were estimated. Photo taken standing on top of floor drain.

Photo 16: Overview of 10,000-liter diesel AST located at the YFA facility. Note: A concrete containment basin sits beneath the AST. Photo is looking south.

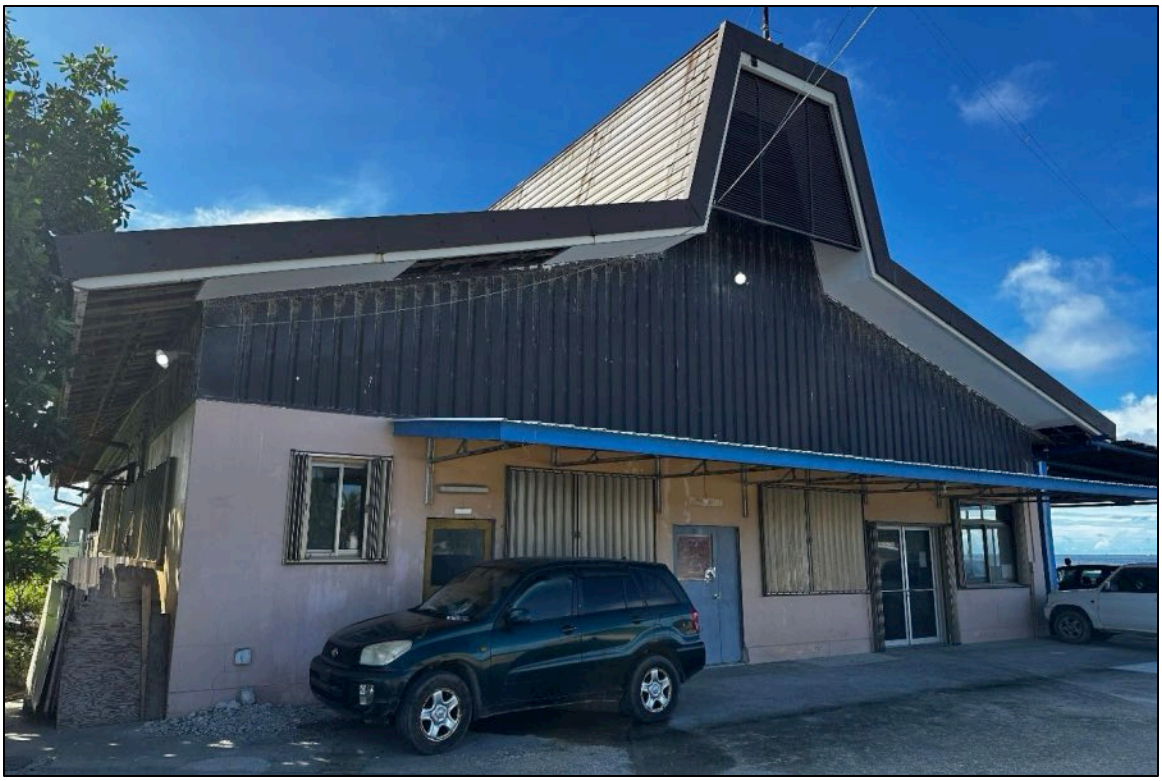

Photo 17: Overview of the office building at the YFA premises. Photo is looking east.

Photo 18: Overview of an approximately 1,500-square-foot scrap metal pile located adjacent to the Recycling Center. Photo is looking east.

Photo 19: Overview of demolition debris mound located in the southeasternmost point of the subject property. A portion of the mound was observed eroding into the ocean. Photo is looking southeast.

Photo 20: Overview of wastewater treatment plant located near the eastern boundary of the subject site. Photo is looking east.

Photo 21: Overview of one of the three non-contiguous abandoned vehicle piles. Photo is looking north.

Photo 22: Close-up view of empty, deteriorated AST observed adjacent to the abandoned vehicle piles. Photo is looking west.

Photo 23: Zoomed-in photograph of the seven abandoned former U.S. Coast Guard fuel tanks. Photo is looking southeast.

Photo 24: Zoomed-in photograph of the seven abandoned former U.S. Coast Guard fuel tanks. Photo is looking west.

Photo 25: Overview of the northern border of the subject property. Note: A buried fuel line marking exists on the street (denoted by red arrow). Photo is looking northwest.

Photo 26: Overview of YCA Rufan Gas Station and its proximity to the ocean. Photo is looking southwest.

Photo 27: Overview of two steel ASTs containing diesel (3,700 gallons) and unleaded gasoline (4,010 gallons) in a concrete secondary containment observed at YCA Rufan Gas Station. Photo is looking north.

Photo 28: Overview of 320-gallon kerosene AST lacking secondary containment. Photo is looking east.

Photo 29: YCA structure, which borders the subject property to the north. Photo is looking northeast.

Photo 30: Small overpass leading to FSM Petroleum Corporation. Note: The subject property road is on the right and the fuel line is on the left. Photo is looking southwest.

Photo 31: Subject property road. Photo looking northwest.

Photo 32: Close-up view of 55-gallon Ansulite buckets sitting on the lawn at the rear end of the fire department building.

Photo 33: View of bulk fuel storage from outside the secured gates of FSM Petroleum Corporation. Photo is looking east.

Photo 34: Overview of the western border of the subject property road. Photo is looking west.

Photo 35: Overview of northern boundary of the subject property, the Yap Living Museum. Photo is looking north.

Photo 36: Southeasternmost point with an overview of the eastern border—the Pacific Ocean. Photo is looking northeast.

Photo 37: Overview of the southern and southwestern border—ocean, and beyond—FSM Petroleum Corporation and undeveloped land. Photo is looking southwest.

Appendix B:
Supporting Documentation

Appendix B.1:
Historical Aerial Photographs and Maps

Map 1: 1983 topographic map of Colonia.
*red outline denotes approximate area of subject property.

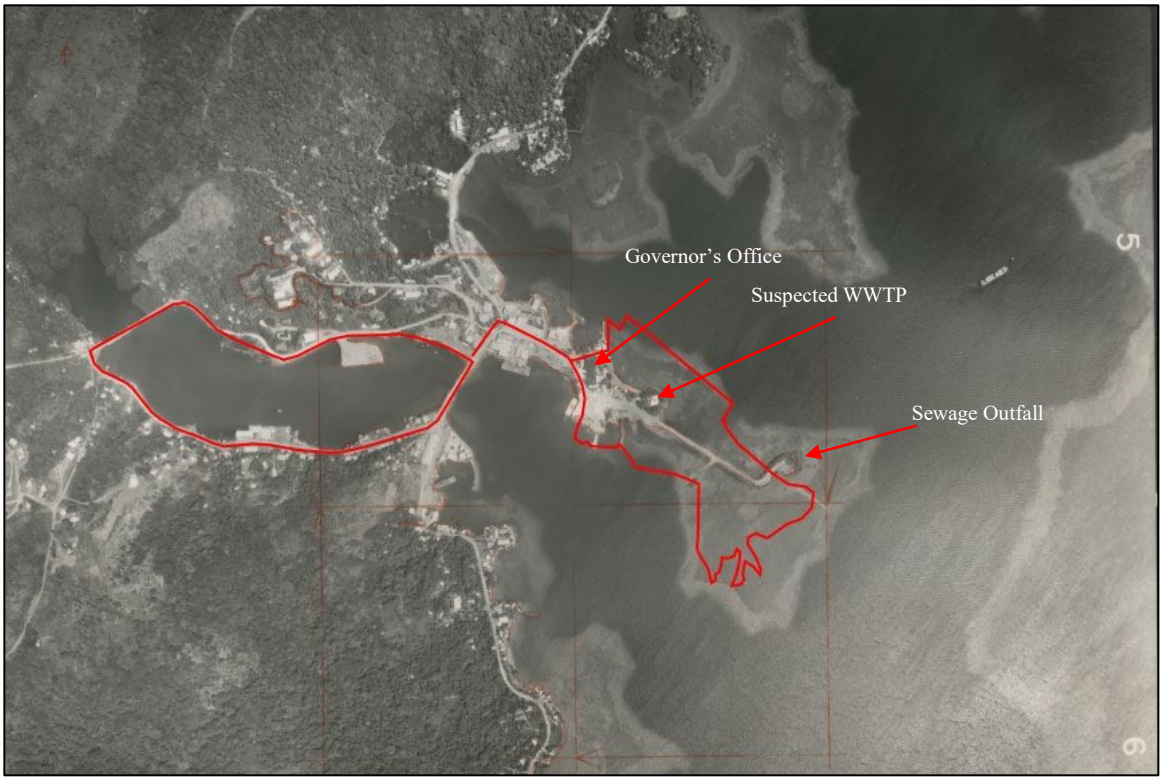

Photo 1: 1976 – Subject property, Colonia. The majority of the subject property in the port area is undeveloped, with the exception of the governor's office and other features in the vicinity, including the suspected WWTP and its sewage outfall.

Photo 2: 2005 – Subject property, Colonia. The subject property appears fully developed. The wharf inside the gated area has been filled. The maintenance shop, YFA building, recycling center and tuna canning building are denoted by the red arrows. The majority of the former sewage outfall is now underwater.

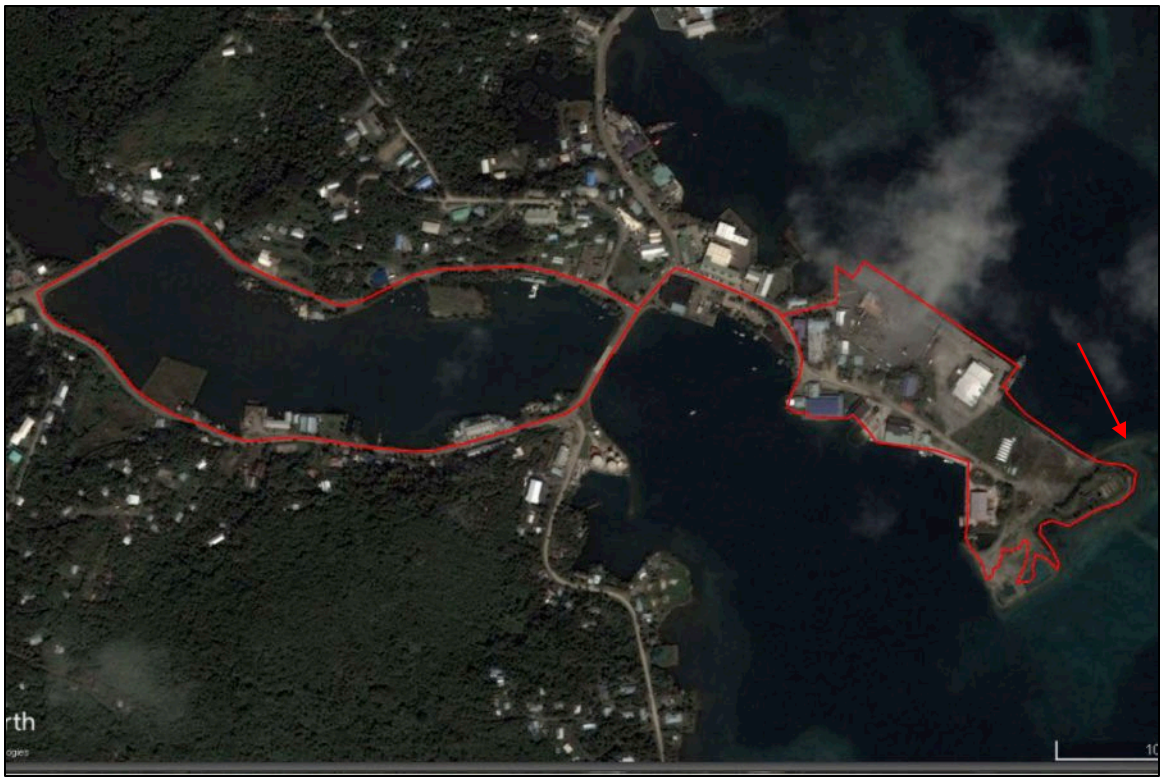

Photo 3: 2008 –Subject property, Colonia. The subject property looks generally the same from the last photo. Some portions of the easternmost point of the peninsula are now underwater. Red arrow points to the underwater strip of land associated with former sewage outfall

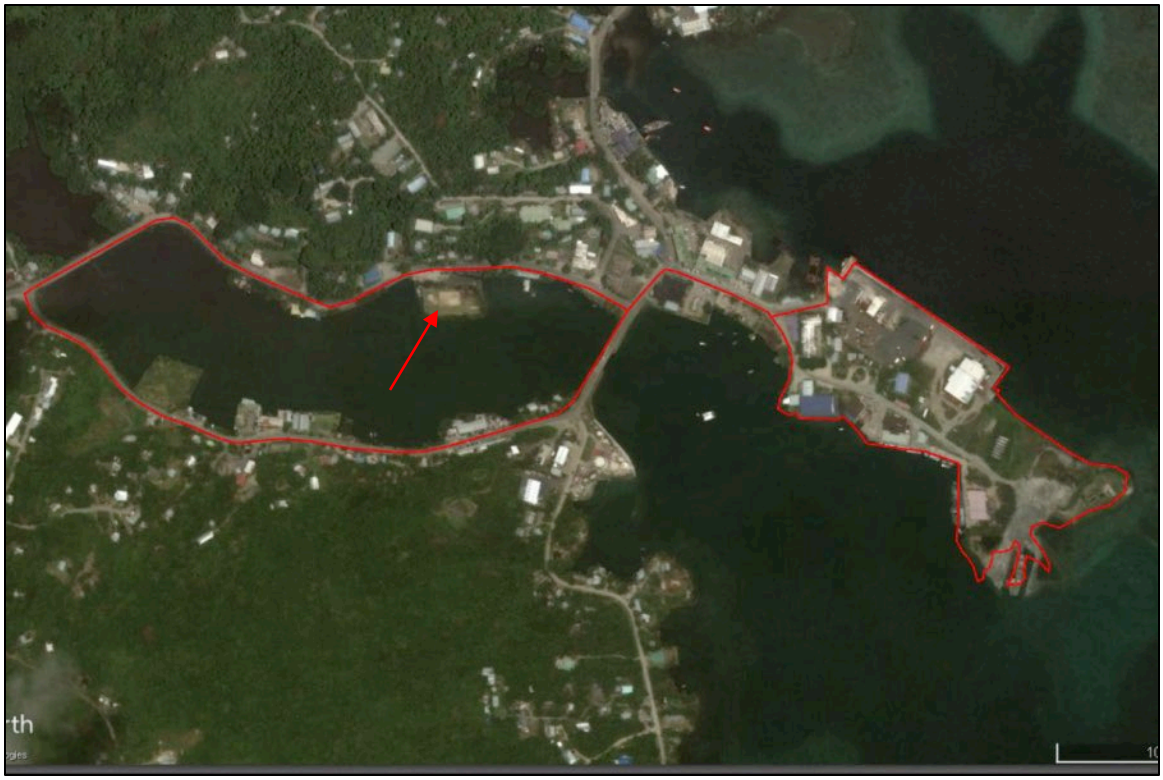

Photo 4: 2013 – Subject property, Colonia. The subject property looks generally the same from the last photo. There appears to be more shipping containers stored inside the gated area. There appears to be development in the adjacent area to the road denoted by the red arrow.

Photo 5: 2014 – Subject property, Colonia. The subject property looks generally the same from the last photo. The southeasternmost region of the subject property appears to be eroding. Red arrow points to region underwater.

Photo 6: 2016 – Subject property, Colonia. The subject property looks generally the same from the last photo.

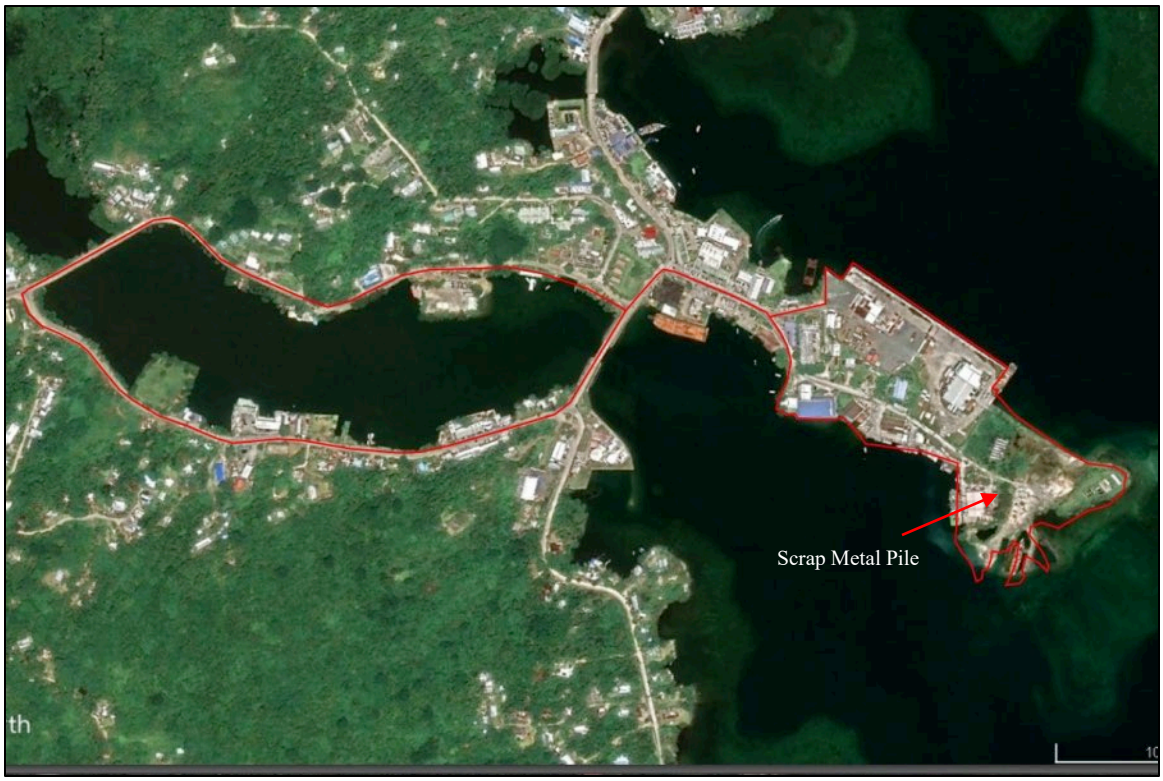

Photo 7: 2017 – Subject property, Colonia. The scrap metal pile adjacent to recycling center is now visible. Both piles are denoted by the red arrows.

Photo 8: 2018 – Subject property, Colonia. The subject property looks generally the same from the last photo.

Photo 9: 2019 – Subject property, Colonia. The subject property looks generally the same from the last photo. The abandoned vehicle piles are beginning to accumulate (denoted by red arrow).

Photo 10: 2022 – Subject property, Colonia. The subject property looks generally the same from the last photo. Moe abandoned vehicles appear to be accumulated. Construction and demolition (C&D) debris pile is now visible (both areas denoted by red arrow).

Appendix B.2:
Interviews

Yap/Tinian EBS Interview Questions

Date/time of interview 7/13/23
Name Tino Yiimaa Sugwemal
Company/Title Aton navigate and Port officer. Sea transportation
Association with property since 2013
Phone number [redacted]
Email Address [redacted]

Site Conditions

Commonly known or reasonably ascertainable information about the subject property.

Do you have any specialized knowledge or experience related to the *property* or nearby properties?

Are you aware of any information about the property that would indicate releases or threatened releases? N/A

a) Do you know the current use and/or activities being conducted at the property?
load off cargos - Any companies handling cargo they have to make sure they are complying w/ port regulations

b) Do you know the past uses or owners of the property?
- Government controls half
- Water USED to be the operations / currently operates over half

c) Do you know of specific chemicals that are present or once were present at the property?
None

d) Do you know of spills or other chemical releases that have taken place at the property?
None

e) Do you know of any environmental cleanups that have taken place at the property?
none

f) Do you know of any current or former underground storage tanks that may be at the property? None

Photos pending

Aton/Port officer: Tino Sugwemal

TS 1

None

SPECIFIC QUESTIONS

Hazardous Materials/Petroleum Products/Wastes

Current Hazardous Substance and/or Petroleum Product use

a. What types of hazardous substances and petroleum products are used, stored, and disposed of on the Property?

b. Is there any storage tanks (ASTs/USTs) located on the property? If so:

   i. What is the tank capacity did not know

   ii. What is being stored in the tank NA

   iii. What is the tank constructed of (steel/fiberglass) and is it single/double walled NA

   iv. Is regular tightness testing done and has there been any evidence of a leak or release NA

   v. Does it have a leak detection system and overfill protection NA

   vi. Does it have secondary containment NA

c. Are there any drums or storage containers greater than 5 gallons present at the site? If so:
   i. What is the quantity stored: Some ships leave and leave theyre empty drums.
   ii. What material is being stored: No Inventory from because that is no place to store filled drums
   iii. Where is the material/container being stored: waiab would know more about the drums
   iv. Is there secondary containment:
   v. Are there floor drains nearby:

d. Are there any regulated wastes at the site (PCB, Used Oil, Hazardous waste, biomedical, etc.)? If so: Not aware
   i. What type of waste: Norm
   ii. How often is it disposed:
   iii. Are there any EPA/State permits for the waste:
   iv. Who provides disposal of the waste (contractor)
   v. Are there disposal manifests available:
   vi. Where is the material/container being stored:
   vii. Is there secondary containment:
   viii. Are there floor drains nearby:

waiab
-2609350

e. PCBs - Are there any PCBs in use or equipment (electrical/hydraulic) known or likely to contain PCBs? If so: Not aware
   i. What type of equipment:
   ii. Is there a PCB label on the equipment:
   iii. Any evidence/history of leakage:
   iv. Has past testing been done:
   v. What is the date of Installation/owner/manufacturer information:

Drains, Sumps, Pits, Ponds, Lagoons

f. Are there any known drains or sumps at the site? If so: None
   i. Where does the drain connect to _____
   ii. How are the fluids that enter the drain disposed of _____
g. Are there any pits, ponds, or lagoons on the property or on adjoining properties?
   _____

Solid Waste

h. [illegible]
i. Where solid waste disposed of [illegible]:
   _____

Waste Water

j. Storm Water
   i. How is storm water captured or handled at the site (culverts, drains, ditches, etc.)? _____
   ii. Where is storm water discharged to _____
   iii. Are there open bodies of water nearby _____
   iv. Any known events of visible sheen on the water _____
   v. Is standing or ponding water present _____
k. Sanitary and Industrial Waste Water Disposal
   i. What is the current and former means of sewage and wastewater disposal _____
   ii. Where does sanitary waste water discharge to _____
   iii. Where does industrial waste water discharge to
   iv. If present, where does cooling water discha ge to _____
   v. Are all discharges permitted _____

vi. Where there any former discharge locations (historic discharge locations different from the present)

_____

vii. How old are these systems_____

l. Potable Water

i. What are the sources of drinking water for the site_____

ii. Where are they located_____

m. Wells/Dry Wells

i. Are there wells present at the site (dry, irrigation, injection, monitoring, abandoned, or other)

_____

OTHER

1. Environmental cleanup liens that are filed or recorded against the site

   Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

   none

2. Activity and land use limitations (AULs) that are in place on the site or that have been filed

   Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

   none

3. The degree of obviousness of the presence of likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation.

   As the user of this Phase I, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

   no

4. (Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*?) NA

   a. Do you know of any previous history of sale of this property?

   _____

NOTES

YSPS provids electricity for whole island.

Maintenance Shop is operated by Waiab to repair forklifts that are down

Two weatherized drums inside tuna packing are empty But they were full

PFSO would know

Tuna building used to be part of YFA

Yap/Tinian EBS Interview Questions

Date/time of interview 7/11/2025 0930
Name Maryjane Falfen / Hinson Palemar
Company/Title Yap Fishing authority / 3 YRS / 2016
Association with property assistant general manager / Supervisor
Phone number [redacted]
Email Address [redacted]
Both Building

Site Conditions

Commonly known or reasonably ascertainable information about the subject property.

Do you have any specialized knowledge or experience related to the *property* or nearby properties?

Are you aware of any information about the property that would indicate releases or threatened releases? possible Diesel leak, Shop supervisor mention last year, all in containment, repair

a) Do you know the current use and/or activities being conducted at the property?
Maintnce Shop, Sell ice, make ice

b) Do you know the past uses or owners of the property?
always been YFA

c) Do you know of specific chemicals that are present or once were present at the property?
Drums unsure / Diesel from gas station to Ship-plastic from other Ships, bait seller, use for equipment

d) Do you know of spills or other chemical releases that have taken place at the property?
Diesel Tank leak from pipe, into ground, Dug up, was repaired

e) Do you know of any environmental cleanups that have taken place at the property?
N/A

f) Do you know of any current or former underground storage tanks that may be at the property?

[illegible] N/A

[illegible] have knowledge of the property?

Himself

[illegible] N/A

SPECIFIC QUESTIONS

Hazardous Materials/Petroleum Products/Wastes
Current Hazardous Substance and/or Petroleum Product use

a. What types of hazardous substances and petroleum products are used, stored, and disposed of on the Property?

b. Is there any storage tanks (ASTs/USTs) located on the property? If so:
   i. What is the tank capacity 10,000 lbs
   ii. What is being stored in the tank Diesel
   iii. What is the tank constructed of (steel/fiberglass) and is it single/double walled Steel inspect before fuel pump off
   iv. Is regular tightness testing done and has there been any evidence of a leak or release
   v. Does it have a leak detection system and overfill protection
   vi. Does it have secondary containment

c. Are there any drums or storage containers greater than 5 gallons present at the site? If so: yes,
   i. What is the quantity stored unsure
   ii. What material is being stored unsure
   iii. Where is the material/container being stored maintenance shop
   iv. Is there secondary containment —
   v. Are there floor drains nearby — yes,

d. Are there any regulated wastes at the site (PCB, Used Oil, Hazardous waste, biomedical, etc.)? If so: no
   i. What type of waste NA
   ii. How often is it disposed NA
   iii. Are there any EPA/State permits for the waste NA
   iv. Who provides disposal of the waste (contractor) NA
   v. Are there disposal manifests available NA
   vi. Where is the material/container being stored NA
   vii. Is there secondary containment NA
   viii. Are there floor drains nearby NA

e. PCBs - Are there any PCBs in use or equipment (electrical/hydraulic) known or likely to contain PCBs? If so: NO
   i. What type of equipment
   ii. Is there a PCB label on the equipment
   iii. Any evidence/history of leakage
   iv. Has past testing been done
   v. What is the date of Installation/owner/manufacturer information

Drains, Sumps, Pits, Ponds, Lagoons   was not aware

f. Are there any known drains or sumps at the site? If so:
   i. Where does the drain connect to________________________________
   ii. How are the fluids that enter the drain disposed of________________________________

g. Are there any pits, ponds, or lagoons on the property or on adjoining properties?
____

Solid Waste

h. Are there any areas that are [illegible] or graded [illegible] that [illegible] suggest [illegible] debris, [illegible], or other solid waste disposal?
____

i. Where is solid waste disposed of currently at the site
____

Waste Water

j. Storm Water
   i. How is storm water captured or handled at the site (culverts, drains, ditches, etc.)? ________________________________
   ii. Where is storm water discharged to________________________________
   iii. Are there open bodies of water nearby________________________________
   iv. Any known events of visible sheen on the water________________________________
   v. Is standing or ponding water present

k. Sanitary and Industrial W ste Wa er Disposal
   i. What is the current and former means of sew[illegible] disposal________________________________
   ii. Where does sanitary waste water discharge to________________________________
   iii. Where does industrial waste water discharge to ________________________________
   iv. If present, where does cooling water discharge to________________________________
   v. Are all discharges permitted________________________________

vi. Where there any former discharge locations (historic discharge locations different from the present)

_____

vii. How old are these systems_____

l. Potable Water

i. What are the sources of drinking water for the site YSIC

ii. Where are they located_____

m. Wells/Dry Wells

i. Are there wells present at the site (dry, irrigation, injection, monitoring, abandoned, or other)

N/A

OTHER

1. Environmental cleanup liens that are filed or recorded against the site

Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

_____ none _____

Activity and land use limitations (AULs) that are in place on the site or that have been filed

Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

_____ none _____

_____ . _____

l The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation

As the user of this Phase I, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

_____ none _____ _____

_____

4 [illegible] reflect the fair market value of [illegible]

[illegible] property?

NOTES

Boat maint. 3 Fishing boats

Shack next to town - ~~Erod~~ cable

Construction of boat launch -

No new EIL comes for construction

Post uses [redacted]

Documents - ?

Waste oil goes in [redacted] - goes to ERA

Tank 16,000 Litres

Pumps are from 1986

typhoon 2004, many have been replaced

transformer replaced 2 years ago

Building Demolished was community Clinic

Subject Site

Yap/Tinian EBS Interview Questions

Date/time of interview 7/14/23 10:25
Name Constantine Yalu
Company/Title Yap Fisheries Authorities
Association with property General Manger
Phone number [redacted]
Email Address [redacted]

Site Conditions

Commonly known or reasonably ascertainable information about the subject property.

Do you have any specialized knowledge or experience related to the *property* or nearby properties?

Are you aware of any information about the property that would indicate releases or threatened releases? None only large boats or barge in the 90's and early 2000's

a) Do you know the current use and/or activities being conducted at the property?
Fisheries, WWTP, recycling center

b) Do you know the past uses or owners of the property?
From early 1980's YFA has existed. "Branched" out from gavement.

c) Do you know of specific chemicals that are present or once were present at the property?
CC condor: used to make pavement

d) Do you know of spills or other chemical releases that have taken place at the property?
None, ~~other than~~ Mary Jane would know more.

e) Do you know of any environmental cleanups that have taken place at the property?
None, ~~[illegible]~~

f) Do you know of any current or former underground storage tanks that may be at the property? None

C-11

SPECIFIC QUESTIONS

Hazardous Materials/Petroleum Products/Wastes

Current Hazardous Substance and/or Petroleum Product use

a. What types of hazardous substances and petroleum products are used, stored, and disposed of on the Property?
   SS condex → popular chemical used on island to make pavement. Its white (looks like milk)

b. Is there any storage tanks (ASTs/USTs) located on the property? If so:
   i. What is the tank capacity No USTs on/in port area to best of his knowledge.
   ii. What is being stored in the tank N/A
   iii. What is the tank constructed of (steel/fiberglass) and is it single/double walled N/A
   iv. Is regular tightness testing done and has there been any evidence of a leak or release N/A
   v. Does it have a leak detection system and overfill protection N/A
   vi. Does it have secondary containment N/A

c. Are there any drums or storage containers greater than 5 gallons present at the site? If so: Yes in warehouse and shop
   i. What is the quantity stored Refered to Henson
   ii. What material is being stored Refered to Henson
   iii. Where is the material/container being stored same
   iv. Is there secondary containment same
   v. Are there floor drains nearby a couple

d. Are there any regulated wastes at the site (PCB, Used Oil, Hazardous waste, biomedical, etc.)? If so:
   i. What type of waste None
   ii. How often is it disposed
   iii. Are there any EPA/State permits for the waste
   iv. Who provides disposal of the waste (contractor)
   v. Are there disposal manifests available NA
   vi. Where is the material/container being stored
   vii. Is there secondary containment
   viii. Are there floor drains nearby

e. PCBs - Are there any PCBs in use or equipment (electrical/hydraulic) known or likely to contain PCBs? If so:
   i. What type of equipment
   ii. Is there a PCB label on the equipment NA
   iii. Any evidence/history of leakage
   iv. Has past testing been done
   v. What is the date of Installation/owner/manufacturer information

Drains, Sumps, Pits, Ponds, Lagoons

f. Are there any known drains or sumps at the site? If so:
   i. Where does the drain connect to common water sewer line
   ii. How are the fluids that enter the drain disposed of WWTP

g. Are there any pits, ponds, or lagoons on the property or on adjoining properties? none

Solid Waste

h. Are there any areas that are filled or graded by non-natural causes that may suggest fill with construction debris, demolition debris or other solid waste disposal? none

i. Where is solid waste disposed of currently at the site Plant [illegible] solid [illegible] and waste

Waste Water

j. Storm Water
   i. How is storm water captured or handled at the site (culverts, drains, ditches, etc.)? drains
   ii. Where is storm water discharged to WWTP
   iii. Are there open bodies of water nearby yes
   iv. Any known events of visible sheen on the water no
   v. Is standing or ponding water present no

k. Sanitary and Industrial Waste Water Disposal
   i. What is the current and former means of sewage and wastewater disposal WWTP
   ii. Where does sanitary waste water discharge to__________
   iii. Where does industrial waste water discharge to__________
   iv. If present, where does cooling water discharge to__________
   v. Are all discharges permitted__________

vi. Where there any former discharge locations (historic discharge locations different from the present)

_____

vii. How old are these systems_____

l. Potable Water

i. What are the sources of drinking water for the site_____

ii. Where are they located_____

m. Wells/Dry Wells

i. Are there wells present at the site (dry, irrigation, injection, monitoring, abandoned, or other)

none

OTHER

1. Environmental cleanup liens that are filed or recorded against the site

   Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

   none

2. Activity and land use limitations (AULs) that are in place on the site or that have been filed

   Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

   none

3. The degree of obviousness of the presence of likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation.

   As the user of this Phase I, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

4. (Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*?)

   a. Do you know of any previous history of sale of this property?

NOTES

Some torpedo... a month ago in channel (10 foot) -> FSM notified

Couple of releases (minor) Some boats have been cleared up

55 condor -> chem mixed w/ sediment to make pavement

Some -HCA inland, it was land; outward was ocean and a couple islands that eventually were built up.

Hospital used to stand near governor's office

Yap/Tinian EBS Interview Questions

Date/time of interview 7/15/23 1130

Name Paul Moor

Company/Title Aces Store

Association with property Owners Son / Built in 1989

Phone number [redacted]

Email Address

Site Conditions

Commonly known or reasonably ascertainable information about the subject property.

Do you have any specialized knowledge or experience related to the *property* or nearby properties?

Are you aware of any information about the property that would indicate releases or threatened releases?

a) Do you know the current use and/or activities being conducted at the property?
Storage Building w/ Vehicles

b) Do you know the past uses or owners of the property?
Always has been in the family, used to be german Steel foundation, Old Building w/ Pigs office Built last year

c) Do you know of specific chemicals that are present or once were present at the property?

e) Do you know of any environmental cleanups that have taken place at the property?
Not aware of any historic Spills on whole island

f) Do you know of any current or former underground storage tanks that may be at the property?

N/A

N/A

SPECIFIC QUESTIONS

Hazardous Waste/Petroleum Products/Wastes

Current Hazardous Substance and/or Petroleum Product Use

a. What types of hazardous substances and petroleum products are used, stored, and disposed of on the Property?

N/A

b. Is there any storage tanks (ASTs/USTs) located on the property? If so

i. What is the tank capacity

ii. What is being stored in the tank

iii. What is the tank constructed of (steel/fiberglass) and is it single/double walled

iv. Is regular tightness testing done and has there been any evidence of a leak or release

v. Does it have a leak detection system and overfill protection

vi. Does it have secondary containment

Drains, Sumps, Pits, Ponds, Lagoons NA

f. Are there any known drains or sumps at the site? If so:
   i. Where does the drain connect to_____
   ii. How are the fluids that enter the drain disposed of_____
g. Are there any pits, ponds, or lagoons on the property or on adjoining properties?
   _____

Solid Waste [redacted]

h. Are there any areas that are filled or graded by non-natural causes that may suggest trash construction debris, demolition debris, or other solid waste disposal?
   _____
i. Where is solid waste disposed of currently at the site
   Dumping area

Waste Water NA

j. Storm Water
   i. How is storm water captured or handled at the site (culverts, drains, ditches, etc.)? _____
   ii. Where is storm water discharged to_____
   iii. Are there open bodies of water nearby_____
   iv. Any known events of visible sheen on the water_____
   v. Is standing or ponding water present_____
k. Sanitary and Industrial Waste Water Disposal
   i. What is the current and former means of sewage and wastewater disposal_____
   ii. Where does sanitary waste water discharge to_____
   iii. Where does industrial waste water discharge to_____
   iv. If present, where does cooling water discharge to_____
   v. Are all discharges permitted_____

c. Are there any drums or storage containers greater than 5 gallons present at the site? If so: NA

   i. What is the quantity stored_____

   ii. What material is being stored

   iii. Where is the m teria /container be'ng stored

   iv. Is there secondary containment_____

   v. Are there floor drains nearby_____

d. Are there any regulated wastes at the site (PCB, Used Oil, Hazardous waste, biomedical, etc.)? If so: NA

   i. What type of waste_____

   ii. How often is it disposed_____

   iii. Are there any EPA/State permits for the waste_____

   iv. Who provides disposal of the waste (contractor)

   _____

   v. Are there disposal manifests available_____

   vi. Where is the mater'al/container being stored_____

   vii. Is there second ary containment_____

   viii. Are there floor drains nearby

e. PCBs - Are there any PCBs in use or equipment (electrical/hydraulic) known or likely to contain PCBs? If so:

   i. What type of equipment_____

   ii. Is there a PCB label on the equipment_____

   iii. Any evidence/history of leakage_____

   iv. Has past testing been done_____

   v. What is the date of Installation/owner/manufacturer information_____

vi. Where there any former discharge locations (historic discharge locations different from the present)

_____

vii. How old are these systems_____

l. Potable Water

i. What are the sources of drinking water for the site_____

ii. Where are they located_____

m. Wells/Dry Wells

i. Are there wells present at the site (dry, irrigation, injection, monitoring, abandoned, or other)

_____

OTHER NA

1. Environmental cleanup liens that are filed or recorded against the site

Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

_____

Activity and land use limitations (AULs) that are in place on the site or that have been filed

Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

_____

[redacted]

_____

_____

4. [redacted]

_____

NOTES

Adjacent Site

Yap/Tinian EBS Interview Questions

Date/time of interview 7/15/13 9:39am
Name Joseph ~~Scott~~ Seweath
Company/Title YCA
Association with property Supervisor of Rufans gas station
Phone number [redacted]
Email Address [redacted]

Site Conditions Three years working at gas station

Commonly known or reasonably ascertainable information about the subject property.

Do you have any specialized knowledge or experience related to the *property* or nearby properties?

Are you aware of any information about the property that would indicate releases or threatened releases? Not anything major, only ldpl from the dispensers

a) Do you know the current use and/or activities being conducted at the property?
Now gas station. Before YCA and before islands that we backfilled

b) Do you know the past uses or owners of the property?
YCA and government

c) Do you know of specific chemicals that are present or once were present at the property?
small tank contains kerosine ~~50,000~~ gal 318 gal
First 2 (4,000 Litres) 3,700 gal 4,010 gal
Commercial lubricants.

d) Do you know of spills or other chemical releases that have taken place at the property?
No major spills

e) Do you know of any environmental cleanups that have taken place at the property?
Small spill and cleaning late 90's / early 2000s

f) Do you know of any current or former underground storage tanks that may be at the property? No USTs

JS 1

Leon & Nam [redacted]

o v h i l r
f ar f g i
c n , r an i l

SPECIFIC QUESTIONS

Hazardous Material/Petroleum Products/Wastes

Current Hazardous Substance and/or Petroleum Products Use

a. What types of hazardous substances and petroleum products are used, stored, and disposed of on the Property?
Fuel in same drums (the 31 for sale) when rain all the runoff goes down the slope into channel

aviation fuel is for the airport

b. Is there any storage tanks (ASTs/USTs) located on the Property?

i. What is the tank capacity 8 drums YSPAC asked for 10 drums

ii. What is being stored in the tank refined w/ diesel but they needed gasoline

iii. What is the tank constructed of (steel/fiberglass) and is it single/double walled steel

iv. Is regular tightness testing done and has there been any evidence of a leak or release yes

v. Does it have a leak detection system and overfill protection no

vi. Does it have secondary containment yes

For tanks see notes on back

c. Are there any drums or storage containers greater than 5 gallons present at the site? If so:
   i. What is the quantity stored 8 drums
   ii. What material is being stored diesel
   iii. Where is the material/container being stored on site
   iv. Is there secondary containment no
   v. Are there floor drains nearby no

d. Are there any regulated wastes at the site (PCB, Used Oil, Hazardous waste, biomedical, etc.)? If so: no
   i. What type of waste
   ii. How often is it disposed
   iii. Are there any EPA/State permits for the waste
   iv. Who provides disposal of the waste (contractor)
   v. Are there disposal manifests available
   vi. Where is the material/container being stored
   vii. Is there secondary containment
   viii. Are there floor drains nearby

e. PCBs - Are there any PCBs in use or equipment (electrical/hydraulic) known or likely to contain PCBs? If so.
   i. What type of equipment
   ii. Is there a PCB label on the equipment
   iii. Any evidence/history of leakage
   iv. Has past testing been done
   v. What is the date of installation/owner/manufacturer information

Drains, Sumps, Pits, Ponds, Lagoons

f. Are there any known drains or sumps at the site?
   i. Where does the drain connect to_____
   ii. How are the fluids that enter the drain disposed of_____
g. Are there any pits, ponds, or lagoons on the property or on adjoining properties?
   _____

Solid Waste [illegible]

h. Are there areas that are filled or graded by non-natural means that may suggest that construction debris, demolition debris, or other solid waste disposal?
   _____
i. Are there visible stains, discoloration, or stressed vegetation?
   _____

Waste Water [illegible]

j. Storm Water
   i. How is storm water captured or handled at the site (culverts, drains, ditches, etc.)?
   ii. Where is storm water discharged to_____
   iii. Are there open bodies of water nearby_____
   iv. Any known events of visible sheen on the water_____
   v. Is standing or ponding water present
k. Sanitary and Industrial Waste Water Disposal
   i. What is the current and former means of sewage and [illegible] disposal_____
   ii. Where does sanitary waste water discharge to_____
   iii. Where does industrial waste water discharge to_____
   iv. If present, where does cooling water discharge to_____
   v. Are all discharges permitted_____

vi. Where there any former discharge locations (historic discharge locations different from the present)

____

vii. How old are these systems____

l. Potable Water

i. What are the sources of drinking water for the site____

ii. Where are they located____

m. Wells/Dry Wells

i. Are there wells present at the site (dry, irrigation, injection, monitoring, abandoned, or other)

____

OTHER NA

1. Environmental cleanup liens that are filed or recorded against the site

   Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

   ____

   ____

2. Activity and land use limitations (AULs) that are in place on the site or that have been filed

   Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

   ____

   ____

3. The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation

   As the user of this Phase I, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

   ____

4. [illegible]

J33

NOTES

Adj. Site

Yap/Tinian EBS Interview Questions

Date/time of interview 7/17/23 8:50 am

Name Francis Chaay

Company/Title Fire Lt.

Association with property

Phone number [redacted] Colleen Heise

Email Address ~~n/a~~ [redacted]

Site Conditions Since 2018. Patrol before

Commonly known or reasonably ascertainable information about the subject property.

Do you have any specialized knowledge or experience related to the *property* or nearby properties?

Are you aware of any information about the property that would indicate releases or threatened releases?

a) Do you know the current use and/or activities being conducted at the property?
Fire Station always since 1989

b) Do you know the past uses or owners of the property?
Fire station

c) Do you know of specific chemicals that are present or once were present at the property?
Chemicals in 5-gal buckets that are expired
Mobil lubes for maintenance in containers stored at office

d) Do you know of spills or other chemical releases that have taken place at the property?
No spills

e) Do you know of any environmental cleanups that have taken place at the property?
None

f) Do you know of any current or former underground storage tanks that may be at the property?

FC 1

SPECIFIC QUESTIONS

Potentially Materials/Petroleum Products/Wastes NA to all a-e
Current Hazardous Substance and/or Petroleum Product use

a. What types of hazardous substances and petroleum products are used, stored, and disposed of on the Property?

b. Is there any storage tanks (ASTs/USTs) located on the property? If so:
   i. What is the tank capacity
   ii. What is being stored in the tank
   iii. What is the tank constructed of (steel/fiberglass) and is it single/double walled
   iv. Is regular tightness testing done and has there been any evidence of a leak or release
   v. Does it have a leak detection system and overfill protection
   vi. Does it have secondary containment

c. Are there any drums or storage containers greater than 5 gallons present at the site? If so:
    i. What is the quantity stored_____
    ii. What material is being stored_____
    iii. Where is the material/container being stored_____
    iv. Is there secondary containment_____
    v. Are there floor drains nearby_____
d. Are there any regulated wastes at the site (PCB, Used Oil, Hazardous waste, biomedical, etc.)? If so:
    i. What type of waste_____
    ii. How often is it disposed_____
    iii. Are there any EPA/State permits for the waste_____
    iv. Who provides disposal of the waste (contractor)
    _____
    v. Are there disposal manifests available_____
    vi. Where is the material/container being stored_____
    vii. Is there secondary containment_____
    viii. Are there floor drains nearby_____
e. PCBs - Are there any PCBs in use or equipment (electrical/hydraulic) known or likely to contain PCBs? If so:
    i. What type of equipment_____
    ii. Is there a PCB label on the equipment_____
    iii. Any evidence/history of leakage_____
    iv. Has past testing been done_____
    v. What is the date of Installation/owner/manufacturer information_____

Drains, Sumps, Pits, Ponds, Lagoons

j. Are there any known drains or sumps at the site? If so:
   - Where does the drain connect to
   - How are the fluids that enter the drain disposed of

k. Are there any pits, ponds, or lagoons on the property or on adjoining properties?

Solid Waste

h. Are there any areas that are filled or graded [illegible] trash construction debris demolition debris or other [illegible]?

   no

i. Where is solid waste disposed of [illegible]?

   remembers piles of debris in town but public works cleans up once a year

Waste Water

j. Storm Water N/A
   i. How is storm water captured or handled at the site (culverts, drains, ditches, etc.)?
   ii. Where is storm water discharged to
   iii. Are there open bodies of water nearby
   iv. Any known events of visible sheen on the water
   v. Is standing or ponding water present

k. Sanitary and Industrial Waste Water Disposal
   i. What is the current and former means of sewage and wastewater disposal
   ii. Where does sanitary waste water discharge to
   iii. Where does industrial waste water discharge to
   iv. If present, where does cooling water discharge to
   v. Are all discharges permitted

vi. Where there any former discharge locations (historic discharge locations different from the present)

_____

vii. How old are these systems_____

l. Potable Water

i. What are the sources of drinking water for the site_____

ii. Where are they located_____

m. Wells/Dry Wells

i. Are there wells present at the site (dry, irrigation, injection, monitoring, abandoned, or other)

_____

OTHER NA

1. Environmental cleanup liens that are filed or recorded against the site
   Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?
   was not aware
   _____
2. Activity and land use limitations (AULs) that are in place on the site or that have been filed
   Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?
   _____
   _____
3. The degree of obviousness of the presence of likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation.
   As the user of this Phase I, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?
   _____
   _____
4. (Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*?)
   a. Do you know of any previous history of sale of this property?
   _____

NOTES

Adj. Site

Yap/Tinian EBS Interview Questions

Date/time of interview 7/17 13:35
Name John Rumwol
Company/Title Vital FSM Petroleum Corp
Association with property officer in Charge since 2018
Phone number [redacted] Terminal Supervisor
Email Address [redacted]

Site Conditions

Commonly known or reasonably ascertainable information about the subject property.

15 years associated with company

Do you have any specialized knowledge or experience related to the *property* or nearby properties?

Are you aware of any information about the property that would indicate releases or threatened releases? none

a) Do you know the current use and/or activities being conducted at the property?
Current Vital FSM since 2007
to Exxon Mobile before.

b) Do you know the past uses or owners of the property?
Mobil

c) Do you know of specific chemicals that are present or once were present at the property?
gas, diesel, A1.

d) Do you know of spills or other chemical releases that have taken place at the property?
None

e) Do you know of any environmental cleanups that have taken place at the property?
None

f) Do you know of any current or former underground storage tanks that are at the property? None

JR 1

plans → will send

SPECIFIC QUESTIONS

Hazardous Waste/Petroleum Products/Wastes
Current Hazardous Substance and/or Petroleum Production

a. What types of hazardous substances and petroleum products are used, stored, and disposed of on the Property?

see notes

b. Is there any storage tanks (ASTs/USTs) located on the property? If so:

i. What is the tank capacity

ii. What is being stored in the tank

iii. What is the tank constructed of (steel/fiberglass) and is it single/double walled

iv. Is regular tightness testing done and has there been any evidence of a leak or release daily checks

v. Does it have a leak detection system and overfill protection alarm

vi. Does it have secondary containment yes concrete

Jet A → 2 Iso ~~cast~~ tanks ~ (5,700 gal each)

gas →

c. Are there any drums or storage containers greater than 5 gallons present at the site? If so: see additional notes in the back

   i. What is the quantity stored_____

   ii. What material is being stored_____

   iii. Where is the material/container being stored_____

   iv. Is there secondary containment_____

   v. Are there floor drains nearby_____

d. Are there any regulated wastes at the site (PCB, Used Oil, Hazardous waste, biomedical, etc.)? If so:

   i. What type of waste_____

   ii. How often is it disposed_____

   iii. Are there any EPA/State permits for the waste_____

   iv. Who provides disposal of the waste (contractor)

   _____

   v. Are there disposal manifests available_____

   vi. Where is the material/container being stored_____

   vii. Is there secondary containment_____

   viii. Are there floor drains nearby_____

e. PCBs - Are there any PCBs in use or equipment (electrical/hydraulic) known or likely to contain PCBs? If so:

   i. What type of equipment_____

   ii. Is there a PCB label on the equipment_____

   iii. Any evidence/history of leakage_____

   iv. Has past testing been done_____

   v. What is the date of Installation/owner/manufacturer information_____

JR2

Drains, Sumps, Pits, Ponds, Lagoons

none

f. Are there any known drains or sumps at the site? If so:
   i. Where does the drain connect to_____
   ii. How are the fluids that enter the drain disposed of_____
g. Are there any pits, ponds, or lagoons on the property or on adjoining properties?

_____

Septic Waste NA

h. [illegible]

_____

i. [illegible]

_____

Waste Water

j. Storm Water
   i. How is storm water captured or handled at the site (culverts, drains, ditches, etc.)? drains
   ii. Where is storm water discharged to storm drain → [redacted]
   iii. Are there open bodies of water nearby yes, ocean
   iv. Any known events of visible sheen on the water no
   v. Is standing or ponding water present no
k. Sanitary and Industrial Waste Water Disposal NA
   i. What is the current and former means of sewage and wastewater disposal_____
   ii. Where does sanitary waste water discharge to_____
   iii. Where does industrial waste water discharge to_____
   iv. If present, where does cooling water discharge to_____
   v. Are all discharges permitted_____

vi. Where there any former discharge locations (historic discharge locations different from the present)

_____

vii. How old are these systems_____

l. Potable Water

i. What are the sources of drinking water for the site_____

ii. Where are they located_____

m. Wells/Dry Wells

i. Are there wells present at the site (dry, irrigation, injection, monitoring, abandoned, or other)

_____

OTHER

1. Environmental cleanup liens that are filed or recorded against the site

Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

no others

_____

2. Activity and land use limitations (AULs) that are in place on the site or that have been filed

Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

_____

he degree of obviousness of the presence of likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation.

As the user of this Phase I, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

_____

[Does the purchase price being paid for this *property* reasonably [illegible] the *property*?]

a. Do you know of any previous history of sale of this prope

_____

JR 3

NOTES

Monthly fine vessel is pumped
- 150 tanks (small)

Jet A1: 2 tanks (5,700 gallons each)

(4) Gasoline: 10 ft 1/16 ~~7 3/4~~ 10 - 2 1/16 / 24 - 5 3/4"

~~24534~~ only fill up 70% of it | 94,743 gallons
100,000 gallon tank

(5) Diesel: 12' - 10 1/4 / 12 - 10 1/4 → up to 90 | 451,~~5~~69.5 gallon
a 500,000 gallon tan

They have an inspection checklist and every morning they check tanks for leaks

Oil water separater ~ 2,000 gal

Drums stops → product drained from line (all filled up)
on concrete.
80

will be filled ~ yes | 90% → 2,289.26 gallons

(1/2) empty
→ will be used for Jet A1

(3) → ~~will be dematisred~~ → unsure how it will be dumped and where it will be taken

tank material → metal

Spill kits → bio socks, absorbant pads

They receive fuel from harbour vessels through pipeline and store at facility. when they had to fuel vessels, they transport in bolder trucks

In case of fire, they have fire pump

Yap/Tinian EBS Interview Questions

Date/time of interview 7/17 23

Name

Company/Title Jeff Marbey / Dwayne Woway / YHPO Chief 2021

Association with property YSHPO

Phone number

Email Address

Site Conditions

Commonly known or reasonably ascertainable information about the subject property.

Do you have any specialized knowledge or experience related to the *property* or nearby properties?

Are you aware of any information about the property that would indicate releases or threatened releases? _____

a) Do you know the current use and/or activities being conducted at the property?

_____

[illegible]

f pert

SPECIFIC QUESTIONS

Hazardous Materials/Petroleum Products/Wastes

Current Hazardous Substance and/or Petroleum Product Use

a. What types of hazardous substances and petroleum products are used, stored, and disposed of on the Property?

b. Is there any storage tanks (ASTs/USTs) located on the property? If so
   i. What is the tank capacity
   ii. What is being stored in the tank
   iii. What is the tank constructed of (steel/fiberglass) and is it single/double walled
   iv. Is regular tightness testing done and has there been any evidence of a leak or release
   v. Does it have a leak detection system and overfill protection
   vi. Does it have secondary containment

c. Are there any drums or storage containers greater than 5 gallons present at the site? If so:
    i. What is the quantity stored_____
    ii. What material is being stored_____
    iii. Where is the material/container being stored_____
    iv. Is there secondary containment_____
    v. Are there floor drains nearby_____
d. Are there any regulated wastes at the site (PCB, Used Oil, Hazardous waste, biomedical, etc.)? If so:
    i. What type of waste_____
    ii. How often is it disposed_____
    iii. Are there any EPA/State permits for the waste_____
    iv. Who provides disposal of the waste (contractor) _____
    v. Are there disposal manifests available_____
    vi. Where is the material/container being stored_____
    vii. Is there secondary containment_____
    viii. Are there floor drains nearby_____
e. PCBs - Are there any PCBs in use or equipment (electrical/hydraulic) known or likely to contain PCBs? If so:
    i. What type of equipment_____
    ii. Is there a PCB label on the equipment_____
    iii. Any evidence/history of leakage_____
    iv. Has past testing been done_____
    v. What is the date of installation/owner/manufacturer information_____

Drains, Sumps, Pits, Ponds, Lagoons

f. Are there any known drains or sumps at the site? If so:
    i. Where does the drain connect to______________________________
    ii. How are the fluids that enter the drain disposed of______________________________
g. Are there any pits, ponds, or lagoons on the property or on adjoining properties?

Solid Waste

h. Are there any areas that are filled or graded by non-natural causes that may suggest trash, construction debris, demolition debris, or other solid waste disposal?
____
i. Where is solid waste disposed of currently at the site
____

Waste Water

j. Storm Water
    i. How is storm water captured or handled at the site (culverts, drains, ditches, etc.)?______________________________
    ii. Where is storm water discharged to______________________________
    iii. Are there open bodies of water nearby______________________________
    iv. Any known events of visible sheen on the water______________________________
    v. Is standing or ponding water present______________________________
k. Sanitary and Industrial Waste Water Disposal
    i. What is the current and former means of sewage and wastewater disposal______________________________
    ii. Where does sanitary waste water discharge to______________________________
    iii. Where does industrial waste water discharge to______________________________
    iv. If present, where does coo ing water discharge to
    v. Are all discharges permitted______________________________

vi. Where there any former discharge locations (historic discharge locations different from the present)

_____

vii. How old are these systems_____

l. Potable Water

i. What are the sources of drinking water for the site_____

ii. Where are they located_____

m. Wells/Dry Wells

i. Are there wells present at the site (dry, irrigation, injection, monitoring, abandoned, or other)

_____

OTHER

1. Environmental cleanup liens that are filed or recorded against the site
   Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

   _____

   _____

2. Activity and land use limitations (AULs) that are in place on the site or that have been filed
   Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

   _____

   _____

3. The degree of obviousness of the presence of likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation.
   As the user of this Phase I, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

   _____

   _____

4. (Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*?)
   a. Do you know of any previous history of sale of this property?
   Need to be associated w/ PRM to buy property not all colonies belong to gov, some private entities

   Price of sale? _____

   Chinese attempt to occupy land, some against, some approves

YSHPO 2/3

NOTES

They do not have any blueprints of Sketch of area of interest

350-36084- Document archive

Can remember 2-3 Oil Spills in water in 90's

1 in 90's, 2 in 2000's

Discoveries of munitions on land- 6 months ago in village

Cannons in colony for tourist monument

Who would have inventory of Stored Chemicals in port - EPA

Water from laundromat goes to ocean, Sewage goes to ocean via pipe coming from Sewage plant water stays inside the reef

Water from laundromat- hears to Soil put money to connect to Sewage, so some do not connect to Sewage = Discharge on ground

He will email Rock about you from the 60's

HPO

Yap/Tinian EBS Interview Questions

Date/time of interview 11:00 am 7/17/23
Name Jeff Norberg
Company/Title Officer in charge / chief
Association with property since 2021
Phone number
Email Address [redacted]

Site Conditions

Commonly known or reasonably ascertainable information about the subject property.

Do you have any specialized knowledge or experience related to the *property* or nearby properties?

Are you aware of any information about the property that would indicate releases or threatened releases? not as of today

a) Do you know the current use and/or activities being conducted at the property?

b) Do you know the past uses or owners of the property?
Department Land DPW's

c) Do you know of specific chemicals that are present or once were present at the property?
Detergent from laundromats dumped as runoff

d) Do you know of spills or other chemical releases that have taken place at the property?
No spills on land Fuel or minor ship spills in 90's and early 2000s

e) Do you know of any environmental cleanups that have taken place at the property?
none

f) Do you know of any current or former underground storage tanks that may be at the property? observed no AST or gas station Runs to hospital

JM 1

EPA

sketches of sewer system

SPECIFIC QUESTIONS

Hazardous Materials/Petroleum Products Users

Current Hazardous Substance and/or Petroleum Product Use

a. What types of hazardous substances and petroleum products are used, stored, and disposed on the Property?

detergent from laundromats

b. Is there any storage tanks (ASTs/USTs) located on the property? If so:

i. What is the tank capacity

ii. What is being stored in the tank

iii. What is the tank constructed of (steel/fiberglass) and is it single/double walled

iv. Is regular tightness testing done and has there been any evidence of a leak or release

v. Does it have a leak detection system and overfill protection

vi. Does it have secondary containment

c. Are there any drums or storage containers greater than 5 gallons present at the site? If so: NA
   i. What is the quantity stored_____
   ii. What material is being stored_____
   iii. Where is the material/container being stored_____
   iv. Is there secondary containment_____
   v. Are there floor drains nearby_____

d. Are there any regulated wastes at the site (PCB, Used Oil, Hazardous waste, biomedical, etc.)? If so: N O
   i. What type of waste_____
   ii. How often is it disposed_____
   iii. Are there any EPA/State permits for the waste_____
   iv. Who provides disposal of the waste (contractor) _____
   v. Are there disposal manifests available_____
   vi. Where is the material/container being stored_____
   vii. Is there secondary containment_____
   viii. Are there floor drains nearby_____

e. PCBs - Are there any PCBs in use or equipment (electrical/hydraulic) known or likely to contain PCBs? If so:
   i. What type of equipment_____
   ii. Is there a PCB label on the equipment_____
   iii. Any evidence/history of leakage_____
   iv. Has past testing been done_____
   v. What is the date of Installation/owner/manufacturer information_____

JM2

Drains, Sumps, Pits, Ponds, Lagoons NA

f. Are there any known drains or sumps at the site? If so:

Where does the drain connect to______________________________

ii. How are the fluids that enter the drain disposed of______________________________

g. Are there any pits, ponds, or lagoons on the property or on adjoining properties?

____

Solid Waste NA

h. Are there any areas that are filled or graded by non-natural causes that may suggest trash, construction debris, demolition debris, or other solid waste disposal?

____

i. Where is solid waste disposed of currently at the site

____

Waste Water NA

j. Storm Water
   i. How is storm water captured or handled at the site (culverts, drains, ditches, etc.)?______________________________
   ii. Where is storm water discharged to______________________________
   iii. Are there open bodies of water nearby______________________________
   iv. Any known events of visible sheen on the water______________________________
   v. Is standing or ponding water present______________________________

k. Sanitary and Industrial Waste Water Disposal
   i. What is the current and former means of sewage and wastewater disposal______________________________
   ii. Where does sanitary waste water discharge to______________________________
   iii. Where does industrial waste water discharge to______________________________
   iv. If present, where does cooling water discharge to______________________________
   v. Are all discharges permitted______________________________

vi. Where there any former discharge locations (historic discharge locations different from the present)

_____

vii. How old are these systems_____

l. Potable Water

i. What are the sources of drinking water for the site_____

ii. Where are they located_____

m. Wells/Dry Wells

i. Are there wells present at the site (dry, irrigation, injection, monitoring, abandoned, or other)

_____

OTHER

1. Environmental cleanup liens that are filed or recorded against the site
   Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

   _____

2. Activity and land use limitations (AULs) that are in place on the site or that have been filed
   Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

   _____

3. The degree of obviousness of the presence of likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation.
   As the user of this Phase I, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

   _____

JM3

NOTES

Yap/Tinian EBS Interview Questions

Date/time of interview 7/18/25 0900

Name Maputamin

Company/Title EPA

Association with property 7 years

Phone number [redacted]

Email Address [redacted]

Previously worked w/ Marine Resources Division

Site Conditions

Commonly known or reasonably ascertainable information about the subject property.

Do you have any specialized knowledge or experience related to the *property* or nearby properties?

Are you aware of any information about the property that would indicate releases or threatened releases? No record of release in Channel, and no record of spills in that area

a) Do you know the current use and/or activities being conducted at the property?

b)

c)

d)

e) Do you know of any environmental cleanups that have taken place at the property?

f) Do you know of any current or former underground storage tanks that may be at the property?

EPA

[illegible]

____

____

____

[illegible]

____

____

____

____

____

____

SPECIFIC QUESTIONS

Hazardous Materials/Petroleum Products/Wastes

Current Hazardous Substance and/or Petroleum Product Use

a. What types of hazardous substances and petroleum products are used, stored, and disposed of on the Property?

____

b. Is there any storage tanks
   i. What is the tank capacity______________________________
   ii. What is being stored in the tank______________________________
   iii. What is the tank constructed of (steel/fiberglass) and is it single/double walled
   iv. Is regular tightness testing done and has there been any evidence of a leak o release______________________________
   v. Does it have a leak detection system and overfill protection______________________________
   vi. Does it have secondary containment______________________________

c. Are there any drums or storage containers greater than 5 gallons present at the site? If so:
    i. What is the quantity stored_____
    ii. What material is being stored_____
    iii. Where is the material/container being stored_____
    iv. Is there secondary containment_____
    v. Are there floor drains nearby_____
d. Are there any regulated wastes at the site (PCB, Used Oil, Hazardous waste, biomedical, etc.)? If so:
    i. What type of waste_____
    ii. How often is it disposed_____
    iii. Are there any EPA/State permits for the waste_____
    iv. Who provides disposal of the waste (contractor)
    _____
    v. Are there disposal manifests available_____
    vi. Where is the material/container being stored_____
    vii. Is there secondary containment_____
    viii. Are there floor drains nearby_____
e. PCBs - Are there any PCBs in use or equipment (electrical/hydraulic) known or likely to contain PCBs? If so:
    i. What type of equipment_____
    ii. Is there a PCB label on the equipment_____
    iii. Any evidence/history of leakage_____
    iv. Has past testing been done_____
    v. What is the date of installation/owner/manufacturer information_____

EPA

Drains, Sumps, Pits, Ponds, Lagoons

h. Are there any known drains or sumps at the site?
   i. Where does the drain connect to_____
   ii. How are the fluids that enter the drain disposed of
i. Are there any pits, ponds, or lagoons on the property or on adjoining properties?

Solid Waste

j. [illegible]
i. [illegible]

Waste Water

j. Storm Water
   i. How is storm water captured or handled at the site (culverts, drains, ditches, etc.)?
   ii. Where is storm water discharged to_____
   iii. Are there open bodies of water nearby_____
   iv. Any known events of visible sheen on the water_____
   v. Is standing or ponding water present_____
k. Sanitary and Industrial Waste Water Disposal
   i. What is the current and former means of sewage [illegible] disposal
   ii. Where does sanitary waste water discharge to_____
   iii. Where does industrial waste water discharge to_____
   iv. If present, where does cooling water discharge to_____
   v. Are all discharges permitted

vi. Where there any former discharge locations (historic discharge locations different from the present)

_____

vii. How old are these systems_____

l. Potable Water

i. What are the sources of drinking water for the site_____

ii. Where are they located_____

m. Wells/Dry Wells

i. Are there wells present at the site (dry, irrigation, injection, monitoring, abandoned, or other)

_____

OTHER

1. Environmental cleanup liens that are filed or recorded against the site
   Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

   _____

   _____

2. Activity and land use limitations (AULs) that are in place on the site or that have been filed
   Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

   _____

   _____

3. The degree of obviousness of the presence of likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation.
   As the user of this Phase I, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

   _____

   _____

4. (Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*?)
   a. Do you know of any previous history of sale of this property?

      _____

EVA

NOTES

What areas are inspected (in our areas of interest)?
+ Sure who owns B[illegible]y or [illegible]

Records of them?

Knowledge of Drums in tank Building?

any previous sampling events?

Monitoring wells across from gas Station?
- [illegible] of fuel line, YSPC
Battery Storage / [illegible] (YFTI)

Storage / haz materials. many said EPA recommended they hold onto Materials

Involvement w/ Vital
[illegible] Deliveries, walk fuel lines to ensure no leaks

EPA has Haz Storage, But materials Store there are not labeled
- Before COVID is heavy Ship came, Women claimed She would help

GPLC has project to improve Sewage plant
permit application for the improvements
Outflow close to island in reef

Asbestos Demolition Debris - no information, Were plans to Ship off island, no follow through

Chemical Storage on Concrete Slabs By Store
new Storage By Public works

Inventory of what was stored there

EPA

Yap/Tinian EBS Interview Questions

Date/time of interview 0900 7/18/23
Name Jordan Mautaman
Company/Title Yap State EPA Pollution Control Specialist
Association with property 7 years with EPA before MR Division
Phone number
Email Address [redacted]

Site Conditions

Commonly known or reasonably ascertainable information about the subject property.

Do you have any specialized knowledge or experience related to the *property* or nearby properties?

Are you aware of any information about the property that would indicate releases or threatened releases?

a) Do you know the current use and/or activities being conducted at the property?

c) Do you know of specific chemicals that are present or once were present at the property?
chemicals stored on concrete slab by YCA

d) Do you know of spills or other chemical releases that have taken place at the property?
Ship releases, EPA was most likely

e) Do you know of any environmental cleanups that have taken place at the property?

f) Do you know of any current or former underground storage tanks that may be at the property? No USTs or anything underground

_____

_____

_____

u

_____

_____

h [illegible] r [illegible] h [illegible] r [illegible] t [illegible]
[illegible] v [illegible] vi e t [illegible]
[illegible] u [illegible] n [illegible] y [illegible] t v [illegible] n [illegible] ?

_____

_____

_____

_____

_____

_____

SPECIFIC QUESTIONS

Hazardous Waste/Petroleum Products/Wastes
Current Operation: Substance and/or Petroleum Product Use

a. What types of hazardous substances and petroleum products are used, stored, and disposed of on the property?

_____

b. Is there any storage tanks (ASTs/USTs) [illegible]

i. What is the tank capacity_____

ii. What is being stored in the tank_____

iii. What is the tank constructed of (steel/fiberglass) and is it single/double walled_____

iv. Is regular tightness testing done and has there been any evidence of a leak or release_____

v. Does it have a leak detection system and overfill protection_____

vi. Does it have secondary containment_____

c. Are there any drums or storage containers greater than 5 gallons present at the site? If so:
    i. What is the quantity stored_____
    ii. What material is being stored_____
    iii. Where is the material/container being stored_____
    iv. Is there secondary containment_____
    v. Are there floor drains nearby_____
d. Are there any regulated wastes at the site (PCB, Used Oil, Hazardous waste, biomedical, etc.)? If so:
    i. What type of waste_____
    ii. How often is it disposed_____
    iii. Are there any EPA/State permits for the waste_____
    iv. Who provides disposal of the waste (contractor) _____
    v. Are there disposal manifests available_____
    vi. Where is the material/container being stored_____
    vii. Is there secondary containment_____
    viii. Are there floor drains nearby_____
e. PCBs - Are there any PCBs in use or equipment (electrical/hydraulic) known or likely to contain PCBs? If so:
    i. What type of equipment_____
    ii. Is there a PCB label on the equipment_____
    iii. Any evidence/history of leakage_____
    iv. Has past testing been done_____
    v. What is the date of installation/owner/manufacturer information

Drains, Sumps, Pits, Ponds, Lagoons

f. Are there any known drains or sumps at the site? If so:
   i. Where does the drain connect to______________________________
   ii. How are the fluids that enter the drain disposed of______________________________

g. Are there any pits, ponds, or lagoons on the property or on adjoining properties?

____

Solid Waste

h. Are there any areas that are filled or graded by non-natural causes that may suggest [illegible] debris, [illegible] or other solid waste disposal?

____

Where is solid waste disposed of currently at the site

____

Waste Water

j. Storm Water
   i. How is storm water captured or handled at the site (culverts, drains, ditches, etc.)? ______________________________
   ii. Where is storm water discharged to______________________________
   iii. Are there open bodies of water nearby______________________________
   iv. Any known events of visible sheen on the water______________________________
   v. Is standing or ponding water present______________________________

k. Sanitary and Industrial Waste Water Disposal
   i. What is the current and former means of sewage and wastewater disposal______________________________
   ii. Where does sanitary waste water discharge to______________________________
   iii. Where does industrial waste water discharge to______________________________
   iv. If present, where does cooling water discharge to______________________________
   v. Are all discharges permitted______________________________

vi. Where there any former discharge locations (historic discharge locations different from the present)

_____

vii. How old are these systems_____

l. Potable Water

i. What are the sources of drinking water for the site_____

ii. Where are they located_____

m. Wells/Dry Wells

i. Are there wells present at the site (dry, irrigation, injection, monitoring, abandoned, or other)

_____

OTHER

1. Environmental cleanup liens that are filed or recorded against the site

Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

_____

Activity and land use limitations (AULs) that are in place on the site or that have been filed

Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

_____

The degree of obviousness of the presence of likely presence of contamination at the pr perty and the ability to detect the contamination by appropriate investigation.

As the user of this Phase I, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

_____

_____

4. [Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*?]

a. Do you know of any previous history of sale of this property?

_____

EPA3

NOTES

YFA storage. ~~may~~ don't have means to identify contents

~~Before covid,~~

Ship cleanups ~~not~~ on record at EPA

~~Batteries~~ at Recycling → move ~~the~~ operation towards the recycling center

~~Drums~~ in Tuna Packing: ~~not~~ aware

WWTP: ~~GPCC Inc~~

↳ PCC Inc → doing improvements at WWTP

↳ No, ~~breaches from~~ sewer line.

MW infront of YCA → unsure who they belon

Car piles on harbor → put there by public works

Vital FSM → EPA works with them during vessel refueling to make sure no leaks

YCA slab used to be the chemical storage until 5 years ago. Transported to the new warehouse near Public Works building on the way to airport (far from site)

No stormwater drain inspections

Waab - subject property

Yap/Tinian EBS Interview Questions

Date/time of interview 7/18/23 ; 1330
Name James Lukan
Company/Title Waab Transportation Company
Association with property General Manager → since Feb
Phone number [redacted]
Email Address [redacted]

Site Conditions

Commonly known or reasonably ascertainable information about the subject property.

Do you have any specialized knowledge or experience related to the *property* or nearby properties?

Are you aware of any information about the property that would indicate releases or threatened releases? _____

a) Do you know the current use and/or activities being conducted at the property?
Waab transportation company

b) Do you know the past uses or owners of the property?
Trust territory of the pacific islands. Government leased it out to Waab shortly after gvnment was created

c) Do you know of specific chemicals that are present or once were present at the property?
1 or 2 drums of hydraulic fluid in maintenance shop

d) Do you know of spills or other chemical releases that have taken place at the property?
non. minor ones at mechanic shop

e) Do you know of any environmental cleanups that have taken place at the property?
none

f) Do you know of any current or former underground storage tanks that may be at the property? none.

JL 1-

SPECIFIC QUESTIONS

Hazardous Materials/Petroleum Products/Wastes

Current Hazardous Substance and/or Petroleum Product Use

a. What types of hazardous substances and petroleum products are used, stored, and disposed of on the Property?

hydraulic fluid 1 or 2 tanks (55-gal)

b. Is there any storage tanks (ASTs/USTs) located on the property? If so:

i. What is the tank capacity ASTs → empty

ii. What is being stored in the tank empty, used to be butane gas

iii. What is the tank constructed of (steel/fiberglass) and is it single/double walled steel

iv. Is regular tightness testing done and has there been any evidence of a leak or release

v. Does it have a leak detection system and overfill protection

vi. Does it have secondary containment

c. Are there any drums or storage containers greater than 5 gallons present at the site? If so:
   i. What is the quantity stored 2
   ii. What material is being stored hydraulic fluid
   iii. Where is the material/container being stored maintenance shop
   iv. Is there secondary containment no
   v. Are there floor drains nearby yes

d. Are there any regulated wastes at the site (PCB, Used Oil, Hazardous waste, biomedical, etc.)? If so:
   i. What type of waste
   ii. How often is it disposed
   iii. Are there any EPA/State permits for the waste
   iv. Who provides disposal of the waste (contractor)
   v. Are there disposal manifests available
   vi. Where is the material/container being stored
   vii. Is there secondary containment
   viii. Are there floor drains nearby

e. PCBs - Are there any PCBs in use or equipment (electrical/hydraulic) known or likely to contain PCBs? If so:
   i. What type of equipment
   ii. Is there a PCB label on the equipment
   iii. Any evidence/history of leakage
   iv. Has past testing been done
   v. What is the date of installation/owner/manufacturer information

Drains, Sumps, Pits, Ponds, Lagoons

f. Are there any known drains or sumps at the site? If so:
   i. Where does the drain connect to_____
   ii. How are the fluids that enter the drain disposed of_____
g. Are there any pits, ponds, or lagoons on the property or on adjoining properties?
   _____

Solid Waste

h. Are there any areas that are filled or graded by non-natural causes that may suggest trash construction debris, demolition debris, or other solid waste disposal?
   _____
i. Where is solid waste disposed of currently at the site
   _____

Waste Water

j. Storm Water
   i. How is storm water captured or handled at the site (culverts, drains, ditches, etc.)?
   ii. Where is sto m wat r discha ged to_____
   iii. Are there open bodies of water nearby_____
   iv. Any known events of visible sheen on the water_____
   v. Is standing or pondi g water present _____
k. Sanitary and Industrial Waste Water Disposal
   i. What is the current and former means of sewage and wastewater disposal_____
   ii. Where does sanitary waste water discharge to
   iii. Where does industrial waste water discharge to_____
   iv. If present, where does cooling water discharge to_____
   v. Are all discharges permitted

vi. Where there any former discharge locations (historic discharge locations different from the present)

_____

vii. How old are these systems_____

l. Potable Water

i. What are the sources of drinking water for the site Municipality

ii. Where are they located_____

m. Wells/Dry Wells

i. Are there wells present at the site (dry, irrigation, injection, monitoring, abandoned, or other)

_____

OTHER

1. Environmental cleanup liens that are filed or recorded against the site
   Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

   _____

   _____

2. Activity and land use limitations (AULs) that are in place on the site or that have been filed
   Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

   _____

   _____

3. The degree of obviousness of the presence of likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation.
   As the user of this Phase I, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

   _____

   _____

4. [Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*?]

   a. Do you know of any previous history of sale of this property?

      _____

JL 3

NOTES

mechanic shop
↳ 1 or 2 drums of hydraulic fluid.

↳ Tuna parking → gov (public works)

↳ ~~Storage~~ Containers → come in ships (goods) → they store them here then ship them back

↳ Tanks (FSTs) → empty → waiting to be shipped back
Butane gas

take goods to vendors

Warehouse is being renovated. Scheduled to be done in a month

Patches on asphalt → could be utilities that need repair → cut a section of them

gas tanks → for gas welding

white "Matson" container leaking ⇒ not sure what it could be. Will follow up with us

fuel line connection to vault is old and may need repair

Yap State did not allow tuna Binding to be taken down

Appendix B.3:
Site Visit Checklist

Phase I ESA (ASTM E1527-1305) – Property Reconnaissance Checklist

1.0 **Client:** NAVFAC Pacific

Project Number: _____

2.0 **Property Name:** Yap Harbor

Property Address: Yap State, FSM

Site Contact, Title, Affiliation and History with Site/Facility: _____

Site Visit Date(s): 13-Jul-2023 through 15-Jul-2023

3.0 Property Reconnaissance Observations – ASTM E1527-05 Standard Scope Topics

Note: All terms in *italics* are defined in ASTM Standard Practice E1527-05.

Introduction: The objective of the *site reconnaissance* is to obtain information indicating the likelihood of identifying *recognized environmental conditions* in connection with the *Property*. On a visit to the *Property* (the *site visit*), the *Property* shall be *visually and/or physically observed* and any structure(s) located on the *Property* to the extent not obstructed by bodies of water, adjacent buildings, or other obstacles shall be observed.

Exterior: The periphery of the *Property* shall be *visually and/or physically observed*, as well as the periphery of all structures on the *Property*, and the *Property* should be viewed from all adjacent public thoroughfares. If roads or paths with no apparent outlet are observed on the *Property*, the use of the road or path should be identified to determine whether it was likely to have been used as an avenue for disposal of *hazardous substances* or *petroleum products*.

Interior: On the interior of structures on the *Property*, accessible common areas expected to be used by *occupants* or the public (such as lobbies, hallways, utility rooms, recreation areas, etc.), maintenance and repair areas, including boiler rooms, and a representative sample of occupant spaces, should be *visually and/or physically observed*. It is not necessary to look under floors, above ceilings, or behind walls.

Uses and Conditions of Concern: The uses and conditions of concern listed below must be assessed and documented during the *Property* visit.

3.1 Geologic, Hydrogeologic, Hydrologic and Topographic Conditions

The topographic conditions of the *Property* shall be noted to the extent *visually and/or physically observed* or determined from *interviews*, as well as the general topography of the area surrounding the *Property* that is *visually and/or physically observed* from the periphery of the *Property*.

Harbor - Paved (gated area) (mostly), no soil mounds noted

Road - Paved

3.2 Current Use(s) of the Property

The current use(s) of the Property shall be identified. Describe current activities/operations. Any current uses likely to involve the use, treatment, storage, disposal, or generation of hazardous substances or petroleum products shall be identified. Unoccupied occupant spaces should be noted. In identifying current uses of the Property, more specific information is more helpful than less specific information. For example, it is more useful to identify uses such as a hardware store, a grocery store or a bakery, rather than simply retail use.

Gated area in Harbor: portion used by Government and other used by Woab Transp. Company

Other areas at port: combination of goverment buildings, abandoned buildings, recycling center, junk yard and waste water treatment plant

Road around Chamanas Bay: municipality road

adjacent sites are a mixture of residential, commercial (i.e. restaurants, hotels, shops) and other city/gov buildings (fire dep and post office), fuel farm

3.2.1 General Description of Structures and Other Improvements:

Generally describe the structures or other improvements on the Property (for example, number of buildings, number of stories, describe each, approximate age of buildings, ancillary structures (if any), etc.). Dis[illegible]

[redacted]

see more on additional notes

Notes:

yes attached highest

3.2.2 Current Hazardous Substance and/or Petroleum Product Use (General):

Describe general use, treatment, storage and disposal of *hazardous substances* and *petroleum products* on the *Property*.

- One active 5-10K tank in use on site at YEA Property in secondary containment. Diesel-containing.
- 4 150 tanks in good condition at port - liquified petroleum gas
- 90-100 55 gal drums observed throughout site and adjacent sites See next page for more details

3.2.3 Storage Tanks:

Aboveground storage tanks, or *underground storage tanks* or vent pipes, fill pipes or access ways indicating *underground storage tanks* must be identified (for example, content, capacity, and age) to the extent *visually and/or physically observed* during the *site visit* or identified from the *interviews* or *records review*: 150 tanks

Location Tank Number:	YFA	Port	YEA gas st.	YCA gas st	YCA-gas Stat
Capacity & Type	5-10K, Stal	4x20-ft	6351 gal	6020 gal	318 gal
Material Stored	diesel	liquified petgas	diesel	gasoline	Kerosine
Location	YFA maint shop	Port	gas station	gas station	gas station
Petrometer Present? Reading?	NA	NA	NA	NA	NA
Date of Installation	NA	↓	2004	2007	unknown
Single or Double Wall	unknown		~~6351 gal~~	~~6020 gal~~	~~318 gal~~
Tightness History	unknown		unknow	unknown	unknown
Spill & Overfill Protection	NO		/	/	/
Leak Detection	"manual"		/	/	/

Evidence of Spills					
AST Secondary Containment	yes	No (130)	yes	yes	No

Other evidence of possible underground tanks (vent or fill pipes, unidentified access ways or manholes, etc.):

NO USTs

3.2.4 Drums, etc. (includes any portable container 5 gallons or larger):

To the extent *visually and/or physically observed* or identified from the *interviews* or *records reviewed*, drums shall be described in the *report*, whether or not they are leaking, unless it is known that their contents are not *hazardous substances* or *petroleum products*. *Drums* often hold 55 gallons (208 L) of liquid but containers as small as 5 gallons (19 L) should also be described.

3.2.4.1 Hazardous Materials:

Location:	Tuna Packing	Maint. Shop	YFA Maint. Shop	Gas Station	
Chemicals Stored	Mobilgard 525, 412 ADL 40, 300C	~~Hose~~ hydraulic fluid	engine oil	diesel	
[redacted]	38 inside 21 outside + 8 more outside	16-20 most empty	~5	8 full (diesel) 20+ empty	
Type of Storage Area	warehouse no secondary containment	on grand	ground	grand	
MSDS Available?	NO	NO	NO	NO	
Secondary Containment?	NO	NO	NO	NO	
Floor Drains Nearby?	NO	yes	NO	Ocean	
Is Storage Appropriate?	NO	NO	NO	NO	

3.2.4.2 Regulated Wastes (Hazardous, Universal, Used Oil, PCB, Biomedical, etc.):

Location:	~~through~~ site	Vital FSM		
Type(s) of Waste	transformers ~~unclear if~~ PCB containing?	used oil		
Frequency of Disposal		manifests		
EPA, State Permits	—	unclear		
Contractor(s) Providing Disposal	—			
Disposal Manifests Available?	—	not as drum		
Type of Storage Area	—	drum		

Location:				
Secondary Containment?		yes		
Floor Drains Nearby?		yes		
Is Storage Appropriate? (signs, labels, compatibility, locked, neat, phone, fire extinguisher, emergency numbers, etc.)		yes		

Notes:

see attached notes

Describe any additional potential releases of oil or hazardous materials to impacted soil, groundwater, or surface water:

outside of two parking buildings 4 drums / unlabeled and observed empty, when tilted, the ground was stained and had oily appearance. vegetation was stressed

3.2.5 Other Containers (Including Out of Use Containers)

3.2.6 Unidentified Substance Containers:

When open or damaged containers containing unidentified substances [illegible] are *visually and/or physically observed* on the property [illegible] conditions shall be described.

39 mostly unlabeled drums observed inside tuna packing building. Other empty drums observed throughout site. Unclear if their contents leaked out onto environment

3.2.7 PCBs In Use:

tuna packing build.

Electrical or hydraulic equipment known to contain PCBs or likely to contain PCBs shall be described [illegible] the extent *visually and/or physically observed* or identified from the interviews [illegible].

leaked / throughout

Location:	[redacted]	[redacted]		
Type of Equipment	[redacted]	[redacted]		
Name Plate Info. (ID / kVA)	[redacted]	[redacted]		
PCB Label?	[redacted]	[redacted]		
Evidence of Leaks?	[redacted]	[redacted]		
[redacted]	[redacted]	[redacted]		
Date of Installation	[redacted]	[redacted]		
[redacted]	[redacted]	[redacted]		
Manufacturer	[redacted]	[redacted]		

Notes:

[illegible]

[illegible]

see logbook

3.2.9 Stains or Corrosion:

To the extent visually and/or physically observed or identified from the *interviews*, stains or corrosion on floors, walls, or ceilings shall be described in the report, except for staining from water.

Pit: Maintenance Shop: heavy floor staining
NTA Maintenance Shop: light floor staining
See logbook notes

3.[illegible] [illegible]amps:

To the extent visually and/or physically observed or identified from the *interviews*, floor drains and sumps shall be described. Drains or sumps containing liquids likely to be *hazardous substances* or *petroleum products* shall be described to the extent visually and/or physically observed or identified from the *interviews* or *records review*. Also describe indications of former floor drains, etc.

Type:	Floor Drains	Sump Pumps	Sewage Ejectors	Grease Traps	Oil/Water Separators
Location					
Discharge Point					
Concerns?					

Notes: See logbook notes All throughout site

3.2.11 Pits, Ponds or Lagoons:

To the extent visually and physically observed or identified in the interviews or records reviewed, pits, ponds, or lagoons of the *Property* shall be described, including if they are/were used in connection with waste disposal or wastewater treatment. The presence of lagoons or pits/ponds adjoining the *Property* shall be described to the extent visually and/or physically observable from the *Property* or from adjoining *Property*.

standing water observed roughly 200 ft SE of recycling center. See photographs

[illegible]

[illegible]

T[illegible] ied from the [illegible] areas of stained s[illegible] shall be [illegible]sc[illegible]

Stained soil next to 4 unlabeled drums outside of tuna packing building. Stressed veg.

other floor staining at maintenance shops (port end 4EA)

3.2.13 Stressed Vegetation:

[illegible] extent [illegible] identified from the [illegible] area of [illegible] (from [illegible] other than [illegible] excessive [illegible] shall [illegible].

Refer to 3.2.12

3.2.14 Odors:

[illegible] identified to be [illegible]

[illegible]

[illegible] Solid Waste:

[illegible]

[illegible] significant [illegible] [illegible]

Junk yard observed approx 1500 ft^2 in area

Notes:

3.2.16 Waste Water:

3.2.16.1 Storm Water:

Locations of culverts, drains, ditches, etc. See logbook.

Surface/Storm water discharges to

Presence of waterway systems or open bodies of water (i.e., springs, streams, basins, open channels)?

Any sheen? none

Any standing water? See 3.2.11.

Notes:

3.2.16.2 Sanitary and Industrial Waste Water Disposal System/Septic System:

The treatment and primary means of sewage and wastewater disposal for the *Property* shall be identified. To the extent visually and/or physically observed or identified from the *interviews* or *records review*, indications of on-site septic systems or cesspools should be described.

Sanitary waste water currently discharges to Sewage Treatment Plant

Industrial waste water currently discharges to water as of VSI

Cooling water currently discharges to water as of VSI

All discharges permitted? NA

Former discharges/locations NA

Any concerns?

Age of system?

Notes:

AECOM

(

3.2.17 Potable Water Supply:

The source ... potable water ... Property shall ...

See Water ...

3.2.18 Wells/Dry Wells:

To the extent visually and/or physically observed ... irrigation wells, injection wells, monitoring wells ...

Monitoring well observed at parking lot adjacent to main road near VCA building
Purpose unclear

3.3 Past Use(s) of the Property:

To the extent that indications of past uses of the *Property* are *visually and/or physically observed* on the *site visit*, or are identified in the *interviews* or facility record review, they must be identified (For example, there may be signs indicating a past use or a structure indicating a past use.) Past uses that represent a *recognized environmental condition* must be highlighted and photographed.

To the extent that past uses are identified that used, treated, stored, disposed of, or generated *hazardous substances* and *petroleum products* on the *Property*, the information shall be identified to the extent it is *visually and/or physically observed* during the *site visit* identified from *interviews with site personnel* or identified from the facility record review.

Part of government since 1979, sectors unknown
of it

... unclear

Phase I ESA (ASTM E1527-1305) – Property Reconnaissance Checklist

3.5 Current uses of Adjoining Parcels:

To the extent that current uses of adjoining parcels are *visually and/or physically observable* during the *Property* visit, or are identified in the *interviews* or *records review*, they must be identified. Current adjoining parcel uses that represent *recognized environmental conditions* in connection with the adjoining parcels or the *Property* must be highlighted.

North Port: Ocean
Road: Residential / commercial

Northeast Port: Ocean
Road: Residential / comercial

East Port: Ocean
Road: Ocean

Southeast Port: Ocean
Road: Ocean

South Port: Ocean
Road: Residential / commercial

Southwest Port: Ocean
Road: Res / Comm

West Port: Res / comm
Road: Res / comm

Northwest Port: Res / comm / ocean
Road Res / comm

Describe any adjacent dry cleaning operation, gasoline station, or manufacturing activity:
gasoline station. See log book

Indicate presence of environmental concerns on adjacent parcels:

- ✓ Evidence of the use, storage, or generation of hazardous waste
- ✓ Outdoor storage of oils and chemicals (in other than *de minimis* amounts)
- ___ Evidence of fill
- ✓ Stained soil or sheens on water
- ___ Stressed vegetation (other than due to weather or lack of water)
- ✓ Evidence of aboveground or underground storage tanks (fill pipes, stanchions, etc.)
- ✓ Opened or unopened containers of hazardous or unidentified substances
- ✓ Oil-filled electrical equipment
- ✓ Other concern (describe below)

Notes:

6 [illegible]

gas stations, hotels, restaurants, fuel farms

[illegible] Surrounding uses

gas stations, hotels, restaurants, fuel farms

10 [illegible]:

[illegible]

- [illegible]
- [illegible] adjacent buildings, [illegible]

Plant [illegible] – Property Reconnaissance Checklist

Use of this [illegible]
part [illegible]
nec [illegible]
Pr [illegible]

Property Reconnaissance Checklist was completed by:	
Name	Mandy / Olivia Shively
Title	Env Scientists
Firm	AECOM
Address	1001 Bishop St #1800, Honolulu, HI
Phone number	
Date	3/13/23 – 3/17/23

Appendix C:
Qualifications

Dustin Goto
Environmental Engineer

Education

MS, Environmental Engineering, University of Hawaii, Manoa, 2010
BA, Biology, Whittier College, 2006

Registrations

P.E. License, December 2016

Years of Experience

With AECOM: 12
With Other Firms: 1

Training

OSHA HAZWOPER 8-Hour Refresher Training
OSHA HAZWOPER 40-Hour Training
OSHA HAZWOPER 30-Hour Supervisor Training

Mr. Goto is a project manager with 13 years of experience conducting environmental site assessments (ESAs), baseline surveys, investigations, and compliance. Mr. Goto has completed Phase I ESAs at commercial and industrial properties in Hawaii and abroad including Tinian and Australia. Issues addressed during assessments have included current and historical storage and use of hazardous materials, petroleum, former landfill sites, and storm water and wastewater discharges.

Highlighted Experience

Corteva Agrisciences, Waimea, Kauai, HI. 2022. Completed a Phase I ESA for an approximately 1,100-acre agricultural area. Conducted background research, site reconnaissance, and authored report.

NAVFAC Pacific, CV 19F0140, Darwin, Australia. 2020. Completed a Phase I ESA for an approximately 100-acre area located at an air force base. Conducted background research, site reconnaissance, and authored report.

City and County of Honolulu Department of Environmental Services, Sand Island Wastewater Treatment Plant, Honolulu, HI. 2019-2020. Completed a Phase I ESA for an approximately 6-acre area located in a primarily industrial area of Honolulu. Conducted background research, site reconnaissance, and authored report.

NAVFAC Pacific, CV CTO 0068, Tinian, CNMI, 2017. Completed an environmental baseline survey for an approximately 240-acre area north of the Tinian International Airport and an 18-acre area north of the Port of Tinian. Conducted background research, visual site inspection, interviews, and authored report.

Napa Auto Parts, Phase I Environmental Site Assessment, Oahu. 2012. Conducted Phase I ESA for a former Napa Auto Parts site, including background research, site inspection, and report writing.

State of Hawaii Department of Hawaiian Homelands, Kekaha, Kauai. 2013. Conducted Phase I ESA for Kekaha Residential Lots Unit 4 Subdivision, including background research, site inspection, and report writing.

Honolulu Authority for Rapid Transportation, Honolulu Rail Project Phase I Environmental Assessments, Honolulu, Hawaii. 2011-2013. Assisted in writing Phase I environmental assessment reports for several parcels along the proposed airport segment of the rail route. Duties included data collection from state and local agencies, site visits, and report writing.

NAVFAC Hawaii, CIV 17F1811 and CV CTO 21F0125, JBPHH. 2018-ongoing. Project manager and deputy project manager for two projects at

site SS11. Project scope involves the preparation of sampling plans, groundwater and soil vapor sampling, and preparation of an environmental hazard evaluation and environmental hazard management plan. Project objectives are to assist the Navy with optimizing the remedy for SS11 and achieving response complete.

NAVFAC Hawaii, CV CTO 19F0124, JBPHH. 2019-ongoing. Project manager and deputy project manager for project to prepare environmental hazard evaluations and environmental hazard management plans for ST02, ST03, and ST14, and conduct a methane investigation at ST14.

NAVFAC Hawaii, CIV CTO 0064, JBPHH. 2019-ongoing. Project manager for project to prepare environmental hazard evaluations and environmental hazard management plans for SS01 and ST18A.

NAVFAC Hawaii, CV CTO 18F0146, NCTAMS PAC, JBPHH. 2018-2020. Project manager for five-year review of CERCLA sites at Wahiawa and Lualualei Annexes. Completed interviews, site visit, background research, and data evaluation, as part of five-year review report.

NAVFAC Hawaii, CV CTO 17F0102, Barbers Point Sanitary Landfill, Barbers Point, JBPHH. 2018-ongoing. Assisted in preparation of the FS and DD, including preparation of an alternatives evaluation, public outreach, cost estimating, a groundwater evaluation, and other tasks.

NAVFAC Hawaii, CIII CTO HC04, Long-Term Monitoring, Bldg. 284 and Former Bldgs. 80 and 302, Ford Island, JBPHH. 2015-2017. Project manager for LTM project, including semi-annual groundwater sampling and LUC inspections. Lead author for annual LTM reports.

NAVFAC Hawaii, LANTDIV CTO KB04, Subsurface Fuel Plume Delineation and EHE/EHMP, Bldg. 8, JBPHH. 2016-2018. Project manager for subsurface fuel plume project, including oversight and coordination of sorbent boom maintenance events.

NAVFAC Hawaii, LANTDIV CTO KB07, Hickam Well Inventory Survey. 2017. Project manager, led field and office efforts, responsible for administrative tasks of project.

County of Kauai, NPDES Compliance Four Transfer Stations, Kauai. 2013-2020. Technical lead for storm water inspection and sampling to assist the County of Kauai in complying with NPDES permits at four transfer stations.

Par Pacific Holdings Inc., Cardlock UST Investigation, Lihue, Kauai. 2018-2019. Project manager for site assessment and environmental oversight of UST investigation.

NAVFAC Hawaii, CIII CTO HC52, Former Vehicle Maintenance Facilities. 2015-2016. Deputy project manager, assisted in preparation of work plans, Record of Decision, and public meeting presentation.