



US Army Corps of Engineers
Honolulu District

Environmental Assessment and Finding of No Significant Impact

Former Aua Fuel Farm Pipelines and Petroleum-Contaminated Soil Removal

Formerly Used Defense Site Project No. H09AS000704
Aua Village, Island of Tutuila, American Samoa



July 2024

FINDING OF NO SIGNIFICANT IMPACT

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Introduction

U.S. Army Corps of Engineers (USACE) has prepared an Environmental Assessment (EA) to evaluate the potential environmental impacts of remediating petroleum contamination from fuel pipelines, soil, and water within the former Aua Fuel Farm. This EA is incorporated by reference.

The EA provides an overview of the environmental resources that may be affected, the interrelationship of these resources, and potential impacts on the human environment. The EA was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) (42 United States Code [USC] 4321 et seq.), Council on Environmental Quality regulations at Title 40 of the Code of Federal Regulations (CFR) Parts 1500–1508, and the Army NEPA regulation at 32 CFR Part 651 (Environmental Analysis of Army Actions). This Finding of No Significant Impact (FONSI) briefly states why the proposed action will not significantly affect the human environment and that an Environmental Impact Statement (EIS) will not be prepared.

Description of the Proposed Action

The proposed action consists of the removal of derelict petroleum pipeline infrastructure; petroleum-contaminated soil characterization, removal, and treatment or disposal; free-product removal and disposal; treatment of construction dewatering fluids; post-excavation soil sampling; site restoration; installation of additional groundwater monitoring wells; and groundwater assessments at the former Aua Fuel Farm.

Alternatives Considered

The EA analyzes the effects of remediating petroleum contamination from fuel pipelines, soils, and water within the former Aua Fuel Farm, along with two sub-alternatives for soil treatment locations and two sub-alternatives for treated water discharge locations (Alternatives B and B-1 through B-4). The EA also analyzes a no-action alternative, under which the fuel pipelines, soil, and water would not be remediated. In addition, eight other alternatives were identified and eliminated from detailed analysis during the planning process, because they did not meet the purpose and need.

USACE has decided soil will be treated at Onesosopo Park consistent with Alternative B-1 and treated effluent will be discharged at Outfall 001 close to the treatment plant located at the intersection of Routes 1 and 6, within a 10-foot radius of 14°16'15.6"S, 170°39'50.4"W consistent with Alternative B-3. At this time, soil will not be treated at Pago Pago airport (Alternative B-2) and the treated effluent discharge pipe will not be placed in the water (Alternative B-4).

Anticipated Environmental Effects

Overall, Alternative B along with sub-alternatives B-1 through B-3 would result in long-term Beneficial impacts and short-term Less than significant Adverse Effects. If, in the future, USACE decides to use the

Pago Pago airport for soil treatment (Alternative B-2) or the offshore discharge location (Alternative B-4), additional coordination with regulatory agencies and additional NEPA compliance would be necessary.

30-Day Public and Agency Review Period

The EA and a draft copy of this FONSI were made available to the public and to appropriate government agencies for review and comment during a 30-day period that began on 17 May 2024, with the publication of a Notice of Availability on the USACE Honolulu District website and in the local newspaper. The EA, along with other relevant documents and instructions for submitting comments, have been available at: <https://www.poh.usace.army.mil/Missions/Environmental/FUDS/Aua-Fuel-Farm/>. Additionally, a hard copy of the EA was made available at offices of the American Samoa Environmental Protection Agency (ASEPA, Utulei, Eastern District 96799, American Samoa) for review.

During the comment period, USACE received comments from US Environmental Protection Agency (US EPA) and American Samoa Department of Marine and Wildlife Resources (DMWR). Comments and responses are listed below.

- US EPA commented that it plans to issue a National Pollutant Discharge Elimination System (NPDES) Discharge Permit that will contain technology-based effluent limits protective of aquatic resources. In addition, the permit will require monitoring of pollutants of concern, with results reported to the US EPA and ASEPA.
- US EPA pointed out the importance of completing the sewer upgrade portion of the project before funding expires. US EPA shares a sense of urgency to remediate petroleum-contaminated soil and water to protect the environment and improve the health and safety of Aua Village residents. US EPA appreciates that the NEPA process was used to evaluate alternatives and agrees with the EA that the project will have an overall beneficial effect.
- US EPA recommended the Final EA update the location of the outfall pipe from the treatment facility consistent with National Oceanic and Atmospheric Administration's 1 May 2024 letter approving placement of treated discharge waters across the shoreline onto the rock revetment and US EPA's NPDES permit. In response to this comment, USACE decided to discharge treated effluent at Outfall 001 close to the treatment plant located at the intersection of Routes 1 and 6, within a 10-foot radius of 14°16'15.6"S, 170°39'50.4"W consistent with Alternative B-3. It will not be placed in the water as described for alternative B-4. USACE added the GPS coordinates to this FONSI.
- DMWR requested a reference for the statement under Alternative B-4 that any sediment would revert to natural conditions overnight. At this time, USACE will not be discharging treated water at the offshore location described in this section. If, in the future, USACE decides to use the offshore discharge location described under Alternative B-4, additional coordination with regulatory agencies and additional NEPA compliance would be necessary.
- DMWR commented that there are no Best Management Practices (BMP) listed in Section 3.3, Geology and Soils, to address emissions from pipeline removal activities and backfilling, and for the Thermal Desorption Unit (TDU) operations at Onesosopo Park. The EA includes BMPs for minimizing air pollution in Section 3.1. The EA is clear that during operation of the TDU to treat excavated soil, emissions from the TDU would be captured and treated to remove pollutants and

minimize impacts to air quality. The EA explains air emissions would be monitored and maintained in accordance with the Stationary Air Pollution Source Permit issued by American Samoa Environmental Protection Agency (ASEPA), dated 8 February 2024. Additionally, dust generated during soil treatment operations would be mitigated by erecting a dust fence, reducing equipment speeds, minimizing emissions by carefully tipping excavator buckets onto stockpiles, covering stockpiles, and spraying water over stockpiles and roadways.

- DMWR referenced Section 3.3 of the EA and stated concern about the large volume of water used to assist with dust control in Onesosopo, and that there is no information about how this water will be contained on site, preventing its movement into the nearby reef area. The EA explains in Section 3.11.1.2 that USACE will comply with measures detailed in the Stormwater Pollution Prevention Plan; Spill Prevention, Control, and Countermeasures Plan; and the NPDES stormwater permit. The EA clearly states USACE will follow the avoidance and minimization measures included in letters from NMFS dated 1 May 2024 and USFWS dated 16 June 2020. USACE also will follow the avoidance and minimization measures and Recommended Standard BMPs included in the letter from USFWS dated October 31, 2023 included Appendix E of the EA. In addition, Section 3.12.2.2 of the EA lists specific BMPs to address the potential to spread sediment or contaminants from the site via surface runoff.
- DMWR stated there is not enough information to indicate monitoring of particulate emissions to verify emissions meet health and human safety standards. The EA explains air emissions will be controlled by following BMPs and complying with Stationary Air Pollution Source Permit issued by ASEPA, dated 8 February 2024. Fugitive dust emissions will be visually monitored to determine when additional dust suppression BMPs are necessary. The TDU is equipped with a dust filtration system and will be monitored according to permit requirements.
- DMWR requested clarification of a statement in Section 3.3.2.2 that says, “material would be placed at the base of the excavation and under untreated overburden, where possible.” Soil treated by the TDU that might be used as backfill will not contain organic material. If organic material is necessary to support vegetative growth, treated soil would be placed in the bottom of the ditch and overburden or topsoil with organic material to allow for plant growth would be added on top of the treated soil.
- DMWR asked whether the ERP has been developed. The ERP is currently being developed and will be completed prior to the start of the proposed action.
- DMWR stated the EA does not include an assessment of fish and invertebrate populations that may exist and be affected by this proposed activity; the EA does not address the impacts the discharge will introduce into the EFH; and there is insufficient information to verify the statement that “proposed activities will not alter or adversely affect the EFH including corals that are in the area.” The EA included this information and explanation. Information on fish and invertebrate populations that may exist is included in the affected environment sections of Sections 3.9.1 Habitat and Wildlife, 3.10.1 Protected Species, and 3.11.1 Essential Fish Habitat. The EA describes the environmental consequences and impacts in Sections 3.9.2, 3.10.2, and 3.11.2. The water treatment system including the design of the diffuser is explained in Section 2.4.3. Section 3.11.1.2 explains USACE will comply with measures detailed in the Stormwater Pollution Prevention Plan, Spill Prevention, Control, and Countermeasures Plan, and the NPDES stormwater discharge permit. In addition, Section 3.12.2.2 lists specific BMPs to address the potential to spread sediment or contaminants from the site via surface runoff. The EA clearly states USACE will follow the

avoidance and minimization measures included in letters from NMFS dated 1 May 2024 and USFWS dated 16 June 2020.

- DMWR commented that the EA provides insufficient information to verify that freshwater inflow will not affect existing biological populations and sediment distribution in the area. In addition, DMWR stated there is no information in the EA that identifies measuring and monitoring dissolved oxygen to be less than 80% of saturation and there is no requirement for documenting sea surface temperature, salinity, and turbidity levels. DMWR stated they believe that monitoring should be done at the discharge point and at different points east and west of the discharge. The EA clearly states USACE will comply with the requirements of the NPDES permit and the draft permit was included as an Appendix to the EA. The NPDES permit includes requirements for monitoring, and documenting and reporting results of dissolved oxygen, temperature, and turbidity. The Draft permit requires all samples to be taken after in-plant return flows and the last treatment process and prior to mixing with the receiving water. USACE did not apply for a mixing zone, therefore, all applicable water quality standards will be met at the point of discharge. For this reason, the discharge point is the most conservative sampling location. USACE will also monitor for salinity as recommended by NMFS in their letter dated 1 May 2024. As explained in the letter, USACE will monitoring for salinity and temperature in the receiving water to maintain the ambient temperature and salinity and avoid adverse impacts.
- DMWR commented that Section 7-1 has insufficient mitigation measures to verify proposed activities and its impacts will be mitigated. The EA is clear in Section 7 that management measures and design features associated with the proposed action include standard protocols, procedures, and requirements. It explains that management measures and design features are described for the proposed action in Section 2.4, and for specific resource areas in Section 3 and are not listed separately in this section. Sections 2.4 and 3 include sufficient measures to ensure adverse impacts will be less than significant.

Findings

I have considered the results of the analysis in the EA and the comments received during the comment period. Based on these factors, I have decided to proceed with the Proposed Action Alternative B, along with B-1 and B-3. Implementation of the Proposed Action, along with specified permits, plans, and measures identified above, will have long-term Beneficial and short-term Less-than-significant adverse effects on the human environment. This FONSI does not include selection of Alternative B-2 or B-4, and I make no finding as to their potential impacts; further follow-on NEPA compliance would be necessary prior to implementation of these alternatives. I have concluded that implementation of the proposed action would not constitute a major federal action significantly affecting the quality of the human environment. Consequently, implementation of the proposed action does not require the preparation of an EIS.

Approved by:



CHRISTOPHER RYAN PEVEY
LTC, EN
Commanding

08 JUL 2024

Date

**Environmental Assessment for
Former Aua Fuel Farm Pipeline and
Petroleum-Contaminated Soil Removal
Aua Village, Island of Tutuila, American Samoa**

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Acronyms and Abbreviations

AD	<i>Anno Domini</i>
AMP	Archaeological Monitoring Plan
AMS	accelerator mass spectrometry
APE	Area of Potential Effect
ASEPA	American Samoa Environmental Protection Agency
ASHPO	American Samoa Historic Preservation Office
ASPA	American Samoa Power Authority
ASTs	aboveground storage tanks
bgs	below ground surface
BMPs	best management practices
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
dBs	decibels
dBA	A-weighted decibel
DERA	Defense Environmental Restoration Act
DERP	Defense Environmental Restoration Program
DoD	U.S. Department of Defense
DPS	Distinct Population Segment
EA	environmental assessment
EFH	Essential Fish Habitat
EIS	environmental impact statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ERP	Ecological Resources Plan
ESA	Endangered Species Act
FDE	Findings and Determination of Eligibility
FEMA	Federal Emergency Management Agency
FEP	Fishery Ecosystem Plan
FONPA	Finding of No Practicable Alternative
FONSI	finding of no significant impact
FUDS	Formerly Used Defense Sites
GHG	greenhouse gas
GPM	gallons per minute

Acronyms and Abbreviations *(continued)*

HAPCs	habitat areas of particular concern
mg/kg	milligrams per kilogram
MSA	Magnuson-Stevens Fishery Conservation and Recovery Act
NEPA	National Environmental Policy Act of 1969
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
OSHA	Occupational Safety and Health Administration
PA	Preliminary Assessment
RI	Remedial Investigation
ROI	radius of influence
SI	Site Inspection
SRF	State Revolving Fund
TDU	thermal desorption unit
TPH	total petroleum hydrocarbons
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WP Council	Western Pacific Regional Fishery Management Council
§	Section

1. Purpose and Need

1.1. INTRODUCTION

The U.S. Army Corps of Engineers (USACE) prepared this environmental assessment (EA) under the National Environmental Policy Act of 1969 (NEPA) to address the remediation activities at the former Aua Fuel Farm. Remediation activities would include fuel pipeline closure or removal; petroleum-contaminated soil characterization, removal, and treatment or disposal; free-product removal and disposal; treatment of construction dewatering fluids; post-excavation soil sampling; site restoration; installation of additional groundwater monitoring wells; and groundwater assessments. The proposed action is located in Aua Village, Island of Tutuila, American Samoa (**Figure 1**).



Figure 1. Location of the Former Aua Fuel Farm and Soil Treatment Area

As shown on **Figure 2**, the project site encompasses approximately 44 acres in Aua Village (based on the former tank farm footprint) from Route 1 to the base of the axial mountain range and project support areas in Onesosopo Park, to the south of Aua Village and at the Pago Pago Airport. Project work may extend west of the village towards the canoe house and east of the village along Route 1 if investigation work indicates that pipeline or contaminated soil removal activities or the installation of additional groundwater monitoring wells are warranted in these areas.



Figure 2. Former Aua Fuel Farm Pipeline Network

This document was prepared in accordance with NEPA (42 United States Code (USC) Section [§] 4321 *et seq.*), Council on Environmental Quality (CEQ) regulations at Title 40 of the Code of Federal Regulations (CFR) Parts 1500-1508, and the Army NEPA regulation at 32 CFR Part 651 (Environmental Analysis of Army Actions). The purpose of this EA is to provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement (EIS) or a finding of no significant impact (FONSI) for the proposed action. This assessment provides an evaluation of the environmental consequences of the proposed action to be implemented by the USACE Honolulu District to remediate petroleum contamination from fuel pipelines, soil, and water within the former Aua Fuel Farm in Aua Village, Island of Tutuila, American Samoa.

1.2. AUTHORITY FOR PROJECT UNDER THE FUDS PROGRAM

The proposed action is under the U.S. Department of Defense's (DoD) Defense Environmental Restoration Program – Formerly Used Defense Sites (DERP-FUDS) (10 USC § 2701 *et seq.*), which is authorized under the Defense Environmental Restoration Act (DERA). The FUDS Program is executed by USACE to clean up waste materials, contaminated soil, and unsafe structures and debris from areas that were under the jurisdiction of the DoD and owned by, leased by, or otherwise possessed by the United States that were transferred from DoD control prior to 17 October 1986.

A Findings and Determination of Eligibility (FDE) for inclusion of the Aua Fuel Farm site in the FUDS Program was issued in 1991. In 2016, a second eligibility assessment was performed to reexamine the eligibility of the site based on the existing FDE and to augment the record in accordance with current FUDS Program and DERP policies. The 2016 assessment determined that the Aua Fuel Farm property was possessed by the United States under the jurisdiction of the Secretary of Defense and was transferred from DoD control prior to 17 October 1986; therefore, the property remained eligible for inclusion in the FUDS Program.

Most FUDS projects follow the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) processes, which would not include preparation of an EA under NEPA. However, the proposed activities involve excavation and removal of petroleum products, which fall outside the purview of CERCLA. The proposed site is considered a Containerized Hazardous, Toxic, and Radioactive Waste (also referred to as “CON/HTRW”) site and is conducted in accordance with the DERP.

1.3. PROJECT SITE DESCRIPTION AND HISTORY

The former Aua Fuel Farm is located on the northeast side of Pago Pago Harbor on Tutuila Island, American Samoa. **Figure 1** shows the location of Aua Village and the adjacent Pago Pago Harbor. Aua Village is currently used for residential, commercial, and institutional purposes. The village comprises homes, community gathering places, a school, churches, and some small stores. **Section 3** includes additional information on the environmental conditions, including air resources, community and land use and traffic, geology and soil, hazardous materials, solid waste, and hazardous waste, noise, cultural resources, floodplains, habitat and wildlife, protected species, essential fish habitat, surface water, wetlands, and other special aquatic sites, and other considerations at Aua Village.

The former Aua Fuel Farm consisted of 12 aboveground storage tanks (ASTs) (each measuring 55 feet in diameter by 24 feet high), 13 pump houses, and approximately 7,500 feet of 12-inch-diameter pipeline distribution network. Historical records indicate that the tanks were constructed of steel and each tank contained up to 10,000 barrels of Navy Special Fuel Oil. **Figure 2** presents the approximate historical location of the ASTs and pipelines. The specific location and final disposition of the fuel pipelines associated with the fuel farm are unknown; however, historical documents indicate that the pipeline extended from Atuu Village and proceeded parallel to Route 1 along the Pago Pago Harbor and into what is now Aua Village and then connected to each of the ASTs. It is suspected that the network of piping within Aua Village as part of the Aua Fuel Farm may have been buried at the same time as the tank remnants.

The Navy constructed the tanks between 1938 and 1939 as part of its Pacific area defense efforts (**Energy Resources International, Inc., 1989**). The U.S. Navy operated the fuel farm for bulk fuel oil storage and distribution and maintained a Construction Battalion camp to support Naval Station Tutuila during World War II. After the war was over, the Samoan Islands were no longer considered to be strategically vital and defense installations on the island were dismantled and salvaged. By June 1945, the ASTs had been drained to the level of the output valve (12 inches from above the bottom of the tank). Approximately 4,893 barrels (205,506 gallons) of fuel oil remained at the farm. No records regarding the final dismantling of the ASTs were found; however, based on observations during various environmental investigations, the tanks are believed to have been crushed, folded, and buried under approximately three feet of imported fill material. Historical documents indicate that the tanks were no longer in the inventory of the U.S. Naval Station Pago as of May 1947.

Over the next 40 years, there were scattered reports from the residents of Aua Village of petroleum contamination in the soil (**USACE, 1991**). Oil was observed in excavations, crop plantings, burial sites, and septic tanks. In 1987, the Department of Public Works, American Samoa Government reported petroleum contamination in groundwater in a trench downgradient of the former tank farm during construction of a waterline. This event spurred further response from USACE as described in the following subsections.

1.4. AUA FUEL FARM – PHASE I

In 1989, USACE-Pacific Ocean Division initiated a Preliminary Assessment (PA) of the Aua Fuel Farm (Phase I) under the DERP-FUDS. The PA confirmed that petroleum hydrocarbons were present in several subsurface regions of the village (**USACE, 1990**). In response, a Site Inspection (SI) was conducted in 1990 to verify the presence or absences of and to define the nature and extent of the subsurface fuel contamination. Twelve test pits were excavated at locations surrounding the former tank sites. Free product characterized as weathered diesel and waste oil was observed in six test pits, and total petroleum hydrocarbons (TPH) was detected in soil at significant concentrations (900 to 15,000 milligrams per kilogram [mg/kg]) in two test pits. Based on field observations and laboratory analytical results, it was concluded that five former tank sites (8, 9, 10, 11, and 12) were extensively contaminated and required remediation (**USACE, 1991**).

To address the identified contamination, tank remnants were removed at locations 8, 9, 10, 11, and 12 in October 1993 and a response action entailing a combination of in situ and ex situ bioremediation was conducted between December 1993 and October 1998. Two bioremediation systems were installed within Aua Village: a passive in situ liquid-delivery process and an ex situ biovented soil pile. The biovented soil pile was dismantled in February 1997, and the liquid delivery system was dismantled in October 1998 (**USACE, 2002**).

1.5. AUA FUEL FARM – PHASE II

In 1995, based on American Samoa Environmental Protection Agency (ASEPA) and village residents' reports of contamination at other former tank sites, further investigations (Phase II) were initiated at the Aua Fuel Farm to address subsurface contamination in four additional tank sites (4, 5, 6, and 7) (**USACE, 1995**). Test trenches were excavated at each of the four locations to evaluate the extent of buried tank remnants, the lateral and vertical extent of subsurface contamination, and the nutrient balances within contaminated soil and groundwater. Tank remnants and contaminated soil were identified at tank sites 4, 5,

and 6; while, despite numerous statements from village residents, no tank remnants or appreciable contamination were discovered at tank site 7. In 1998, contamination was removed to the extent feasible at the remaining sites and bioremediation was performed on the remaining contamination. It was concluded that natural attenuation aided by bioremediation would effectively complete remediation at the project site (USACE, 1999).

1.6. AUA FUEL FARM PIPELINE

The Aua Fuel Farm Pipeline was originally believed to have been installed below ground along Route 1 but aboveground within Aua Village and was investigated separately from the Aua Fuel Farm itself. The inset box on **Figure 2** presents the Aua Fuel Farm Pipeline alignment from Atuu Village to Aua Village. After conducting an extensive SI and Remedial Investigation (RI) of the Aua Fuel Farm Pipeline along Route 1, a Proposed Plan and Decision Document were prepared that deemed No Further Action for the Aua Fuel Farm Pipeline is necessary to protect human health and the environment. This decision did not apply to the Aua Fuel Farm itself nor the segments of the pipeline that have been uncovered within Aua Village, which is the subject of this EA.

1.6.1. Aua Fuel Farm Pipeline – 2011 Site Inspection

In 2011, an SI was performed to verify the presence and absence of and to delineate the nature and extent of contamination associated with the former Aua Fuel Farm Pipeline between Atuu Village and Aua Village. The SI was performed along a 1.75-mile stretch of Route 1 from central Atuu Village to approximately 350 feet east of Aua Village and included advancement of approximately 30 soil borings and collection of 103 surface and subsurface soil samples from within its right-of-way. Twenty-eight out of 30 of the soil borings were collected on Route 1; areas within Aua Village associated with the former Aua Fuel Farm were excluded from this SI. No evidence of widespread contamination was observed along Route 1; however, isolated contamination at four locations was identified.

1.6.2. Aua Fuel Farm Pipeline – 2013 Remedial Investigation

In 2013, an RI was performed to further evaluate the nature and extent of contamination in soil, soil vapor, and groundwater in three investigation areas along the Aua Fuel Farm Pipeline alignment (USACE, 2016a). All three investigation areas were located along Route 1. No further action was warranted at the two investigation areas located on Route 1 west of Aua Village; however, subsurface petroleum contamination was noted in the third investigation area located at the Route 1 and Route 6 juncture at the southern perimeter of the former Aua Fuel Farm downgradient of former Tank 11. It was concluded that the contamination was likely associated with the former Aua Fuel Farm ASTs and associated piping and not the Aua Fuel Farm Pipeline.

1.6.3. Aua Fuel Farm Pipeline – Proposed Plan and No Action Decision Document

After the completion of the Aua Fuel Farm Pipeline RI, the USACE issued a Proposed Plan (USACE, 2017) and Decision Document (USACE, 2018) deeming that no action for the Aua Fuel Farm Pipeline is necessary to protect human health and the environment. The Decision Document explicitly states that the No Further Action decision applies to contamination within the boundaries of the former Aua Fuel Farm Pipeline and not within the former Aua Fuel Farm itself and the network of pipelines connecting the former

tanks to the Aua Fuel Farm Pipeline. The decision for no action was made in accordance with the DERP and with concurrence from the ASEPA.

1.7. AUA FUEL FARM TANK REMNANT REMOVAL ACTIONS

Since completion of the Aua Fuel Farm remediation efforts in 1998, USACE has performed additional actions to investigate and remove residual contamination stemming from the discovery of buried tank remnants during installation of utilities by American Samoa Power Authority (ASPA) throughout Aua Village. The timeline of events is summarized below.

September 2018 – ASPA discovers abandoned tank remnants near the approximate location of Tank 1 while installing an underground conveyance line to a private property.

November 2018 – ASPA discovers remnants of a second abandoned tank near the approximate location of Tank 3 during installation of an underground conveyance line.

August through September 2019 – In response to the tank findings, USACE conducts emergency tank removal actions at Tanks 1, 2, and 3 and a follow-on tank location and investigation of petroleum in soil at the remaining tanks (4 through 12) within the former Aua Fuel Farm.

May through September 2021 – USACE proceeds with excavation of petroleum-contaminated soil and tank remnants from Tank Sites 1, 2, 3, 4, 5, 9, 10, 11, and 12. No action was taken at Tanks Sites 6 and 8 because of access limitations encountered in the field. No tank remnants were found at the historical location of Tank 7, and it is presumed that the tank is beneath a residence to the south of the historical location.

A total of 8,197 cubic yards of petroleum-contaminated soil was excavated, thermally treated, and used as excavation backfill. In addition, 225 gallons of free-product impacted groundwater was extracted from the excavations and disposed of off the site. Bioremediation enhancements were applied to groundwater in open excavations to augment the in situ aerobic bioremediation of residual free product.

1.8. AUA FUEL FARM IMAGING SURVEY AND SNORKEL SURVEY

An imaging survey is being performed between April through May 2024 to investigate the location of the pipeline and contaminated soil. Subsurface imaging will be completed using a down-hole logging tool that uses fluorescence to identify the location and presence of petroleum contamination. A direct-push Geoprobe drill rig will be used to advance imaging borings into the subsurface. Approximately 500 borings will be advanced up to 20 feet below ground surface (bgs). The locations of the borings will be selected on a judgmental basis within each of 13 study areas, as shown on **Figure 3**, with drilling locations based on the known or suspected location of the pipeline and previous investigation data. The locations will be used to identify areas of gross contamination, further define the extent of subsurface contamination, inform the phasing of the potential pipeline excavation, and document the residual contamination where excavation would not be possible.

In addition, a snorkel survey is being conducted to identify existing conditions in Pago Pago Harbor and to assist with determining the best location for water treatment infrastructure. The snorkel survey is expected to last less than three days, will be completed using snorkel gear, and will not disturb the existing environment.

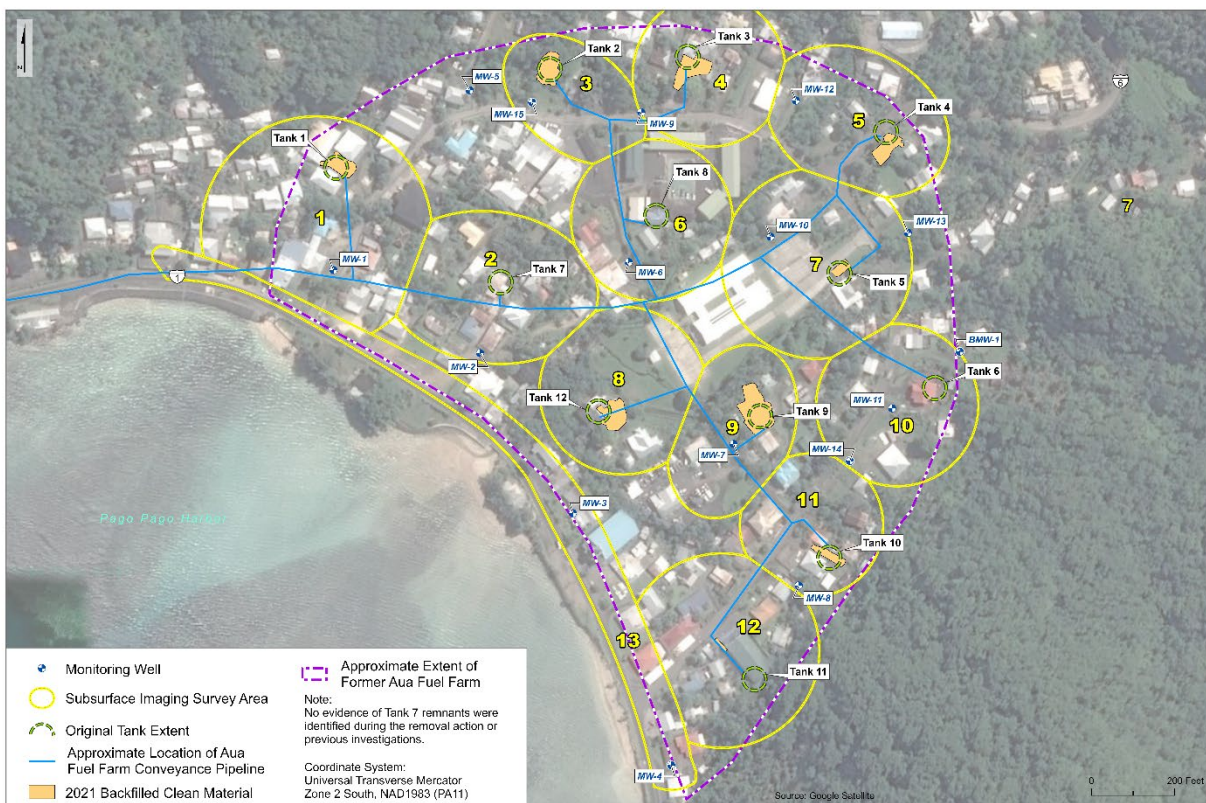


Figure 3. Drilling Locations

1.9. PURPOSE AND NEED FOR THE PROPOSED ACTION

While most of the tank remnants and associated contaminated soil have been removed from the tank sites within Aua Village, buried sections of the fuel pipeline network within Aua Village were discovered during the tank removal actions in 2021. It was previously thought that the pipeline network within the village had been aboveground, drained, and removed during dismantling of the fuel farm; however, a portion of the suspected pipeline was encountered during the 2021 removal actions between Tank 10 and Tank 11 along Route 6 as shown on **Figure 2**. Free product was observed on groundwater and saturated soil adjacent to the suspected pipeline. Fuel was also observed flowing out of pipeline segments that were removed by ASPA during sewer line installation activities near Tank Sites 3, 9, and 11.

Pipeline segments remaining in the subsurface may be a preferential pathway for free product migration to surface water or the harbor. Furthermore, as these pipeline segments degrade, they may collapse causing subsidence and damage to surrounding infrastructure. If the remaining pipeline segments located throughout Aua Village are not removed, eventually more widespread contamination of the environment will occur.

The purpose of the proposed action is to complete remediation activities including fuel pipeline closure or removal; petroleum-contaminated soil characterization, removal, and treatment or disposal; free-product removal and disposal; treatment of construction dewatering fluids; post-excavation soil sampling; site restoration; installation of additional groundwater monitoring wells; and groundwater assessments. A

portion of the proposed action is being scheduled to coincide with the State Revolving Fund (SRF)-funded sewer line installation project being performed by ASPA at the intersection of Route 1 and Route 6. Although the rest of the sewer system upgrades have been completed, approximately 400 linear feet of sewer line remains to be installed because the installation location is within an area where historic contamination exists. The existing infrastructure in Aua is unable to process the petroleum-impacted dewatering fluids that will be generated during the sewer line installation so the sewer installation project has been suspended until the dewatering fluids can be treated through the water treatment system included as part of this proposed action. Because the SRF funding expires in 2024, there is urgency to conduct the proposed action before the funding expires.

The need for the proposed action is to reduce risk to human health and the environment and complete response actions in accordance with the DERP-FUDS.

1.10. PUBLIC PARTICIPATION, TRIBAL CONSULTATION, AND AGENCY COORDINATION

To facilitate the analysis and the decision-making process, USACE is inviting public participation and maintaining a policy of open communication with interested parties. All federal and state agencies, public and private organizations, and members of the public that have a potential interest in the proposed action, including minority, low-income, and disadvantaged communities and federally recognized Native American tribes, were urged to participate in the NEPA and decision-making processes, as guided by CEQ and Army NEPA regulations.

In keeping with established USACE policy to provide a transparent and open decision-making process, USACE is making this EA available to applicable federal and local agencies, stakeholders, and the public for review and comment. Copies of the EA and the Finding of No Practicable Alternative (FONPA) for Federal activities within the floodplain are available on USACE's website at:

<https://www.poh.usace.army.mil/Missions/Environmental/FUDS/Aua-Fuel-Farm/>

Comments can be submitted via a link available on the USACE website or to:

Email address: **HonoluluDistrictFUDSInfo@usace.army.mil** or

Mailing address: U.S. Army Corps of Engineers, Honolulu District
ATTN: Matthew Haith, CEPOH-PPE, 230 Otake Street, Fort Shafter, Hawaii 96858-544

A draft FONSI is being issued concurrently with the original EA stating, based on the evidence gathered throughout the NEPA processes for this project, the current determination that the proposed action will have no foreseeable, significant impact on environmental resources. USACE will consider all comments before making a final determination that the proposed action will have no foreseeable significant impact on environmental resources. If appropriate, a FONSI will be issued following completion of the 30-day review period and comments received are appropriately addressed.

2. Description of the Proposed Action and Alternatives

2.1. ALTERNATIVE SELECTION CRITERIA

USACE used selection criteria to establish reasonable alternatives that meet the need for the proposed action. Any alternative selected for detailed analysis must have met the following selection criteria:

- Able to be implemented in the timeframe necessary to support the sewer installation project.
- Able to be implemented given weather considerations and the limited construction season.
- Protects human health and the environment.
- Complies with applicable regulations.

2.2. ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

Nine alternatives were considered for the different elements of the proposed action and eliminated from detailed analysis during the planning process because they did not meet the purpose and need. The alternatives and reasons for dismissal are described below under the categories of Pipeline Closure with Soil and Free Product Removal and Treatment, Soil Treatment and Disposal, and Management of Construction Dewatering Fluids.

Pipeline Closure with Soil and Free Product Removal and Treatment

- **Eliminated Alternative 1** – In situ pipeline closure or abandonment with no soil removal or treatment, monitored natural attenuation of residual contamination, and no management of construction dewatering fluids. This alternative was eliminated because direct removal and treatment of the contaminated soil and dewatering fluids would be the fastest and surest means of eliminating or reducing environmental contamination. While natural attenuation might be used after free product removal, it would not be effective without removing free product and grossly contaminated soil.
- **Eliminated Alternative 2** – In situ treatment. This alternative was eliminated for full analysis because, until free product and grossly contaminated soil are removed, in situ treatment is unlikely to be effective at reducing contaminant concentrations. If in situ treatment is considered in the future, additional NEPA analysis would be completed.

Soil Treatment and Disposal

- **Eliminated Alternative 3** – Pipeline removal with soil excavation and on- or off-island soil disposal at a certified disposal facility. This alternative was eliminated because there is a need for using treated soil as backfill.
- **Eliminated Alternative 4** – Pipeline removal with soil excavation and soil treatment via landfarming. This alternative was eliminated because there is no location able to accommodate the amount of space needed for a landfarm. Also, landfarming would take significantly longer to treat the contaminated soil and treatment would not be complete within the limited construction season.

Management of Construction Dewatering Fluids

- **Eliminated Alternative 5** – Discharge dewatering fluids to the sanitary sewer. This alternative would involve discharging dewatering fluids either without treatment or after treatment to the sanitary sewer. This alternative was eliminated because the sanitary sewer could not accommodate the large volume of water that would be generated during construction dewatering.
- **Eliminated Alternative 6** – Discharge dewatering fluids to a surface impoundment. This alternative would involve piping or transporting dewatering fluids and placing them in a surface impoundment that would discharge the fluids or allow the fluids to infiltrate into the aquifer. This alternative was eliminated because there is no location that is large enough to accommodate the volume of water that would be generated during construction dewatering.
- **Eliminated Alternative 7** – Containerization and offsite treatment. Under this alternative, water encountered during construction would be piped to tanks that would be transported to another location for treatment. This alternative was eliminated because too many trucks would be needed and there is no existing treatment system capable of treating the large volume of water that would be generated during construction dewatering.
- **Eliminated Alternative 8** – Underground injection. Under this alternative, water encountered during construction would be injected into an underground injection well for disposal. This alternative was eliminated because a suitable location had not been identified for underground injection and permitting could not be completed in time to support the sewer installation project.
- **Eliminated Alternative 9** – Other discharge locations. Under this alternative, the outfall for the water treatment plant would be extended to the sandy area on the shore. This alternative was eliminated because the locations did not provide an operational or environmental advantage to the two locations chosen for analysis. Also, additional data would need to be collected to determine the impact on natural resources and that data would not be available in time to support the sewer installation project. If these locations would be considered in a future phase of the project, additional NEPA analysis would be completed.

Based on the selection criteria listed in **Section 2.1**, the proposed action involving pipeline removal with treatment of contaminated soil and dewatering fluids along with two sub-alternatives for soil treatment locations and two sub-alternatives for treated wastewater discharge locations, and the No Action Alternative were selected for detailed analysis.

2.3. ALTERNATIVE A: NO ACTION

Under the No Action Alternative, contaminant sources and contaminated soil and water would not be excavated and treated. Also, monitoring wells would not be installed and sampled. The No Action Alternative provides a baseline against which the impacts of the action alternative can be measured. The No Action Alternative does not meet the purpose and need (**Section 1.9**).

2.4. ALTERNATIVE B: PROPOSED ACTION

Under the proposed action alternative, contaminant sources and contaminated soil and associated dewatering fluids would be excavated and treated. In addition, monitoring wells would be installed and groundwater samples would be collected for site characterization and to determine the nature and extent of any remaining contamination.

The planned activities would occur within Aua Village with transport of excavated soil to and from the soil treatment location. The proposed action consists of locating and removing (where accessible) or draining, cutting, and capping (where inaccessible) the fuel pipeline and removing and treating petroleum contaminated soil associated with the fuel pipeline. Ancillary to the pipeline and soil removal activities, is the treatment and discharge of petroleum-contaminated dewatering effluent (construction dewatering fluids) generated during excavation work. Once the proposed action is implemented, the site will be restored, and monitoring wells would be installed for ongoing monitoring activities.

The four primary components being assessed for this proposed action are described in the following subsections:

- Excavation and removal or capping of the fuel pipelines petroleum-contaminated soil.
- Treatment of excavated soil at a thermal desorption unit (TDU) located at Onesosopo Park.
- Dewatering and treatment of construction dewatering fluids from pipeline excavations.
- Installing monitoring wells and collecting groundwater samples.

The physical tasks associated with the Removal Action Alternative generally include:

- Mobilization of equipment and materials.
- Site preparation.
- Removing an estimated 7,500 feet of subsurface pipeline along the historical route at a width of approximately 2 feet and a depth of approximately 4 feet bgs.
- Excavating up to 5,000 cubic yards of contaminated soil to a maximum depth of 10 feet bgs from the pipeline trenches and placing material directly into haul trucks for transport to the thermal treatment area.
- Hauling contaminated soil and water to their respective treatment areas.
- Treating contaminated soil using a direct-fired rotary drum thermal extraction technology.
- Collecting surface and subsurface post-excavation soil samples.
- Dewatering excavations and treating the dewatering fluids with an onsite water treatment system.
- Discharging treated dewatering effluent into the Pago Pago Harbor.
- Backfilling excavations with a combination of screened aggregate removed from excavation soil, clean overburden, thermally treated soil, and imported fill material, and restoring the ground surface to its pre-excavation condition (i.e., compacted soil, vegetated, paved).
- Returning important vegetation that was relocated to facilitate the removal action to its original location when possible or replaced with comparable items.
- Installing up to 20 paired groundwater monitoring wells and collecting groundwater samples.
- Decontamination of equipment.
- Removal of laydown areas and site restoration.
- Demobilization.

Additional information regarding the details of the work is provided in the “Work Plan for Fuel Pipeline and Petroleum-Contaminated Soil Removal Aua, Island of Tutuila, American Samoa FUDS Project No.

H09AS000704” dated April 2024 [Work Plan, (USACE, 2024a)]. All work would follow the Ecological Resources Plan (ERP), Archeological Monitoring Plan (AMP), and applicable environmental laws, regulations, permits, and other requirements. **Appendix A** includes the Stationary Air Pollution Source and the Draft National Pollutant Discharge Elimination System permits. The project would follow the Stormwater Pollution Prevention Plan and would be covered by the 2022 Construction General Permit (USEPA, 2022) for stormwater discharges for construction activities. In addition, the American Samoa Coastal Management Program concurred with the Coastal Zone Management Act consistency determination for the proposed project (**Appendix B**).

Several vehicles and construction equipment will be used at the site, including:

- Excavators (small and medium)
- Vibratory Compactor
- Front-end Loaders
- Skid-steer Loaders
- 5-yard Dump Trucks
- Direct-push Drill Rig, e.g., Geoprobe Systems®
- TDU (consisting of a control house, feed system, countercurrent rotary dryer, thermal oxidizer, indirect rotary dryer, and stack)
- Water Treatment System (consisting of pumps, frac tanks, oil-water separators, bag filters, and activated carbon and clay media filters)
- Site Vehicles
- Light Towers
- Generators

2.4.1. Fuel Pipeline and Petroleum-Contaminated Soil Removal

Excavation will be performed using heavy equipment to remove the historical fuel pipeline and any associated petroleum-contaminated soil, to the extent practicable. Excavation will proceed along the historical fuel pipeline network within Aua Village at a width of approximately two feet and a depth of approximately four feet bgs. If necessary, the excavations will be expanded until no evidence of contamination is observed up to a maximum depth of 10 feet bgs or until a structural, safety, or other limitation is encountered. Post-excavation samples will be collected to document the concentration of any residual petroleum contamination. The Tropical Pacific Environmental Screening Levels developed by the Hawaii Department of Health and accepted by ASEPA will be used to document whether any residual contamination exceeds the guidelines for unrestricted use (220 mg/kg for TPH diesel range organics and 500 mg/kg for TPH residual-range organics).

The fuel pipeline trench excavations will be backfilled with a combination of clean overburden, thermally treated soil, and imported fill material (if necessary). Excavations will be backfilled predominantly with thermally treated soil followed by clean overburden; imported fill material will only be used to supplement backfill if there is insufficient clean overburden and treated material. Once backfill has reached the elevation of the surrounding ground surface, the site will be graded to pre-existing conditions and allow for surface water drainage to prevent ponding. Surface features (e.g., concrete pads, fencing, walls, asphalt, etc.)

removed prior to excavation will be replaced in kind. Important vegetation (as determined in accordance with the ERP and AMP and with concurrence by the property owners and appropriate agencies) relocated prior to excavation will be returned to its original location or replaced with comparable items approved by USACE and Aua Village leadership.

2.4.2. Soil Treatment

A direct-fired TDU plant will be operated to treat the petroleum-contaminated soil excavated from the fuel pipeline trenches. The TDU removes organic contaminants (i.e., petroleum hydrocarbons) from the soil by heating the soil in a thermal desorber to evaporate the contaminants. Organic vapor is captured in a thermal oxidizer which converts the vapor into carbon dioxide and water.¹ TDU emissions will be maintained and monitored in accordance with the Stationary Air Pollution Source Permit issued by ASEPA. The TDU and general layout of the thermal treatment area are presented on **Figure 4**.



Figure 4. Thermal Treatment and Staging Area Layout

¹ The TDU uses a thermal extraction technology that includes a direct-fired rotary drum followed by process gas treatment, including dust filtration and thermal oxidation, prior to atmospheric discharge. The gas stream output from the TDU is routed through a modular thermal oxidizer/stack unit, which reduces the hydrocarbon content of the gas stream with destructive removal efficiency capable of up to 99.9%, depending on the contaminant concentrations.

Two alternative soil treatment locations are provided below.

2.4.2.1. Alternative B-1 Soil Treatment Location A

Soil treatment location A would be at Onesosopo Park as shown in **Figure 5**.



Figure 5. Map of Soil Treatment Location A Onesosopo Park

As shown in **Figure 7**, a temporary water treatment system will be constructed near the intersection of Route 1 and Route 6 to process dewatering fluids from the fuel pipeline excavation trenches. The water treatment system will process water at a rate of 1,000 to 1,500 gallons per minute (GPM), during working hours (up to 12 hours per day). The total discharge from the project, over the 4-to-6-month project duration, is expected to be 22 million gallons.

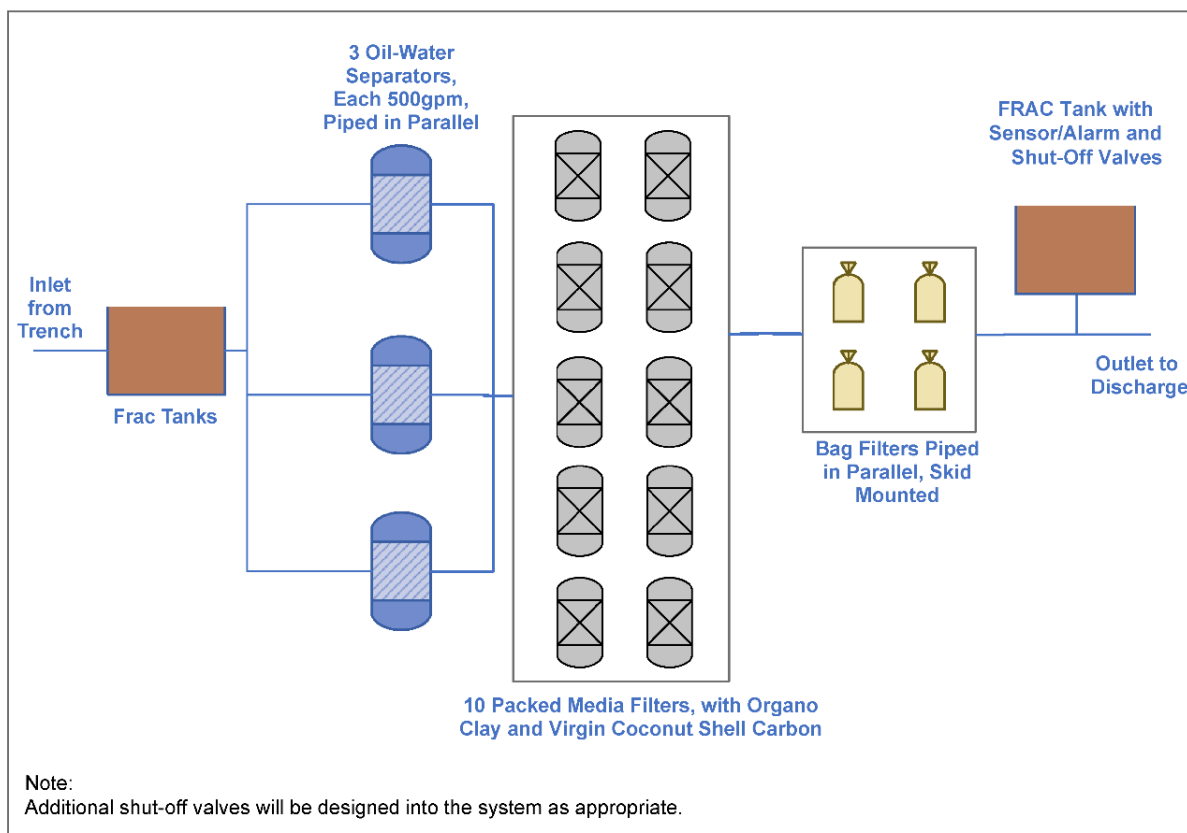


Figure 7. Water Treatment System

As shown in **Figure 7**, the water treatment system will include intake tanks (two or three 9,000-gallon capacity frac tanks), followed by bag filters to remove the dirt and debris, three 500 GPM oil-water separators operating in parallel to remove free product, transfer pumps, redundant filtration vessels (five granular activated carbon units operating in parallel followed by five organo-clay media vessels operating in parallel) for additional contaminant removal and polishing, and clean water tanks (up to two 9,000-gallon capacity frac tanks) for water monitoring prior to discharge. The water treatment system will be operated with a programmable logic controller with redundant system controls, including an oil sensor in the clean water tanks that will alarm in the event of any oil detected at that stage of treatment. A positive flow/backflow device will be installed on the end of the clean water tank to prevent unintentional release of water from the treatment system to the harbor. Treated effluent will be discharged to Pago Pago Harbor.

The pressure on the outfall will be relatively low (the discharge pumps are only rated for 15 pounds per square inch) and the diameter of the discharge pipe will be large (anticipated to be 8 to 10 inches); therefore, the energy at the outfall will be fairly low. The velocity of the water at the end of the pipe will be approximately four to six feet per second and the horizontal discharge will be less than four feet from the

end of the pipe. To further reduce the energy of the water at the discharge, the discharge will consist of a “tee” joint and a horizontal diffusion line similar to the one shown in **Figure 8** that will discharge to the rock revetment. The photograph included in **Figure 8** is an example of the diffuser construction prior to installation.

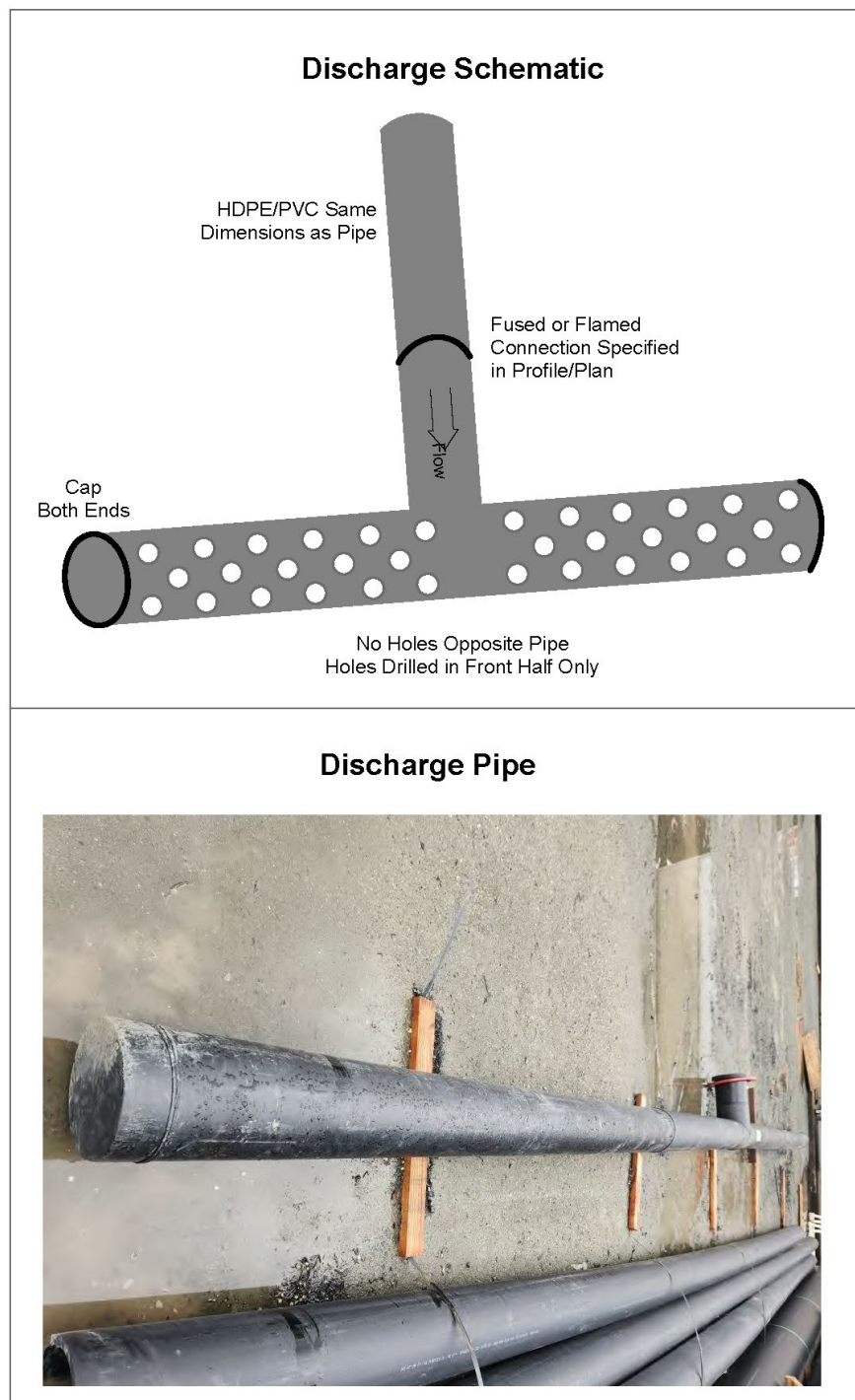


Figure 8. Water Outfall Diffuser

A containment boom will be placed in the harbor surrounding the discharge point and routine visual observations, in addition to the permit-required monitoring and testing, will be performed to ensure that no evidence of petroleum discharge is present in the harbor. Two alternative locations for treated water discharge are shown below.

2.4.3.1. **Alternative B-3 Treated Water Discharge Location A**

Under Alternative B-3, treated effluent would be discharged at Outfall 001 close to the treatment plant located at the intersection of Routes 1 and 6 (**Figure 9**). The discharge pipe would be placed across the shoreline onto a rock outcropping/revetment above the mean high tide line. It will not be placed in the water.



Figure 9. Water Treatment System Discharge Location A

2.4.3.2. **Alternative B-4 Treated Water Discharge Location B**

Under Alternative B-4, treated effluent would be approximately 50 feet off the shore from the location of the water treatment plant at the intersection of Routes 1 and 6 (**Figure 10**). This location would be in the water and not on the shoreline. USACE would select a method to consider impacts to the ocean floor. Since the discharge is only anticipated to occur during working hours (per ASPA schedule), any sediment disturbance would revert to the natural condition overnight.

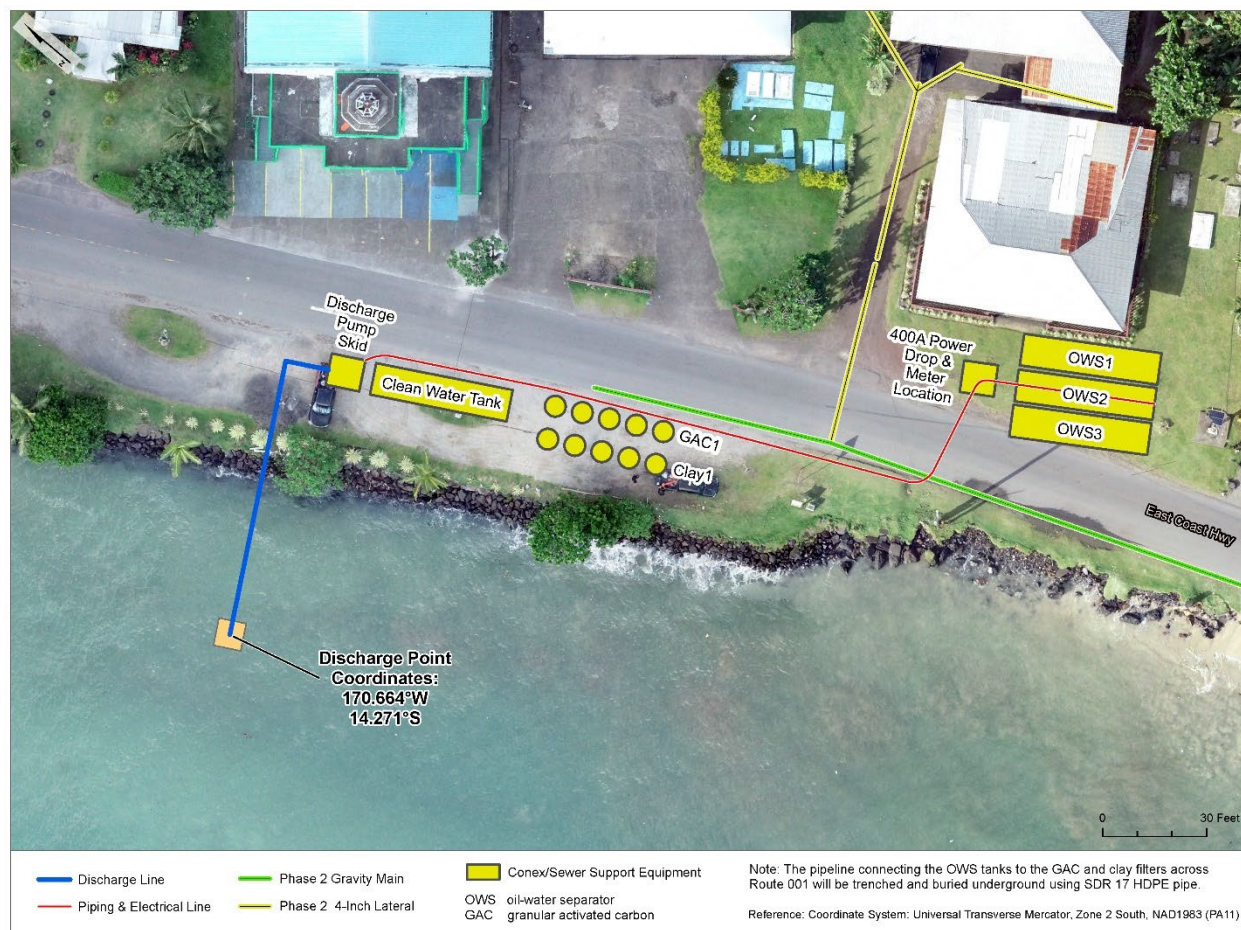


Figure 10. Water Treatment System Discharge Location B

The outfall would still be kept as close to shore as possible, while remaining in the water. By keeping the discharge point closer to the shore, we minimize the construction impacts from installation into a longer stretch of reef, decrease damage scenarios from storm or wave impacts to the pipeline (and potentially the reef) while it is installed and operating, and decrease the potential for animal entanglement in the deeper waters. Also, this would minimize the requirement for significant boating activity because the effort to perform inspections is decreased (less distance to travel, shorter duration of inspections, etc. which would increase opportunity for animal encounter).

2.5. PREFERRED ALTERNATIVES

The proposed action to excavate contaminant sources, treat and remove contaminated soil and dewatering fluids, and perform additional groundwater monitoring (Alternative B) along with soils treatment location A (Sub-alternative B-1, Onesosopo Park) and treated water discharge location A (Sub-alternative B-3, the revetment/out of water) are the preferred alternatives.

3. Affected Environment and Environmental Consequences

Chapter 3 describes the affected environment (existing conditions) and presents the analysis of potential impacts of implementing the proposed action and alternatives.

The terms “consequences,” “impacts,” and “effects” are used interchangeably throughout this chapter; for the purpose of this EA, they are synonymous. The use of the term “significant” and derivations thereof in this document require consideration of both the context and intensity of impacts. The following terms are used throughout this EA to indicate the relative degree of severity of predicted environmental impacts:

- **No Effect** – No change to the resource or built system.
- **Less-than-significant Adverse Effects** – Adverse effects do not exceed the threshold of significance established for the resource or built system. Adverse effects may be detectable, but they are within or approximate to normal variability and do not appreciably affect the extent or value of the resource or built system. Adverse impacts are easily absorbed without mitigation and do not contribute toward long-term consequences.
- **Less-than-significant Adverse Effects with Mitigation** – Adverse impacts with mitigation applied do not exceed the threshold of significance established for the resource or built system.
- **Significant Adverse Effects** – Adverse impacts exceed normal variability, appreciably affect the value or extent of the resource or built system, and may affect the viability of the resource or built system. Full mitigation of adverse impacts is not possible, or mitigation success is not likely, and long-term deterioration of the resource or built system may be unavoidable.
- **Beneficial Effects** – Impacts on the resource are positive.

In accordance with the CEQ Regulations, USACE used a review of applicable environmental documentation, and an analysis of the scope and components of the proposed action by qualified technical subject matter experts to identify issues anticipated to experience little to no impact from the proposed action and alternatives.

Resources eliminated from detailed analysis and the rationale for their dismissal are described below.

Climate Change. The proposed action is short term in nature. Greenhouse gas emissions from the proposed action will not add to, or otherwise have a measurable effect on, local or global climate change. This analysis concludes that there will be no discernable impact on climate change.

Navigation. No aspect of the proposed action would affect the current navigability of Pago Pago Harbor.

Socioeconomics. Construction associated with the proposed action would create local jobs and induce effects, such as local expenditures from construction workers. These jobs would be temporary, and personnel employed would not change their place of residence. Effects associated with construction would occur on a temporary basis over the course of a few months. As a result, changes to population, demographics, income, community services and facilities, or housing would not be appreciable.

Geography and Topography. Geography and topography would remain unchanged. Excavations of pipeline remnants and contaminated soil would be backfilled to match surrounding grade. The topography and overland flow patterns will not be altered.

The following sections describe the affected environment and environmental consequences of implementing the proposed action on the following resources areas:

- Air Resources
- Community, Land Use, and Traffic
- Geology and Soil
- Hazardous Materials, Solid Waste, and Hazardous Waste
- Noise
- Cultural Resources
- Floodplains
- Habitat and Wildlife
- Protected Species
- Essential Fish Habitat
- Surface Water, Wetlands, and Special Aquatic Sites

3.1. AIR RESOURCES

3.1.1. Affected Environment

Air quality in American Samoa is generally fair to excellent, with persistent winds from the ocean and the absence of significant pollutant emission sources. The area meets or is cleaner than the National Ambient Air Quality Standards (ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particle pollution, and lead), and it is designated as an attainment area by the U.S. Environmental Protection Agency (EPA).

3.1.2. Environmental Consequences

3.1.2.1. *Alternative A: No Action*

With no action, exposure to petroleum remaining in the subsurface and nuisance odors would be released during excavation activities and other subsurface activities carried out by the Aua Village residents for the foreseeable future. No additional air emissions from earth disturbance, equipment, and vehicles would occur.

3.1.2.2. *Alternative B: Proposed Action*

Under the proposed action, there would be minimal short-term adverse impacts to air quality surrounding the areas of earth disturbance. Particulate emissions would be generated during site preparation, backfilling the trenches, and other earth-disturbing activities. Vehicles and equipment used during construction and operations would temporarily generate nitrous oxides, sulfur dioxide, particle pollution, volatile organic

compounds, carbon monoxide, and carbon dioxide. These emissions would be short-term and transient in nature. Appropriate best management practices (BMPs) would be implemented to minimize air pollution. For example, equipment use would be limited to normal work hours and idling of engines would be prohibited.

Equipment would be shipped to American Samoa from the U.S. mainland. Transportation by container ship would contribute to a minor increase in overall greenhouse gas (GHG) emissions. All equipment required for the proposed action will be transported within 20 to 30 international shipping containers over three or four shipping dates. The route-specific values for consumption of GHGs from the U.S. mainland to American Samoa varies widely based on the size and efficiency of the container ship, ports used for transit, and the overall weight and volume of goods transported. Emissions contributed by 20 to 30 containers is proportionally negligible to the overall emissions associated with a laden cargo ship, which can average anywhere between 5,000 and 20,000 20-foot containers.

During operation of the TDU to treat excavated soil, emissions from the TDU would be captured and treated to remove pollutants and minimize impacts to air quality. Air emissions would be monitored and maintained in accordance with the Stationary Air Pollution Source Permit issued by ASEPA, dated 8 February 2024. Additionally, dust generated during soil treatment operations would be mitigated by erecting a dust fence, reducing equipment speeds, minimizing emissions by carefully tipping excavator buckets onto stockpiles, covering stockpiles, and spraying water over stockpiles and roadways. Given the potential to use large volumes of water to assist with dust control, a water tank would be incorporated into the TDU operations to compensate for water pressure drops in the public water system during periods of high use.

During site preparation for the water treatment system, particulate pollution would be generated from earth disturbance. Nitrous oxides, sulfur dioxide, particulate matter, volatile organic compounds, carbon monoxide, and carbon dioxide would be generated from vehicles and equipment during site preparation and water treatment system operations. Appropriate BMPs would be implemented to minimize air pollution.

Alternative B-1: Soil Treatment Location A

Under Alternative B-1, air emissions from pipeline removal activities and backfilling would occur as described for the proposed action. Air emissions related to soil treatment including emissions from site preparation, vehicles, soil stockpile management, and the TDU would occur at Onesosopo Park. Emissions would be temporary. Appropriate BMPs would be implemented to minimize air pollution.

Alternative B-2: Soil Treatment Location B

Under Alternative B-2, air emissions from pipeline removal activities and backfilling would occur as described for the proposed action. Air emissions related to soil treatment including emissions from site preparation, vehicles, soil stockpile management, and the TDU would occur at Pago Pago Airport. Transportation Emissions would be greater compared to Alternative B-1 because the airport is further from the project site compared to the park. Emissions would be temporary. Appropriate BMPs would be implemented to minimize air pollution.

Alternative B-3: Treated Water Discharge Location A

A small amount of particulate matter emissions for a few hours for one to two days would occur during installation of the water piping at discharge location A. No ongoing air emissions would occur at the

discharge point. Emissions would be temporary. Appropriate BMPs would be implemented to minimize air pollution.

Alternative B-4: Treated Water Discharge Location B

A small amount of particulate matter emissions for a few hours for one to two days would occur during installation of the water piping at discharge location B. No ongoing air emissions would occur at the discharge point. Emissions would be temporary.

Alternative B, the proposed action, along with Alternatives B-1 through B-4 (soil treatment and water discharge locations), would have long-term Beneficial and short-term Less-than-significant Adverse Effects on air resources.

3.2. COMMUNITY, LAND USE, AND TRAFFIC

3.2.1. Affected Environment

Tutuila, American Samoa's largest island, is the center of government and business, and is home to the majority of the estimated 49,710 total population of the territory in 2020 (**U.S. Census Bureau Release, 2020**). Of the 11,807 housing units counted in the 2020 Census, 1,549 housing units were located in Aua Village. The estimated population growth rate in 2023 was -1.74 percent (**U.S. Central Intelligence Agency, 2023**).

The following description of the community and economy is excerpted from the Fishery Ecosystem Plan for the American Samoa Archipelago (**Western Pacific Regional Fishery Management Council, 2009**):

"The only U.S. territory south of the equator, American Samoa is considered "unincorporated" because the U.S. Constitution does not apply in full, even though it is under U.S. sovereignty. American Samoan natives born in the Territory are classified as U.S. nationals and categorized as Native Americans by the U.S. government. American Samoa's constitution makes it government policy to protect persons of American Samoan ancestry from the alienation of their lands and the destruction of the Samoan way of life and language. It provides for such protective legislation and encourages business enterprise among persons of American Samoan ancestry.

American Samoa has a small developing economy, dependent mainly on two primary income sources: the American Samoa Government (ASG), which receives income and capital subsidies from the federal government, and the two fish canneries on Tutuila. These two primary income sources have given rise to a third: a services sector that derives from and complements the first two. A large proportion of the territory's work force is from Western Samoa (now officially called Samoa; BOH 1997). Western Samoans working in the Territory are alien workers by law, however, they are the same people, by culture, history, and family ties.

"...From the time of the Deeds of Cession to the present, despite increasing Western influences on American Samoa, native American Samoans have expressed a very strong preference for and commitment to the preservation of their traditional matai (chief), 'aiga (extended family), and communal land system, which provides for social continuity, structure, and order. The traditional system is ancient and complex, containing nuances that are not well understood by outsiders."

The median household income as reported in the 2020 U.S. Census is \$28,352, with most American Samoans living in poverty according to U.S. income standards. The median home value in 2020 was \$84,400 as reported by the US Census Bureau. The people of Aua retain their indigenous cultural practices, known as fa'a Samoa' (the Samoan Way), whereby communal land ownership is limited to those with Samoan ancestry. About 90 percent of the land is owned communally through extended families or clans.

Aua is located next to Pago Pago Harbor, one of the world's largest natural harbors and a regular port of call for shipping vessels, including export of tuna from the Starkist Tuna cannery located less than two miles from Aua Village. Aua Village is a primarily residential community with Aua Elementary School and Church of Jesus Christ of Latter-day Saints centrally located within the valley.

3.2.2. Environmental Consequences

3.2.2.1. *Alternative A: No Action*

Under the No Action Alternative, community and land use would remain unchanged. Subsurface contamination related to the buried network of fuel pipelines associated with the former Aua Fuel Farm would continue to persist. Potential exposure of subsurface contamination to construction workers would occur. With no action, traffic would be unchanged from current patterns.

3.2.2.2. *Alternative B: Proposed Action*

The long-term land use at Aua Village would remain unchanged with the implementation of the proposed action; however, completing the removal action would have beneficial aesthetic and environmental impacts.

Traffic would be adversely affected in the short-term to accommodate transportation of soil from the excavation areas to the TDU for treatment and in areas where buried segments of the pipeline are excavated and removed. No aspect of the proposed action would permanently change current traffic in the area.

Project personnel would follow the traffic control plan developed for the project. Single lane road closures would occur within the village during investigation and remediation activities. A flagger would be used as necessary to direct traffic.

Work would be performed in accordance with cultural norms of the community, including limiting field activities within Aua Village to Monday through Saturday and ceasing work at the beginning of the evening curfew, which is observed for *Sa* (10 to 15 minutes of silence and prayer between 6 p.m. and 7 p.m.).

Parking or other use of the area occupied by the wastewater treatment system would be prohibited during the project. The area would return to its regular use after the end of the project.

Alternative B-1: Soil Treatment Location A

During the project, Onesosopo Park would not be available for use. Onesosopo Park would be temporarily used as a staging and treatment area but would be returned to park use once the project is completed.

Under Alternative B-1, traffic congestion would increase near Onesosopo Park. As shown on **Figure 5**, trucks carrying excavated materials to and from the excavation areas within Aua Village will travel along Route 1 to the park. Traffic would be adversely affected in the short-term, however, no aspect of the proposed action would permanently change traffic in the area.

Alternative B-2: Soil Treatment Location B

Under Alternative B-2, the area at Pago Pago airport would be used for soil treatment. Traffic congestion would increase near Pago Pago Airport. As shown on **Figure 6**, trucks carrying excavated materials to and from the excavation areas within Aua Village will travel along Route 1 to the airport. Adverse impacts from transportation would be greater and would impact a greater number of people compared to Alternative B-1 because the airport is further from the project site compared to the park. Traffic would be adversely affected in the short-term, however, no aspect of the proposed action would permanently change traffic in the area.

Alternative B-3: Treated Water Discharge Location A

Location A of the outfall for treated water discharge is not anticipated to have an impact on recreational uses of the bay. There would no impact to community land use or traffic.

Alternative B-4: Treated Water Discharge Location B

Under Alternative B-4 the location of the treated water discharge outfall could have a short term minor adverse aesthetic impact. There would no impact to community, land use or traffic.

Alternative B, the proposed action, along with Alternatives B-1 through B4 (soil treatment and water discharge locations), would have long-term Beneficial and short-term Less-than-significant Adverse Effects on community, land use, and traffic.

3.3. GEOLOGY AND SOIL

3.3.1. Affected Environment

Tutuila is a basaltic volcanic island within the east-southeasterly trending Samoan Island chain in the Pacific Ocean. Tutuila is the eroded subaerial remnant of a large volcanic edifice centered on a shallow submarine platform more than twice its present area at 200-meter isobaths. Tutuila consists of several basaltic shield volcanoes, now extinct, with the most notable being the eroded Pago shield volcano. The Pago shield volcano is just west of Pago Pago Harbor. Trachyte plugs and dikes are located east of Aua Village. Aua Village is located on alluvium, talus, and beach sand and is surrounded by the Pago intracaldera and extracaldera parent material (McDougall, 1985).

In Aua Valley, colluvium has collected to create a bowl-shaped geomorphology, bounded by extremely steep to vertical source slopes. Several landslides and rock fall scars are visible on the adjacent slopes to the site. Rockfall is an ongoing process in the Aua area, as evident from the bare cliffs above the village and massive rock blocks protruding from the ground surface even in low-lying areas (Schwarm, 2010).

Urban Land-Aua-Leafu complex makes up most of the soil within the Aua Fuel Farm. This soil type occurs on coastal plains, valley floors, and mountain foot slopes. The complex comprises 45 to 60 percent urban land, 20 to 40 percent Aua very stony silty clay loam, and 10 to 15 percent Leafu silty clay. Much of the urban land has been leveled and filled with coral, sand, cinder, and other fill material and consists of areas covered by streets, buildings, and other structures. The Aua and Leafu soils both have moderately rapid permeability and runoff is slow to medium (Nakamura, 1984). Additional soil in the Aua Village, but outside the areas excavated in 2021, includes very small areas of Aua stony silty clay loam and Fagasa family-Lithic Hapludolls-Rock Outcrop Association. Those soils are found in upland areas around the perimeter of the Aua Village (Nakamura, 1984).

Soil observations during the 2021 removal action indicated that soil within the excavation areas consisted of managed lands, with various historical and modern deposits consisting of cinder, basalt gravel, sand, and locally available stony Aua stony silty clay loam. Pre-tank construction-leveling activities were particularly evident in the stratigraphic profiles documented at each site.

The nature and extent of subsurface soil contamination is relegated to soil below three feet bgs given that the former Aua Fuel Farm was buried under approximately three feet of imported fill at the time of closure. Residual petroleum soil contamination associated with the Aua Fuel Farm conveyance pipeline is likely to exist based on observations during previous utility line installations performed by ASPA and is the subject of this proposed action.

3.3.2. Environmental Consequences

3.3.2.1. *Alternative A: No Action*

The geological conditions would remain consistent with current conditions with residual petroleum contamination remaining in the subsurface soil. Pockets of soil contamination associated with the network of fuel pipelines would continue to degrade and may be exposed if excavation activities are performed in the future.

3.3.2.2. *Alternative B: Proposed Action*

The proposed action would remove and treat contaminated soil surrounding the fuel pipelines, thereby reducing potential exposure to petroleum waste and reduce the amount of uncontrolled waste present in the subsurface. The excavated soil would be treated using thermal desorption to remove petroleum contamination and used for backfilling. Treated soil reused as backfill would be free of contamination, but would also be free of organic material, which could inhibit plant growth. To minimize the impacts to regrowth in these areas, the material would be placed at the base of the excavation and under untreated overburden, where possible. Additionally, most of the fuel lines are being excavated within roadways where vegetative growth is not a concern; however, topsoil may be placed over the treated material where important vegetation is replaced.

Alternative B-1: Soil Treatment Location A

Under Alternative B-1, Onesosopo Park would be temporarily used for soil treatment. Vehicles would travel off road in some areas and soil would be stockpiled. Equipment including the TDU would be placed directly on soil or other surface. Gravel or geotextile material could be used to reduce erosion. At the end of the project, the area would be regraded to match existing topography. No long-term impacts would occur.

Alternative B-2: Soil Treatment Location B

Under Alternative B-2, an area at Pago Pago Airport would be temporarily used for soil treatment. Vehicles would travel off road and soil would be stockpiled. Equipment including the TDU would be placed directly on soil or other surfaces. Gravel or geotextile material could be used to reduce erosion. At the end of the project, the area would be regraded to match existing topography. No long-term impacts would occur.

Alternative B-3: Treated Water Discharge Location A

Under Alternative B-3, the treated water discharge location would be on the rock/revetment. No impact to soil would occur, as a result of, the outfall location.

Alternative B-4: Treated Water Discharge Location B

Under Alternative B-4 the treated water discharge pipe would be extended out into the bay. A small area of soil would be disturbed while installing the outfall. At the end of the project, the area would match existing topography. No long-term impacts would occur.

Alternative B, the proposed action, along with Alternatives B-1 through B4 (soil treatment and water discharge locations), would have long-term Beneficial and short-term Less-than-significant Adverse Effects on geology and soil.

3.4. HAZARDOUS MATERIALS, SOLID WASTE, AND HAZARDOUS WASTE

3.4.1. Affected Environment

Small amounts of hazardous materials are sometimes used during construction activities and maintaining water treatment units and TDUs. In addition, solid waste such as paper, cardboard, pallets or other consumer materials may be generated. Waste petroleum product and portions of the buried conveyance fuel lines remain throughout the village.

3.4.2. Environmental Consequences

3.4.2.1. *Alternative A: No Action*

Waste petroleum will remain in the subsurface and may potentially be exposed during future utility line installations or underground work resulting in exposure to construction workers. No additional hazardous materials would be used, and no additional waste would be generated.

3.4.2.2. *Alternative B: Proposed Action*

Small amounts of hazardous materials could be used. Any hazardous materials would be carefully managed so as not to be released to the environment, and these materials would not be left on the site. The proposed project includes removal of soils exposed to waste petroleum. Recovered petroleum would be recycled or properly disposed of. Waste generated from the water treatment system including granular activated carbon would be either regenerated and reused or disposed of according to the Waste Management Plan. When encountering any toxic substances, including excavation and treatment of the waste petroleum, actions taken for handling and disposal will comply with the project Waste Management Plan, Work Plan and all applicable DoD, Department of the Army, USACE regulations, and all applicable Federal and State laws, permit conditions, regulations, and guidance.

Alternative B-1: Soil Treatment Location A

Under Alternative B-1, petroleum-contaminated soil would be stockpiled and treated at Onesosopo Park. At the end of the project, all equipment, material, and waste would be removed, and the area would be regraded to match original topography.

Alternative B-2: Soil Treatment Location B

Under Alternative B-2, petroleum contaminated soil would be stockpiled and treated at Pago Pago Airport. At the end of the project, all equipment, material, and waste would be removed, and the area would be regraded to match original topography.

Alternative B-3: Treated Water Discharge Location A

Under Alternative B-3, the location of the outfall would not cause a change in hazardous materials used, solid waste generated, or hazardous waste generated.

Alternative B-4: Treated Water Discharge Location B

Under Alternative B-4, a longer pipe may be necessary to extend into the bay. This very small amount of piping would likely be disposed of at the end of the project. The location of the outfall would not cause a change in hazardous materials used or hazardous waste generated.

Alternative B, the proposed action, along with Alternatives B-1 through B4 (soil treatment and water discharge locations), would have long-term Beneficial and short-term Less-than-significant Adverse Effects on hazardous materials, solid waste, and hazardous waste.

3.5. NOISE

3.5.1. Affected Environment

No specific noise data exist for Aua Village, but man-made background noise emanates from air traffic, and vehicles.

Noise is measured in units of sound pressure levels called decibels (dBs). The dBs are measured on a logarithmic scale, which means that a small change in the number of dBs results in a huge change in the amount of noise and the potential damage to a person's hearing. The Occupational Safety and Health Administration (OSHA) sets legal limits on noise exposure in the workplace. These limits are based on a worker's time-weighted average over an eight-hour day. For noise, OSHA's permissible exposure limit is 90 A-weighted dB (dBA) for all workers for an eight-hour day. The National Institute for Occupational Safety and Health has recommended that all worker exposures to noise should be controlled below a level equivalent to 85 dBA for eight hours to minimize occupational noise-induced hearing loss. For reference, if you need to raise your voice to speak to someone three feet away, noise levels might be over 85 dBs.

3.6. ENVIRONMENTAL CONSEQUENCES

3.6.1.1. *Alternative A: No Action*

The noise conditions would remain unchanged. No construction would occur, and noise would remain at current levels; therefore, no impacts would occur to existing noise-sensitive receptors.

3.6.1.2. *Alternative B: Proposed Action*

In some instances, the proposed action would be located within close proximity to sensitive noise receptors, such as the residential homes, community gathering places, schools, and churches. Noise levels would be elevated while heavy equipment is operating outside their homes and other establishments.

Large heavy equipment (e.g., excavators, skid steers, telehandlers, and loaders) would generate about 80 to 85 dBA at 50 feet away, and small heavy equipment (e.g., mini excavators and rollers/compactors) would generate less than 80 dBA at 50 feet away. Trucks would generate approximately 54 dBA at the engine. The loudest component of the water treatment system (the dewatering pumps) would generate 65 dBA at about 30 feet. The Geoprobe would generate 118 dBA at the source.

Construction noises tend to be short in duration and concentrated around the immediate work area. Noise produced during the construction activities would result in some localized short-term impacts at waterlines along the right-of-way (mainly near the highway and some residential areas). Although temporary community annoyance may occur, construction would be finished in a short time period.

Work hours would be limited to normal business hours to minimize disturbing surrounding residents. In addition, construction-related noise would be reduced through the use of mufflers on construction equipment.

At the soil and water treatment locations, there may be a slight increase in noise levels during field work due to the use of heavy equipment and operation of the TDU and water treatment system. Any increase in noise levels would be short-term and localized to the active construction area or operational area.

Alternative B-1: Soil Treatment Location A

Under Alternative B-1, soil treatment operations would be located at Onesosopo Park. Noise would be generated by equipment and vehicles at the park. Noise from the TDU (including the loader, generator set, and system) would be approximately 65 dBA at 300 feet away.

Alternative B-2: Soil Treatment Location B

Under Alternative B-2, soil treatment operations would be located at Pago Pago airport. Noise would be generated by equipment and vehicles at the airport. Noise from the TDU (including the loader, generator set, and system) would be approximately 65 dBA at 300 feet away.

Alternative B-3: Treated Water Discharge Location A

Under Alternative B-3 there would be very little noise from water being discharged on the rock outcropping/revetment.

Alternative B-4: Treated Water Discharge Location B

Under Alternative B-4 there would be very little noise generated from water being discharged farther out in the bay.

Alternative B, the proposed action, along with Alternatives B-1 through B4 (soil treatment and water discharge locations), would have short-term Less-than-significant adverse Effects from noise.

3.7. CULTURAL RESOURCES

3.7.1. Affected Environment

As defined in the National Historic Preservation Act, there are no documented Historic Properties within Aua Village. The proposed action will not alter or destroy any archaeological sites or buildings that are

over 50 years old. USACE has determined that the undertaking as identified by the proposed action will result in “No Historic Properties Affected.”

Considering previous research, ethnographies, landscape, climate, and former land use practices, predictive models can be made regarding the nature and distribution of potentially sensitive archaeological areas. For American Samoa in general, the three types of archaeological finds listed below are anticipated.

- Surface cultural deposits, such as fire hearths (umu), habitation surfaces (ili‘ili), house foundations (paepae), wells, rockwalls, terraces, burial features, adzes grinding stones (foaga), mounds, platforms, petroglyphs, lithic and pottery scatters, and other forms of basalt architecture.
- Subsurface features, which include fire hearths (umu), storage (mase) pits, habitation surfaces (ili‘ili), house foundations (paepae), shell middens, pottery and lithic debris, and burials.
- Isolated Artifacts, such as pottery, fishhooks, stone and shell abraders, adzes, stone and shell scrapers, and debitage.

While ample archaeological work has been conducted in Samoa over the last century, only a small portion of the literature is applicable to the project Area of Potential Effect (APE). A detailed analysis of the archaeological research performed in the Samoan Islands is provided in the AMP (USACE, 2024b). **Table 1** summarizes the archaeological work conducted to date within Aua Village, as provided in the AMP.

Table 1. Previous Archaeological Investigations within APE

Reference	Nature of Work	Results
Streck 1990	Oral History Interviews, Archaeological Monitoring	No cultural materials or resources observed. Wetland deposits observed ranging from 114 to 250 centimeters below surface.
Williams et al. 2000	Archaeological Monitoring, Subsurface Sampling	No cultural materials or resources observed. Wetland deposits observed with some charcoal. Accelerator mass spectrometry (AMS)-calibrated date of <i>Anno Domini</i> (AD) 1430–1660.
Athens and Desilets 2003	Paleoenvironmental and Archaeological Subsurface Sampling, Archaeological Monitoring	No cultural materials or resources observed. Wetland deposit observed to be 67 centimeters thick. AMS-calibrated date of AD 1045–1256 from base of wetland deposit.
Schwarm 2010	Geotechnical Engineering Evaluation	No cultural materials or resources observed. Fill underlain by wetland deposit observed in two test pits in Aua Village.
Hawkins 2012	Archaeological Sensitivity Analysis	Recommended Aua Village as medium potential for cultural resources.

Based on these findings, it is anticipated that archaeological findings in Aua Village are likely to be relegated to isolated artifacts and fuel tank remnants. According to local legends related to the Aua ceremonial field Malaeopaepaeulupoo (field of stacked skulls), there is the possibility of finding human remains (USACE, 2020).

3.7.2. Environmental Consequences

3.7.2.1. *Alternative A: No Action*

Several archaeological monitoring efforts have been conducted in the Aua Village in connection with the Aua Fuel Farm remediation efforts. However, no culturally significant materials or resources were observed. It is anticipated that archaeological findings in Aua Village are likely to be relegated to isolated artifacts and fuel tank remnants. With no action, there would be no impact to cultural resources.

3.7.2.2. *Alternative B: Proposed Action*

Through early consultation with American Samoa Historic Preservation Office (ASHPO), USACE has been advised that numerous sets of human remains have been uncovered in Aua Village in recent years and the probability for additional finds is high. USACE commits to providing a full-time archaeological monitor during all ground disturbing activities. Any finds of potential archaeological or cultural significance, especially human burials, would be reported to the ASHPO immediately upon discovery for consultation and development of a path forward. BMPs and impact minimization measures are detailed in the ASHPO consultation letter (**Appendix C**). No significant impacts to Cultural and Archaeology Resources are expected from the proposed action.

Several archaeological monitoring efforts have been conducted in the Aua Village in connection with the Aua Fuel Farm remediation efforts; however, no culturally significant materials or resources were observed. The proposed action would expose fuel farm remnants and potentially uncover archaeological artifacts; thus, work would be performed under archaeological monitoring performed by a Secretary of the Interior-qualified Archaeological Monitor in accordance with the AMP. The Archaeological Monitor would provide awareness briefings to field personnel and ensure that cultural resources and materials are protected in accordance with the appropriate protocols. The Archaeological Monitor also would maintain an accurate record of all ground-disturbing activities in accordance with the Secretary of Interior's Standards and Guidelines for Archaeological Documentation. If significant cultural resources are identified, the Archaeological Monitor would cease work in the vicinity of the discovery and USACE and the ASHPO will be notified.

Alternative B-1: Soil Treatment Location A

Under Alternative B-1, soil would be treated at Onesosopo Park. Processes and procedures for monitoring and potential discovery of cultural resources described above would be followed at Onesosopo Park.

Alternative B-2: Soil Treatment Location B

Under Alternative B-2, soil would be treated at Pago Pago Airport. Processes and procedures for monitoring and potential discovery of cultural resources described above would be followed at Pago Pago Airport.

Alternative B-3: Treated Water Discharge Location A

Under Alternative B-3, processes and procedures for monitoring and potential discovery of cultural resources described above would be followed while installing the treated water discharge outfall.

Alternative B-4: Treated Water Discharge Location B

Under Alternative B-4, processes and procedures for monitoring and potential discovery of cultural resources described above would be followed while installing the treated water discharge outfall.

Alternative B, the proposed action, along with Alternatives B-1 through B4 (soil treatment and water discharge locations), would have Less-than-significant Adverse Effects on cultural resources.

3.8. FLOODPLAINS

3.8.1. Affected Environment

Executive Order (EO) 11988, as amended by EO 13690, requires Federal agencies to determine whether a proposed action would occur within a floodplain and to avoid floodplains to the maximum extent possible when there is a practicable alternative. Further, the USACE must take all practicable measures to design or modify their actions to minimize adverse impacts to floodplains and wetlands.

The proposed excavation of petroleum contaminated soil and water must occur in situ. The estimated excavation area within Aua village is within the special hazard flood area as defined by Federal Emergency Management Agency (FEMA). Additionally, Onesosopo Park and Pago Pago Airport were selected as the locations for soil treatment during the alternatives analysis because they were the closest locations with enough flat surface to accommodate operations. Portions of the proposed action would be located temporarily within the floodplain within Aua Village and the soil treatment areas located at Onesosopo Park and Pago Pago Airport. National Flood Hazard Layer FIRMette from FEMA are provided in the FONPA, and the maps and the FONPA are provided in **Appendix D**.

3.8.2. Environmental Consequences

Alternative A No Action

Under the No Action Alternative, the operations in the floodplain would not take place. Petroleum contamination would remain in the soil in the floodplain and could potentially spread during flood events.

Alternative B Proposed Action

During development of the EA, the USACE sought ways to site the thermal treatment facilities entirely outside of floodplains while still addressing project needs. However, USACE has determined that work would occur within the floodplain because no other site is available that meets the size and topography requirements for staging the soil and water thermal treatment equipment within the specified timeframe. While there is no practicable alternative to the selected location of the proposed project, most ground disturbing activities would be temporary in nature and are anticipated to improve onsite soil conditions following project completion. Groundwater monitoring wells would be established within the special flood hazard area. Soil and water treatment activities within the floodplain are expected to be conducted using temporarily staged equipment and facilities, be short-term in nature, and would be limited to a small geographic area. No other development or permanent structures will be constructed within the floodplain.

Publication in the *Samoa News* of the Notice of Availability for the EA and Draft FONSI commenced a 30-day public review period. The notice also stated that the 30-day public review period applied to the

FONPA that accompanied the EA and Draft FONSI. Written comments shall be considered during the 30-day public comment period.

The proposed Federal actions would not affect flood hazard risk or alter the floodplain topography significantly.

Alternative B-1: Soil Treatment Location A

Under Alternative B-1, soil treatment operations would take place at Onesosopo Park in the floodplain.

Alternative B-2: Soil Treatment Location B

Under Alternative B-2, soil treatment operations would take place at Pago Pago Airport in the floodplain.

Alternative B-3: Treated Water Discharge Location A

Under Alternative B-3, the treated water discharge outfall would be in the floodplain.

Alternative B-4: Treated Water Discharge Location B

Under Alternative B-4, the treated water discharge outfall would be in the floodplain.

Alternative B, the proposed action, along with Alternatives B-1 through B4 (soil treatment and water discharge locations), would have long-term Beneficial and short-term Less-than-significant Adverse Effects on floodplains.

3.9. HABITAT AND WILDLIFE

3.9.1. Affected Environment

3.9.1.1. Vegetation

Most of the Aua Fuel Farm area has been classified as urban (32.88 acres) (U.S. Forest Service [USFS], 2016). Lowland tropical rainforest has been identified on the northern edge of the area (6.78 acres) (USFS, 2016), although aerial imagery shows that much of this area has been developed and may be composed of agricultural species, such as breadfruit and banana. A sliver of lowland grassland (0.37 acres) enters the Aua Fuel Farm area to the south, and remnant mangrove (0.72 acres) is located at the confluence of Lalolamauta, Suaia, and Matagimalie streams (USFS, 2016). The dominant vegetation within the mangrove wetland is red mangrove (*Rhizophora mangle*) and beach hibiscus (*Hibiscus tiliaceus*) (Pedersen Planning Consultants, 2000).

Current vegetation, as observed in the project area, was identified as managed land and secondary scrub mostly consisting of exogenous grasses, decorative plants, shrubs and trees, and crop vegetation, including taro (*Colocasia esculenta*), breadfruit (*Artocarpus altilis*) papaya (*Carica papaya*), mango (*Mangifera indica*), avocado (*Persea americana*), banana (*Musa* sp.), and various citrus species. Although mangrove and tropical lowland rainforest also exist in the Aua Village, these vegetation groups were not under direct impact at any of the pipeline locations.

The diversity of native terrestrial wildlife species of American Samoa is low: 25 species of migratory land or water birds, 20 species of resident sea birds, three species of native mammals (bats), three species of

native skinks, one native gecko, and two sea turtles (**Craig, 2009**). Terrestrial fauna observed during 2021 field activities included indigenous lizards, geckos, fruit bats, and a variety of birds (i.e., both land and sea due to the proximity to the coast). Dogs and chickens are found freely throughout the village. Pigs are generally contained in dry-litter pens in the back of the village.

Small, remote islands generally have lower diversity than larger land areas; however, native plants and wildlife species in the region have also been heavily impacted by introductions of non-native species. Introductions of non-native rats, birds, pigs, cats, dogs, toads, geckos, freshwater fish, snails, tropical fire ants, and over 250 plant species have impacted native species in many ways, including habitat loss, competition for resources, and predation.

3.9.1.2. Invertebrates

Land snails of American Samoa have been in severe decline due to introduced species of snails and rats and habitat losses from agricultural development and hurricanes. The pest species giant African snail (*Achatina fulica*) was introduced to American Samoa prior to 1977, followed by intentional introductions of two carnivorous snail species (*Gonaxis kibweziensis* and *Euglandina rosea*) in an effort to control the giant African snail (**Miller, 1993**). The initial giant African snail infestation was observed near the fish canneries on Tutuila in March 1977 (**Miller, 1993**). Native land snails in American Samoa are typically found on the understory vegetation of a canopy forest (**Miller, 1993**). Agricultural or other developed areas subject to prior forest clearing may not provide suitable temperature, light, and humidity conditions for suitable habitat. The majority of the project area has been cleared or developed. Scattered patches of trees and shrubs may offer marginal habitat to native land snails. Vegetation removal could impact marginal suitable habitat for native land snails.

3.9.1.3. Birds

Two federally endangered bird species (friendly ground-dove and mao) were evaluated for their potential to occur in the project area. The project is outside the known range for both species. Several other species of migratory and resident birds have potential to forage or nest within the project area, including the ruddy turnstone, many-colored fruit-dove, and other rare or common species. Introduced species such as common myna, red-vented bulbul, and rock dove are common in developed areas of the island (**McAllan & Hobcroft, 2005**) and are presumably present in the project area.

3.9.1.4. Mammals

The Samoan fruit bat, Pacific fruit bat, and Pacific sheath-tailed bat are the only native terrestrial mammals in American Samoa. The Pacific sheath-tailed bat is thought to be extirpated from American Samoa (**USFWS, 2016**). The Samoan fruit bat and Pacific fruit bat both exhibit high roost site fidelity and prefer to roost in forest habitats away from human disturbance.

3.9.1.5. Marine Species

In contrast to the low terrestrial diversity of American Samoa, marine diversity is high with 961 coral reef fishes, over 250 corals, and several whales and dolphins inhabiting the offshore environments (**Craig, 2009**). Some of these may be present in the nearshore waters of Pago Pago Harbor off of Au'a.

Two special-status marine reptiles, the green and hawksbill sea turtles, may be present in the waters around American Samoa. The beach adjacent to and outside the project area is not known to support nesting by sea turtles; however, they may be transient in the waters of Pago Pago Harbor.

3.9.2. Environmental Consequences

3.9.2.1. *Alternative A: No Action*

The No Action Alternative would avoid any potential project impacts to the local habitat and wildlife. However, the residual subsurface petroleum contamination would remain, and potentially migrate further into the environment.

3.9.2.2. *Alternative B: Proposed Action*

Minimal impacts to habitat during the estimated 6 months of project execution would result from equipment noise and movements that would temporarily displace most wildlife species from the site. Loud noise caused by the use of brush cutters and soil excavation equipment has the potential to disturb wildlife and displace them from nesting sites or preferred roosting or foraging habitats. The level of impact will depend on the sensitivity and mobility of the species and availability of alternative habitats. If disturbance occurs during nesting season, it has the potential to negatively impact the reproduction of the species. Though it is not likely that bat species would roost within the project area, it is possible for them to be present passing through or foraging in the project area. Vegetation removal could impact marginal suitable foraging habitat for bat species. Likewise, vegetation removal, ground disturbance, and noise from people or equipment have the potential to impact nesting birds. These impacts will be mitigated by adhering to the ERP prepared by a qualified biologist.

In the long-term, the reduction of contamination in subsurface soil will improve the habitat available in Aua Village and the adjacent Pago Pago Harbor.

Alternative B-1: Soil Treatment Location A

Under Alternative B-1, soil would be treated at Onesosopo Park. Impacts at Onesosopo Park would be similar to those described for the proposed action.

Alternative B-2: Soil Treatment Location B

Under Alternative B-2, soil would be treated at the Pago Pago Airport. Impacts at Pago Pago Airport would be similar to those described above for the proposed action.

Alternative B-3: Treated Water Discharge Location A

Under Alternative B-3, the treated water discharge outfall location would be on the rock outcropping/revetment. There would be no discernable change to terrestrial habitat/wildlife from discharging treated water at this location. Impacts to other habitat/wildlife are covered above under the proposed action.

Alternative B-4: Treated Water Discharge Location B

Under Alternative B-4, the treated water discharge outfall location would be further out into the bay. There would be minimal adverse impacts to terrestrial habitat/wildlife from discharging treated water at this location. Impacts to other habitat/wildlife are covered above under the proposed action.

Alternative B, the proposed action along with Alternatives B-1 through B4 (soil treatment and water discharge locations) would have long-term Beneficial and short-term Less-than-significant adverse Effects on habitat and wildlife.

3.10. PROTECTED SPECIES

3.10.1. Affected Environment

Jurisdiction under the Endangered Species Act (ESA) of 1973 is divided by species between the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). A search of the USFWS Environmental Conservation Online System (also referred to as “ECOS”) returned 14 wildlife species of concern within the Territory of American Samoa (USFWS, 2020b). In accordance with Section 7 of the ESA of 1973, as amended (Title 16 USC § 1531 *et seq.*), USFWS has determined that the endangered *Ostodes strigatus* and *Eua zebrina* (hereafter collectively referred to as “American Samoa snails”) and endangered Central South Pacific Distinct Population Segment (DPS) of the lauamei ena’ena (green sea turtle, *Chelonia mydas*) and endangered lauamei uga (hawksbill sea turtle, *Eretmochelys imbricata*) (hereafter collectively referred to as “sea turtles”) may be present adjacent to the project area (Table 2). ESA-listed sea turtles in their terrestrial habitat, such as nesting beaches, are managed by the USFWS, while the same species are under NMFS jurisdiction while in their aquatic habitat. One plant species (*Gymnomyza samoensis*) with historical records in American Samoa (Whistler, 2005) has been listed as federally endangered under ESA; however, this species was not included as a species with potential to occur in the project area in the USFWS concurrence letter.

Marine species of concern (Craig, 2009; National Oceanic and Atmospheric Administration [NOAA], 2019; Western Pacific Regional Fishery Management Council [WP Council], 2019) with potential to occur offshore include:

- Marine mammals, including five endangered whales – blue whale (*Balaenoptera musculus*), fin whale (*Balaenoptera physalus*), sei whale (*Balaenoptera borealis*), sperm whale (*Physeter macrocephalus*), and humpback whale (*Megaptera novaeangliae*).
- Three additional species of sea turtle – leatherback turtle (*Dermochelys coriacea*), endangered; loggerhead turtle (*Caretta caretta*), endangered; and olive ridley turtle (*Lepidochelys olivacea*), threatened.
- Three threatened fish species – scalloped hammerhead shark (*Sphyrna lewini*), giant manta ray (*Manta birostris*), and oceanic whitetip shark (*Carcharhinus longimanus*).
- Six threatened coral species – *Acropora globiceps*, *Acropora jacquelinae*, *Acropora retusa*, *Acropora speciosa*, *Euphyllia paradivisa*, and *Isopora crateriformis*.

Informal consultation with the NMFS identified two sea turtle species, one fish, and three coral species listed under the ESA that could potentially be affected by the proposed action, as shown in Table 2 and Appendix E.

Table 2. Summary of ESA-Listed Species Potentially Affected by the Proposed Action

Species	Listed Population	ESA Status	Agency Jurisdiction	Critical Habitat in Project Area?
American Samoa snail (<i>Ostodes strigatus</i>)	All	Endangered	USFWS	No
American Samoa snail (<i>Eua zebrina</i>)	All	Endangered	USFWS	No
Green sea turtle (<i>Chelonia mydas</i>)	Central South Pacific DPS	Endangered	USFWS (terrestrial habitat)	Yes (proposed)
			NMFS (aquatic habitat)	
Hawksbill sea turtle (<i>Eretmochelys imbricata</i>)	All	Endangered	USFWS (terrestrial habitat)	No
			NMFS (aquatic habitat)	
Scalloped hammerhead shark (<i>Sphyrna lewini</i>)	Indo-West Pacific DPS	Threatened	NMFS	No
Coral (<i>Acropora globiceps</i>)	All	Threatened	NMFS	No
Coral (<i>Acropora retusa</i>)	All	Threatened	NMFS	No
Coral (<i>Acropora speciosa</i>)	All	Threatened	NMFS	No

These ESA-listed species are present in the marine areas around American Samoa and could be present in Pago Pago Harbor. Additionally, any marine mammals (including all dolphins and other whale species) potentially present are protected under the Marine Mammal Protection Act. All seabirds potentially present are protected by the Migratory Bird Treaty Act.

No critical habitat has been designated under the ESA for any of these species; critical habitat has been proposed for the South Pacific green sea turtle. In areas of American Samoa, proposed critical habitat for green sea turtles includes the marine environment from the mean high water line to 20-meter depth. The specific areas within the proposed designation, with their physical and biological features are:

1. From the mean high-water line to 20-meter depth, sufficiently dark and unobstructed nearshore waters adjacent to nesting beaches proposed as critical habitat by USFWS, to allow for the transit, mating, and inter-nesting of reproductive individuals, and the transit of post-hatchlings.
2. From the mean high-water line to 20-meter depth, underwater refugia (e.g., caves, reefs, protective outcroppings, submarine cliffs, and “potholes”) and food resources (i.e., seagrass, marine algae, and/or marine invertebrates) of sufficient condition, distribution, diversity, abundance, and density necessary to support survival, development, growth, and/or reproduction (NMFS, 2024).

3.10.2. Environmental Consequences

3.10.2.1. *Alternative A: No Action*

The No Action Alternative would avoid any potential project impacts to protected species. However, the residual subsurface petroleum contamination would remain, and potentially migrate further into the environment.

3.10.2.2. *Alternative B: Proposed Action*

In its informal consultation letter dated 16 June 2020 (**USFWS, 2020c**), the USFWS stated that it is unlikely that the project activities would impact the two species of endangered snails, as recent surveys had not found them in the project area. The USFWS provided avoidance and minimization measures to ensure that project impacts would be discountable:

- A survey would be conducted for the presence of tree snails either the day before or in the morning before contractors commence their work within the proposed project site.
- If listed tree snails occur in the vicinity of the proposed project area, the following would be implemented:
 - The project biologist would determine the extent of the colony by surveying outwards in all directions from the original sighting until individuals are no longer detected.
 - Tree snails be identified, recorded using Global Positioning System, marked/flagged for avoidance, and the locational data communicated to USFWS for evaluation of population status.
 - Cutting or removing vegetation within 200 feet of the known occurrence would be avoided to minimize impacts to the tree snails and their habitat.
 - Trees and shrubs occupied by tree snails would be marked with brightly colored flagging tape and foot traffic would be kept to a minimum of 33 feet from marked vegetation to avoid inadvertently dislodging and trampling individual tree snails.
 - Clearing of understory and overstory forest vegetation would be avoided outside existing developed areas.
 - Movement of heavy equipment would be confined to existing roadways.
 - If helicopters are used to reach the project site, the occupied site would be avoided to prevent helicopter rotor wash that could dislodge snails.
 - Personnel who work in tree snail habitat would be trained to identify the listed species and their habitat.

The NMFS, in its informal consultation letter dated 1 May 2024 (**NMFS, 2024**), identified human disturbance, turbidity and sedimentation, and exposure to waste and discharges has having the potential to affect listed species and proposed critical habitat. The NMFS provided the following measures to avoid and minimize adverse effects:

- A Project Biologist would conduct a pre-construction survey of each work area (e.g., discharge location) to determine the presence of ESA-listed species. The observers shall report to the workers when motile ESA-listed marine species are within 50 meters of the proposed work and halt work and shall only begin/resume after the animals have voluntarily departed the area.
- Project personnel would NOT attempt to feed, touch, ride, or otherwise intentionally interact with any ESA-listed marine species.
- Oil-absorbent booms would surround the temporary water treatment system and a spill containment kit would be stationed adjacent to the treatment train.
- Containment booms would fully surround the point of discharge in Pago Pago Harbor.
- Project personnel would conduct daily receiving water visual monitoring at the outfall for oily sheen, foam, discoloration, or floating debris. Visual observations would be conducted when treated effluent is being discharged from the facility. If free product or a sheen is observed inside the containment structure, dewatering would be suspended, the treatment system would be inspected, and repairs (or modifications) would be made, as needed, before resuming water processing.
- Project personnel would remove free products within Pago Pago Harbor, as needed.
- Monitoring for salinity and temperature would be conducted at the receiving water to maintain the ambient temperature and salinity concentration around the outfall as to avoid impacts to surrounding impacts.
- Project personnel would collect a minimum of two samples during the first week of discharge (i.e., treatment system startup). For any parameter detected above the effluent limit, monitoring would continue weekly during discharge. All other parameters would be sampled monthly.
- Earth berms and/or other containment features would be placed around each excavation area to prevent offsite migration of stormwater runoff.
- Project personnel would install stormwater barriers/filters around tank excavation areas and other ground disturbance areas to control sediment migration and filter stormwater.
- Exposed soil areas would be covered by reusable geotextile fabric or 100% natural material erosion control blanket during heavy rain events or if there are no project-related activities for three days.

Informal consultation under Section 7 of the ESA culminated in a determination by the USACE of “may affect but not likely to adversely affect” for any ESA-listed species or their critical habitat. The USFWS and the NMFS both concurred in writing with this determination, conditioned upon the incorporation of all recommended conservation measures.

Alternative B-1: Soil Treatment Location A

Under Alternative B-1, soil treatment would occur at Onesosopo Park. Impacts to terrestrial species at Onesosopo Park would be similar to those described above for the proposed action. USACE would follow the avoidance and minimization measures described above to reduce adverse effects.

Alternative B-2: Soil Treatment Location B

Under Alternative B-2 soil treatment would occur at Pago Pago Airport. The area is developed and highly modified. It provides limited habitat for protected species. Although consultation was not initiated for Pago Pago airport, impacts to terrestrial species at Pago Pago airport would be expected to be the same as those described above for the proposed action. Prior to initiating activities at Pago Pago airport, additional evaluation and coordination with USFWS for protected species would be performed. USACE shall follow all avoidance and minimization measures to reduce adverse effects to all protected species. If consultation results in a determination that a significant impact would occur, additional NEPA compliance would be completed.

Alternative B-3: Treated Water Discharge Location A

Under Alternative B-3, the treated water discharge location would be on the rock outcropping/revetment. USACE would follow the avoidance and minimization measures described above to reduce adverse effects.

Alternative B-4: Treated Water Discharge Location B

Under Alternative B-4, the treated water discharge location would be further out in the bay. USACE would follow the avoidance and minimization measures described above to the reduce adverse effects.

Alternative B, the proposed action along with Alternatives B-1 (soil treatment at Onesosopo Park) and Alternatives B-3 and B-4 (treated water discharge locations) would have Less-than-significant adverse effects on protected species. Although consultation was not initiated for Pago Pago airport, impacts to terrestrial species at Pago Pago airport would be expected to have less than significant adverse effects. Prior to initiating activities at Pago Pago airport, additional evaluation and coordination with USFWS for protected species would be performed. USACE shall follow all avoidance and minimization measures to reduce adverse effects to all protected species. If consultation results in a determination that a significant impact would occur, additional NEPA compliance would be completed.

3.11. ESSENTIAL FISH HABITAT

3.11.1. Affected Environment

Amendments to the Magnuson-Stevens Fishery Conservation and Recovery Act (MSA) in 1996 defined essential fish habitat (EFH) as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” NOAA Fisheries works with regional fishery management councils to designate EFH, with the goal of minimizing adverse effects from fishing and non-fishing activities.

The WP Council oversees EFH in the marine waters of American Samoa, and developed the Fishery Ecosystem Plan (FEP) for the American Samoa Archipelago (**WP Council, 2009a**). The waters surrounding Tutuila Island, including Pago Pago Harbor, provide EFH for bottomfish and seamount groundfish, crustaceans, precious corals, and coral reef ecosystems (**Figure 11**). The American Samoan EFH in many areas overlaps with EFH designated in the WP Council’s FEP for pelagic species (**WP Council, 2009b**).

The MSA also provides for the designation of habitat areas of particular concern (HAPCs). HAPCs are specific areas within EFH that are essential to the life cycle of important species. A coral reef system located within Pago Pago Harbor, the Aua Transect-Pago Pago Harbor, is one such HAPC. Other coral reef HAPCs

have been designated along the Tutuila coast at Larsen Bay, Steps Point, and Fagatele Bay (**Figure 11; WP Council, 2009a**). The coral reef systems are also considered special aquatic sites, as described in **Section 3.12.1**.

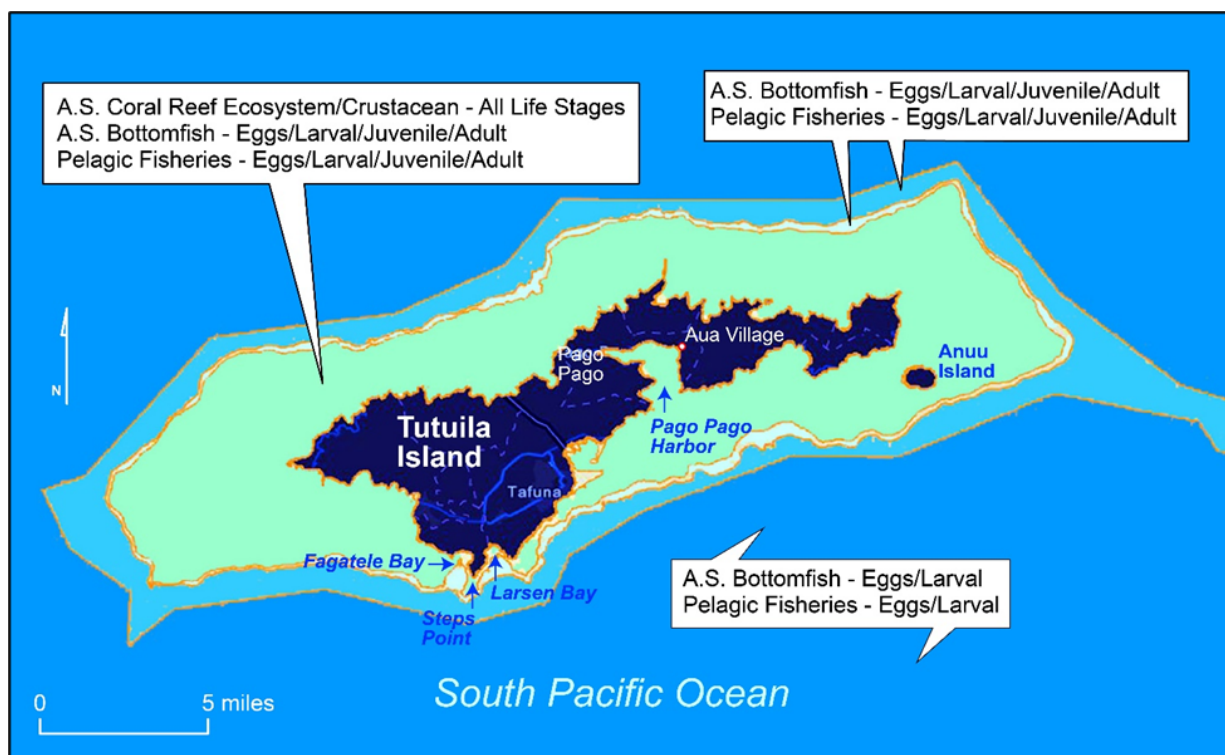


Figure 11. Essential Fish Habitat

3.11.1.1. Alternative A: No Action

The No Action Alternative avoids any potential project impacts to EFH but would leave in place subsurface petroleum contamination which could, in time, migrate into fish habitat.

3.11.1.2. Alternative B: Proposed Action

The proposed activity will not alter or adversely affect EFH, other than the potential for stormwater runoff to migrate into surface water and the adjacent harbor. The impacts will be negligible with implementation of the measures detailed in the Stormwater Pollution Prevention Plan and Spill Prevention, Control, and Countermeasures Plan; through compliance with the NPDES Discharge Permits; and the avoidance and minimization measures included in the letter from NMFS dated 1 May 2024). The NPDES Discharge Permits contains technology-based effluent limits and numerical and narrative water quality-based effluent limits as necessary for the protection of applicable aquatic life uses. The USACE determines that the proposed activities will not adversely affect EFH.

Alternative B-1: Soil Treatment Location A

Under Alternative B-1, the soil treatment location would be at Onesosopo Park. USACE would follow the plans and permits described for the proposed action. No additional impacts would occur as a result of the soil treatment location.

Alternative B-2: Soil Treatment Location B

Under Alternative B-2, the soil treatment location would be at Pago Pago Airport. USACE would follow the plans and permits described for the proposed action. No additional impacts would occur as a result of the soil treatment location.

Alternative B-3: Treated Water Discharge Location A

Under Alternative B-3, the treated water discharge location would be on the rock outcropping/revetment. USACE would follow the plans and permits described for the proposed action. No additional impacts would occur as a result of the treated water discharge location.

Alternative B-4: Treated Water Discharge Location B

Under Alternative B-4, the treated water discharge location would be farther out in the bay. USACE would follow the plans and permits described for the proposed action. No additional impacts would occur as a result of the treated water discharge location.

Alternative B, the proposed action, along with Alternatives B-1 through B4 (soil treatment and water discharge locations), would have long-term Beneficial and short-term Less-than-significant adverse Effects on Essential Fish Habitat.

3.12. SURFACE WATER, WETLANDS, AND OTHER SPECIAL AQUATIC SITES

3.12.1. Affected Environment

Special aquatic sites, identified as part of the Clean Water Act, are waters of the U.S. possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. The areas are generally recognized as significantly influencing or positively contributing to the general environmental health or vitality of the entire ecosystem of a region. The following ecosystems are designated as special aquatic sites:

- Wetlands
- Coral reefs
- Sanctuaries and refuges
- Mudflats
- Vegetated shallows
- Riffle and pool complexes (in freshwater streams)

Numerous streams flow into Aua Valley. **Figure 12** shows the locations and names of current and historical streams within Aua. Leasi Stream drains into the western end of the valley and discharges into Pago Pago Harbor. Matagimalie Stream, Suaia Stream, and Lalolamauta Stream drain into Aua Valley from the northwest, north, and northeast, respectively, and then converge near the center of Aua Village into a single channel that discharges into Pago Pago Harbor. Amano Stream and an unnamed intermittent tributary discharge into Lalolamauta Stream near the back of Aua Valley, prior to its convergence with Suaia Stream. An intermittent, unnamed tributary loop of Lalolamauta Stream branches off just north of Route 6 (north edge of Aua Village) and reconnects with the converged Matagimalie, Suaia, and Lalolamauta Streams just before the channel discharges into Pago Pago Harbor. The National Wetlands Inventory classify the channels of Lalolamauta, Suaia, and Matagimalie streams as “riverine unknown perennial unconsolidated bottom permanently flooded” (R5UBH) within the project area (USFWS, 2020a). An additional unnamed stream drains into the central-eastern end of the valley and discharges into Pago Pago Harbor. No other surface water bodies are present in Aua Valley. Historic topographic maps identify alternative courses for some of the current streams and additional unnamed streams that are no longer present (U.S. Geological Survey [USGS], 2015).

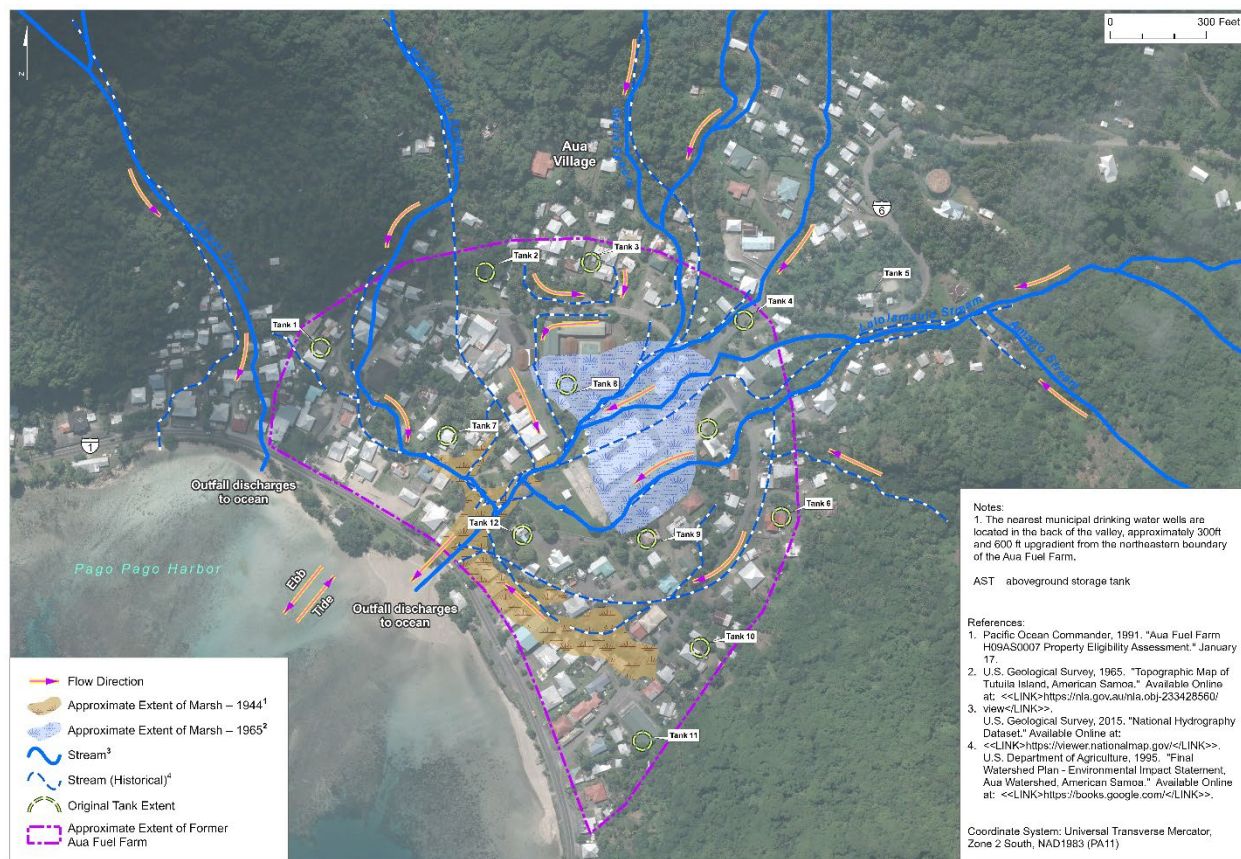


Figure 12. Hydrologic Map of Aua Valley

Many of these perennial streams and associated wetlands have been encroached upon or diverted to accommodate buildings. Streams cross the perimeter road around the village (Route 6) through eight pipe or box culverts and converge prior to draining to Pago Pago Harbor through a 4-foot by 15-foot box culvert (Natural Resource Conservation Service [NRCS], 1995). Surface water quality and the nearshore marine area is degraded by sediment, animal waste discharge, household trash, and residual fuel oil in the subsoil

(NRCS, 1995). A tidal wetland (mangrove) of approximately 1.8 acres is located inland of the highway (Route 1) and serves as the confluence of Lalolamauta, Suaia, and Matagimalie streams (NRCS, 1995).

The 1965 USGS Topographic Map for Tutuila Island indicates the presence of a marsh in the northeastern portion of Aua Village in the area now occupied by a church and several residences (USGS, 1965). The Aua Tank Farm map, dated 20 January 1944 and included in the 2016 FDE (USACE, 2016b), indicates the presence of a much smaller marsh in the area indicated on the 1965 topographic map, as well as a large marshy area in the southeastern portion of the tank farm. The large marsh area shown in the southeastern portion of the tank farm in the 1944 drawing generally coincides with today's areas of dense vegetation, as well as some developed residential areas. However, in the past 50 years the area has experienced heavy ground disturbance, human occupancy, and residential development (previously mapped wetlands are now occupied by a church and several residences) resulting in a current absence of any designated wetlands within the project area.

Coral reefs are present in the adjacent Pago Pago Harbor that may potentially include ESA-listed coral species that require special protection. A coral survey is being conducted in accordance with the ongoing Fish and Wildlife Coordination Act interagency Consultation involving USFWS, NMFS, and the Territorial wildlife agency (American Samoa Department of Marine and Wildlife Resources). The coral survey will identify areas that do not have coral species that require special protection that will be used to locate the outfall discharge point of the water treatment plant.

3.12.2. Environmental Consequences

3.12.2.1. Alternative A: No Action

The No Action Alternative avoids any potential project impacts to special aquatic sites, but would leave in place, subsurface petroleum contamination that could, in time, migrate into aquatic resources.

3.12.2.2. Alternative B: Proposed Action

The proposed activities would potentially benefit waters, wetlands, and special aquatic sites by removing contaminants from the environment. The risk of spreading sediment or contaminants from the site via surface runoff would be reduced through BMPs during project earth-moving activities and soil management. BMPs would include the following:

- Soil exposed during construction activities would be minimized and the existing topsoil and other soil surfaces would be preserved in the existing pre-construction state as much as practicable.
- Storm water that has not been impacted by site contaminants would be directed toward vegetated or permeable areas to allow for the greatest amount of infiltration and recharge.
- Velocity dissipation devices or techniques would be used, as necessary, to minimize erosion at the point of stormwater discharge.
- Vegetation removal would be minimized to the extent possible to reduce erosion potential and sediment loss.
- Excavation areas would be restored to their pre-excavation conditions, including revegetation or paving of disturbed areas, prior to demobilizing from the site.

- A perimeter fence with fabric screen (“dust fence”) would be installed around the soil treatment area and, as deemed necessary, around excavations within the primary work area.
- Plastic sheeting or tarps would be used to cover untreated stockpiled soil at the soil treatment area when left overnight or during heavy rain events to prevent migration of soil. Coverings would be secured with sandbags or other weighted material.
- Fiber rolls and/or straw wattles would be used to prevent sediment from migrating off the project site. Wattles would be placed upgradient of the clean overburden stockpile and downgradient of each excavation area and the soil treatment area. Fiber rolls would be used along the downgradient site perimeter at excavation areas within 50 feet of surface waters. Fiber rolls could also be used to protect nearby storm drains, drainage canals, and streams.
- A containment boom would be installed at the treated water discharge point. The containment boom would be sized appropriately for the depth and condition of the receiving water and to appropriately surround the discharge point. The water surface within the containment boom would be monitored regularly (i.e., at least daily) to ensure that no sheen or other visible evidence of contaminant discharge is present.

Alternative B-1: Soil Treatment Location A

Under Alternative B-1, the soil treatment location would be at Onesosopo Park. USACE would follow BMPs during project earth-moving activities and soil management operations to reduce adverse impacts to surface waters, wetlands, and special aquatic sites. No additional impacts would occur as a result of the soil treatment location.

Alternative B-2: Soil Treatment Location B

Under Alternative B-2, the soil treatment location would be at Pago Pago Airport. USACE would follow BMPs during project earth-moving activities and soil management operations to reduce adverse impacts to surface waters, wetlands, and special aquatic sites. No additional impacts would occur as a result of the soil treatment location.

Alternative B-3: Treated Water Discharge Location A

Under Alternative B-3, the treated water discharge location would be on the rock outcropping/revetment. USACE would follow BMPs during project earth-moving activities and soil management operations to reduce adverse impacts to surface waters, wetlands, and special aquatic sites. No additional impacts would occur as a result of the soil treatment location.

Alternative B-4: Treated Water Discharge Location B

Under Alternative B-4, the treated water discharge location would be farther out in the bay. USACE would follow BMPs during project earth-moving activities and soil management operations to reduce adverse impacts to surface waters, wetlands, and special aquatic sites. No additional impacts would occur as a result of the soil treatment location.

Alternative B, the proposed action, along with Alternatives B-1 through B4 (soil treatment and water discharge locations), would have long-term Beneficial and short-term Less-than-significant adverse Effects on surface water, wetlands, and other special aquatic sites.

4. Other Considerations

4.1. ENVIRONMENTAL JUSTICE

EO 14096 (88 Federal Register 25251, April 26, 2023) directs the Federal Government to build upon and strengthen its commitment to deliver environmental justice to all communities across America through an approach that is informed by scientific research, high-quality data, and meaningful Federal engagement with communities with environmental justice concerns. “Environmental Justice” means the just treatment and meaningful involvement of all people—regardless of income, race, color, national origin, Tribal affiliation, or disability—in agency decision-making and other Federal activities that affect human health and the environment so that people (1) are fully protected from disproportionate and adverse human health and environmental effects (including risks) and hazards, including those related to climate change, the cumulative impacts of environmental and other burdens, and the legacy of racism or other structural or systemic barriers; and (2) have equitable access to a healthy, sustainable, and resilient environment in which to live, play, work, learn, grow, worship, and engage in cultural and subsistence practices.

The proposed action would have short-term less than significant impacts from an increase in air pollution, water pollution, traffic, and noise. Onesosopo Park would be temporarily unavailable for community use. The proposed action may affect but is not likely to adversely affect endangered species and there could be less-than-significant adverse impacts on other natural and cultural resources. The project does not displace any portion of the people living in the area nor create any additional long-term environmental hardships for any portion of the population.

This project would clean up former contamination of soil and groundwater and support construction of sanitary sewer service to residences and community buildings that previously had no sewer connection, thereby improving environmental conditions for the residents of Aua. The proposed action would have long-term beneficial effects for the population.

4.2. PROTECTION OF CHILDREN FROM ENVIRONMENTAL HEALTH AND SAFETY RISKS

On 21 April 1997, EO 13045, Protection of Children from Environmental Health and Safety Risks, was issued to identify and assess environmental health and safety risks that may disproportionately affect children. EO 13045 states, “‘Environmental health risks and safety risks’ mean risks to health or to safety that are attributable to products or substances that the child is likely to come in contact with or ingest (such as the air we breathe, the food we eat, the water we drink or use for recreation, the soil we live on, and the products we use or are exposed to).”

During construction activities, children will not be allowed access to construction areas in order to protect them from construction activities and hazards. The soil and water treatment areas will be secured to ensure unauthorized people, including children, cannot gain access to the areas.

The proposed action would have short-term less-than-significant impacts from an increase in air pollution, water pollution, traffic, and noise. Onesosopo Park would be temporarily unavailable for community use. The proposed action may affect but is not likely to adversely affect endangered species and there could be less than significant adverse impacts on other natural and cultural resources.

This project would clean up former contamination of soil and groundwater and support construction of sanitary sewer service to residences and community buildings that previously had no sewer connection, thereby improving environmental conditions for the residents of Aua. The proposed action would have long-term beneficial effects for the population.

5. Cumulative Impacts

5.1. INTRODUCTION

This section analyzes the potential cumulative effects of the proposed action and past, present, and reasonably foreseeable future actions within the proposed action's radius of influence (ROI). Cumulative effects of the proposed action can be viewed as “the total effects on a resource, ecosystem, or human community of that action and all other activities affecting that resource” (USEPA, 1999). The cumulative effects analysis determines if the activities involved in the proposed action would combine with these other impacts to result in either adverse or beneficial cumulative impacts when considering other actions in the ROI.

5.2. PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE PROJECTS

This EA considers the effects of actions that occur around the same time and place and that have a close causal relationship as the proposed action and alternatives. These include actions located at and adjacent to the project area. This cumulative impacts analysis has selected for inclusion related actions that have a reasonable probability of being completed in the next few months. Upcoming projects were identified by contacting ASPA and ASEPA. **Table 3** lists these projects.

Table 3. Future Projects in the Project Area Vicinity that are Reasonably Anticipated to Occur

Action	Timeframe	Impacts
ASPA Water Line Project	2024–2025	Air Resources, Community and Land Use, Geology and Soil, Hazardous Materials, Solid Waste and Hazardous Waste; Noise; Habitat and Wildlife; Protected Species; EFH; Surface Water, Wetlands and Special Aquatic Sites; Cultural Resources; Floodplains
Onesosopo Park Redevelopment	Late 2024–2025	Air Resources, Community and Land Use, Geology and Soil, Hazardous Materials, Solid Waste and Hazardous Waste; Noise; Habitat and Wildlife; Protected Species; EFH; Surface Water, Wetlands and Special Aquatic Sites; Cultural Resources; Floodplains

The reasonably foreseeable future projects listed in **Table 3** would have long-term Beneficial impacts and similar types of short-term Less-than-significant effects on the same environmental resources as the proposed action. When combined with the reasonably foreseeable future projects, the proposed action would have long-term Beneficial Effects and short-term Less-than-significant effects.

6. Unavoidable Adverse Impacts

The proposed action would not have any significant adverse environmental effects that cannot be avoided. Overall, Alternative B along with sub-alternative B-1 through B-4 would result in long-term Beneficial impacts and short-term Less than significant adverse impacts.

7. Mitigation Measures

Mitigation measures are those that USACE would identify and implement to mitigate adverse impacts on resources, as identified in the EA. Management measures and design features associated with the proposed action include standard protocols, procedures, and requirements. Management measures and design features are described for the proposed action in **Section 2.4**, and for specific resource areas in **Section 3** and are not listed separately here.

8. Conclusions and Recommendations

This EA reflects USACE's environmental impact analysis for the proposed action based on its review of the best available data; and consultation/coordination with Federal, State, and local agencies. The EA will be available to agencies, tribes, organizations, and individuals from the public. This EA concludes that none of the alternatives for implementing the proposed action would have a significant impact on the natural or human environment and would require preparation of an EIS. A FONSI for the proposed action, will be issued to conclude the NEPA documentation process.

9. Organizations and Parties Consulted and List of Preparers

Appendix F includes a list of the agencies consulted in the preparation of this EA, and a list of EA preparers.

10. References

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Appendix A: Permits

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 Hawthorne Street
San Francisco, CA 94105**

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

NPDES PERMIT NO. AS0020048

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

Permittee Name	U.S. Army Corps of Engineers and Engineering/Remediation Resources Group
Permittee Address	USACE, CEPOH-PPE, Building 230 Ft. Shafter, HI 96858-5440
Facility Name	Former Aua Fuel Farm Temporary Water Treatment System
Facility Location Address	Near Highway 1 and Eastern Rim Road Intersection Aua Village, AS 96799 Eastern County
Facility Rating	Minor

Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
001	Construction dewatering effluent	14° 16' 19.48" S	170° 39' 52.73" W	Pago Pago Harbor

Commented [WA(1)]: Seeking comments on exact discharge point. Proposed alternative options from the permittee include sites within 500 feet north or south along the coast of this Outfall 001 location. See Attachment B-3 for proposed discharge location alternatives.

This permit was issued on:	Date of signature below
This permit shall become effective on:	<IF no comments: 1 st of month after issue date, IF comments: 1 st of month following 33 days after issue date>
Permit reapplication due no later than:	<Effective date + 5 years – 180 days>
This permit shall expire at midnight on:	<Effective date + 5 years – 1 day>

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

Signed for the Regional Administrator:

Tomás Torres, Director
Water Division

Date

DRAFT

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Part I. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Effluent Limits and Monitoring Requirements

1. Effluent Limits – Outfall Number 001
The permittee is authorized to discharge treated construction dewatering effluent from sewer line installation and fuel pipeline excavation trenches in compliance with the effluent limits and monitoring requirements specified in Table 1.
2. The discharge of pollutants at any point other than the outfall specifically authorized in this permit is prohibited.
3. The discharge of treated effluent from the facility to Pago Pago Harbor shall not exceed the projected maximum treatment capacity of 1,500 gallons per minute (“GPM”).
4. The discharge of sludge generated during the dewatering process is prohibited.
5. The discharge shall not cause conditions in the receiving water that are inconsistent with the American Samoa Water Quality Standards, 2018 Revision (“ASWQS”, available as American Samoa Administrative Rule 001-2019), including the narrative standards at ASWQS § 24.0206. The narrative standards in the ASWQS specify that the receiving waters:
 - a. Shall be substantially free from materials attributable to sewage, industrial wastes, or other activities of man that will produce objectionable color, odor, or taste, either of itself or in combinations, or in the biota;
 - b. Shall be substantially free from visible floating materials, grease, oil, scum, foam, and other floating material attributable to sewage, industrial wastes, or other activities of man;
 - c. Shall be substantially free from materials attributable to sewage, industrial wastes, or other activities of man that will produce visible turbidity or settle to form objectionable deposits;
 - d. Shall be substantially free from substances and conditions or combinations thereof attributable to sewage, industrial wastes, or other activities of man which may be toxic to humans, other animals, plants, and aquatic life or produce undesirable aquatic life;
 - e. Shall not deviate in temperature by more than 1.5 degrees Fahrenheit (“°F”) from conditions which would occur naturally and shall not fluctuate more than 1 degree Fahrenheit on an hourly basis or exceed 85 degrees Fahrenheit due to the influence of other than natural causes;
 - f. Shall not contain a concentration of radioactivity that results in accumulations or radioactivity in edible plants and animals that present a hazard to consumers or

are harmful to aquatic or terrestrial life, as recommended by the Federal Radiation Council in the "Radiation Protection Guides" (as compiled at <https://www.epa.gov/radiation/federal-guidance-radiation-protection>).

- g. Shall not contain a concentration of toxic pollutants that exceeds the more stringent of the aquatic life criteria for marine waters or the human health concentration criteria for consumption of organisms found in the U.S. Environmental Protection Agency's ("EPA's") 2002 National Recommended Water Quality Criteria;
- 6. There shall be no changes in basin geometry or freshwater inflow that will alter current patterns in such a way as to adversely affect existing biological populations or sediment distribution. To protect estuarine organisms, no change in channels, basin geometry, or freshwater influx shall be made which would cause permanent changes in existing isohaline patterns of more than 10 percent.
- 7. The discharge shall not cause the concentration of dissolved oxygen to be less than 80 percent of saturation at any time, as influenced by salinity or naturally occurring temperature variations. Where natural conditions cause lower dissolved oxygen levels, controllable water quality factors shall not cause further reductions.
- 8. The discharge of runoff from petroleum-contaminated soil disposal areas, including the thermal treatment area at Onesosopo Park, is prohibited.

B. Effluent Limits and Monitoring Requirements – Outfall Number 001

Table 1. Effluent Limits and Monitoring Requirements

Parameter	Maximum Allowable Discharge Limits			Monitoring Requirements	
	Concentration and Loading				
	Average Monthly	Maximum Daily	Units	Frequency	Sample Type
Flow rate	(1)	(1)	MGD	Continuous	Meter
Visible Sheen and Foam	(1)	(1)	--	Daily	Visual Inspection and Log
Temperature	(1)	(1)	°F	(3)	Meter
Turbidity	0.75 ⁽⁴⁾	1.5	NTU	(3)	Grab ⁽²⁾
Total Suspended Solids (“TSS”)	—	100	mg/L	(3)	Grab ⁽²⁾
Oil and Grease	—	15	mg/L	(3)	Grab ⁽²⁾
pH	Between 6.5 and 8.6 at all times.		S.U.	(3)	Meter
Lead	7.0	14	µg/L	(3)	Grab ⁽²⁾
Remaining Metals ⁽⁵⁾	(1)	(1)	µg/L	(3)	Grab ⁽²⁾
Acenaphthene	90	(1)	µg/L	(3)	Grab ⁽²⁾
Benzo(a)anthracene	0.0013	0.0026	µg/L	(3)	Grab ⁽²⁾
Benzo(a)pyrene	0.00013	0.00026	µg/L	(3)	Grab ⁽²⁾
Benzo(b)fluoranthene	0.0013	0.0026	µg/L	(3)	Grab ⁽²⁾
Benzo(k)fluoranthene	0.013	0.026	µg/L	(3)	Grab ⁽²⁾
Chrysene	0.13	0.26	µg/L	(3)	Grab ⁽²⁾
Dibenzo(a,h)anthracene	0.00013	0.00026	µg/L	(3)	Grab ⁽²⁾
Fluoranthene	20	40	µg/L	(3)	Grab ⁽²⁾
Fluorene	70	(1)	µg/L	(3)	Grab ⁽²⁾
Indeno(1,2,3-cd)pyrene	0.0013	0.0026	µg/L	(3)	Grab ⁽²⁾
Naphthalene	—	20	µg/L	(3)	Grab ⁽²⁾
Pyrene	30	60	µg/L	(3)	Grab ⁽²⁾
Group II PAHs ⁽⁶⁾	—	100	µg/L	(3)	Grab ⁽²⁾
TPH-Diesel [TPH-DRO (C10-C28)]	—	640	µg/L	(3)	Grab ⁽²⁾
TPH-Residual [TPH-RRO (>C28-C40)]	—	640	µg/L	(3)	Grab ⁽²⁾
Benzene	16	32	µg/L	(3)	Grab ⁽²⁾
Ethylbenzene	130	261	µg/L	(3)	Grab ⁽²⁾
Toluene	520	1,045	µg/L	(3)	Grab ⁽²⁾
Xylene	10,000	20,100	µg/L	(3)	Grab ⁽²⁾

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

- (2) Results from grab samples collected for laboratory analysis and any field samples that meet the requirements of section 1.D.1 of this permit shall be reported as described in section 1.D of this permit.
- (3) The permittee shall collect a minimum of two samples during the first week of discharge (i.e., treatment system start-up). For any parameter detected above the effluent limit, monitoring shall continue weekly during discharge. All other parameters shall be sampled monthly.
- (4) This limit is expressed as a median monthly limit of 0.75 NTU.
- (5) Metals required to be monitored shall include antimony, arsenic, cadmium, chromium, copper, mercury, nickel, selenium, silver, and zinc.
- (6) Group II PAHs shall mean the sum of acenaphthene, acenaphthylene, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, phenanthrene, and pyrene.

C. Sampling

1. Samples shall be representative of the volume and quality of effluent discharged over the sampling and reporting period. All samples are to be taken during normal operating hours. Yes,
2. All samples shall be taken after in-plant return flows and the last treatment process and prior to mixing with the receiving water, where representative samples can be obtained.
3. For intermittent discharges, the permittee shall monitor on the first day of discharge. The permittee is not required to monitor in excess of the minimum frequency required in Table 1. If there is no discharge during the reporting period, the permittee shall report "C" in the "No Discharge" box on the DMR for the reporting period.

D. General Monitoring and Reporting

1. All monitoring shall be conducted in accordance with 40 CFR § 136 test methods, unless otherwise specified in this permit. For effluent analyses required in this permit, the permittee shall utilize 40 CFR § 136 test methods with MDLs and MLs that are lower than the effluent limits in this permit. For parameters without an effluent limit, the permittee must use an analytical method at or below the level of the applicable water quality criterion for the measured pollutant. If all MDLs or MLs are higher than these effluent limits or criteria concentrations, then the permittee shall utilize the test method with the lowest MDL or ML and the permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is equal to or less than the ML. Influent and effluent analyses for metals shall measure "total recoverable metal", except where stated otherwise in this permit.
2. As an attachment to the first DMR, the permittee shall submit, for all parameters with monitoring requirements specified in this permit:
 - a. The test method number or title and published MDL or ML,
 - b. The preparation procedure used by the laboratory,

- c. The laboratory's MDL for the test method computed in accordance with Appendix B of 40 CFR § 136,
- d. The standard deviation (S) from the laboratory's MDL study,
- e. The number of replicate analyses (n) used to compute the laboratory's MDL, and
- f. The laboratory's lowest calibration standard.

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

- 3. The permittee shall develop a Quality Assurance ("QA") Manual for the field collection and laboratory analysis of samples which specifies the procedures for the collection and analysis of samples and explaining data anomalies if they occur. The QA Manual shall be developed within 10 days of the permit effective date and the permittee shall reviewed the QA Manual annually and revise it as appropriate. The date of the most recent review and revision shall be indicated on the QA Manual. A copy of the permittee's QA Manual shall be retained on the permittee's premises and available for review by regulatory authorities upon request. At a minimum, the QA Manual shall include the following:
 - a. Identification of project management and a description of the roles and responsibilities of the participants; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable technical, regulatory, or program-specific action criteria; and personnel qualification requirements for collecting samples;
 - b. A description of sample collection procedures; equipment used; the type and number of samples to be collected including QA/Quality Control ("QC") samples; preservatives and holding times for the samples (see 40 CFR § 136.3); and chain of custody procedures;
 - c. Identification of the laboratory used to analyze the samples; provisions for any proficiency demonstration that will be required by the laboratory before or after contract award such as passing a performance evaluation sample; analytical method to be used; MDL and ML to be reported; required QC results to be reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and corrective actions to be taken in response to problems identified during QC checks; and
 - d. Discussion of how the permittee will perform data review, report results, and resolve data quality issues and identify limits on the use of data.
- 4. All field collection and laboratory analyses of samples shall be conducted in accordance with the QA/QC procedures documented in the QA Manual. If samples

are tested by a contract laboratory, the permittee shall ensure that the laboratory has a QA Manual on file.

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

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

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

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

NODI (B), if the maximum value of all analytical results is less than the laboratory's MDL.

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

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

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

NODI (B), if the maximum value of all analytical results is less than the laboratory's MDL.

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

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

6. The permittee shall include the following in records of monitoring information: the laboratory which performed the analyses and any comment, case narrative, or summary of results produced by the laboratory. The records should identify and discuss QA/QC analyses performed concurrently during sample analyses and whether project and 40 CFR § 136 requirements were met. The summary of results must include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, and sample condition upon receipt, holding time, and preservation. The permittee shall maintain these records on their premises and make them available to regulatory authorities on request. The permittee shall include the information specified in this paragraph in addition to information requirements specified and described in Part IV.A.10.c of this permit.

7. In accordance with the NPDES Electronic Reporting Rule, the permittee shall use CDX (<https://cdx.epa.gov/>) to access the NPDES Electronic Tool (NeT) and electronically submit the following program reports:
 - a. NetDMR/Discharge Monitoring Report
 - b. Groundwater Remediation dewater & Hydrostatic Testing
8. DMRs shall be submitted by the 28th day of the month following the previous quarterly reporting period. For example, the three DMRs for January, February, and March are due on April 28th. Quarterly and annual monitoring must be conducted starting in the first complete quarter or calendar year following the permit effective date. Annual reporting for annual monitoring is due on January 28th of the following year. A DMR must be submitted for the reporting period even if there was not any discharge. If there is no discharge from the facility during the reporting period, the permittee shall submit a DMR indicating no discharge as required.

E. Field Monitoring

1. The permittee shall conduct weekly in-situ field sampling at the monitoring location specified in section C.2 to determine if the implemented BMPs are functioning properly, and develop additional BMPs, as necessary to comply with the terms of this permit. If oil is identified in the
2. If any in-situ field monitoring results exceed the numeric and/or narrative effluent limits described in section I.A and I.B of this permit, the permittee shall cease discharge of dewatering effluent and follow the engineering controls and BMP procedures described in Part III.A of this permit.
3. The permittee shall keep a record of field monitoring results and instrumentation; including portable organic vapor monitors, turbidity meters, and pH meters; and shall make these records available to EPA and ASEPA upon request.
4. The permittee shall collect field samples by meter or other in-situ monitoring instrumentation. Results of field samples that do not meet the requirements of section 1.D.1 of this permit shall not be reported on DMRs.

F. Receiving Water Monitoring

1. The permittee shall conduct daily receiving water visual monitoring at Outfall 001 for oily sheen, foam, discoloration, or floating debris. Visual observations shall be conducted when treated effluent is being discharged from the facility.
2. The permittee shall keep a record of all visual monitoring, including any observations of sheen, foam, discoloration, or floating debris. The record shall be attached to the DMRs for the reporting period in which visual monitoring was conducted.

Part II. SPECIAL CONDITIONS

A. Permit Reopener(s)

1. In accordance with 40 CFR §§ 122 and 124, this permit may be modified by EPA to include effluent limits, monitoring, or other conditions to implement new regulations, including EPA-approved water quality standards; or to address new information indicating the presence of effluent toxicity or the reasonable potential for the discharge to cause or contribute to exceedances of water quality standards.
2. In accordance with 40 CFR 122 and 124, this permit may be modified to include effluent limits or permit conditions to address toxicity (acute and/or chronic) in the effluent or receiving waterbody, as a result of the discharge; or to implement new, revised, or newly interpreted water quality standards applicable to toxicity.

B. Reporting of Noncompliance

1. The permittee is required to provide an oral report of the noncompliance within 24 hours of becoming aware of:
 - a. Any unanticipated bypass which exceeds any effluent limit in the permit;
 - b. Any upset which exceeds any effluent limit in the permit;
 - c. Violation of a maximum daily discharge limit for Lead, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Naphthalene, Pyrene, Group II PAHs (as defined in Table 1), TPH-Diesel, [TPH-DRO (C10-C28)], TPH-Residual, [TPH-RRO (>C28-C40)], Benzene, Ethylbenzene, Toluene, or Xylene
 - d. Any other noncompliance which may endanger human health or the environment.
2. The permittee shall provide an oral report to both EPA and ASEPA at each of the following phone numbers within 24 hours from the time the permittee becomes aware of the noncompliance:

U.S. Environmental Protection Agency
Wastewater Enforcement Section (ENF-3-1)
(415) 947-4222

American Samoa Environmental Protection Agency
Water Quality Program Manager
(684) 633-2304
3. The permittee shall submit a written report within five days of the time the permittee becomes aware of the noncompliance. Written reports shall be emailed to

R9NPDES@epa.gov. The written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

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

C. 401 Water Quality Certification

The permittee shall comply with all requirements set forth in ASEPA's 401 Water Quality Certification issued on [DATE]. See Attachment D.

Part III. BEST MANAGEMENT PRACTICES AND POLLUTION PREVENTION PLAN REQUIREMENTS

A. Best Management Practices

1. In accordance with section 304(e) of the CWA and 40 CFR § 122.44(k), prior to operation of the treatment facility and prior to any discharge, the permittee shall develop and implement appropriate pollution prevention measures or Best Management Practices ("BMPs"). Appropriate BMPs are those pollution prevention measures necessary to control site runoff, spillage and leaks, sludge and waste disposal, and drainage from raw material storage which are associated with or ancillary to the maintenance, transportation, and storage of petroleum products or other potential pollutants at the facility that may contribute measurable or observable amounts of such pollutants to surface waters.
2. The permittee must implement the BMPs that include, but are not limited to:
 - (1) discharge flow controls, including methods for measuring discharge flow, and control measures to prevent discharge exceeding the treatment capacity of the facility;
 - (2) engineering controls to prevent the discharge of untreated effluent or free product including:
 - i) a containment boom that fully surrounds the point of discharge; and removal of any free product from within the boom;
 - ii) if free product or a sheen is observed inside the containment boom, dewatering will be suspended, the treatment system will be inspected, and repairs (or modifications to the system) will be made, as needed to prevent discharge of free product or oil, prior to resuming water processing; and

- iii) if oil is identified in the harbor within the discharge zone, a fuel fingerprinting sample will be collected and submitted for laboratory analysis within 24 hours, and results shall be compared with fuel fingerprint results from the 2021 removal action to determine if the source is the water treatment plant effluent within 48 hours of receiving the results. If the source is the water treatment plant effluent, the permittee shall follow the procedures in paragraph III.A.2.(2)(ii) to suspend and remedy discharge of free product or oil.
- (3) good housekeeping: the permittee must keep all exposed areas of the facility in a clean, orderly manner where such exposed areas could contribute pollutants to discharges;
- i) vehicle and equipment storage areas must be regularly inspected and cleaned for spills and leaks (including storm inlets); and have spill response equipment (e.g., drip pans, sorbent pads) to respond immediately to spills or leaks;
 - ii) vehicle and equipment fueling areas must have measures that prevent or minimize contamination of discharges from these areas such as covering the fueling area, using spill/overflow protection and cleanup equipment, using proper cleaning methods instead of hosing down area, minimizing run-on/runoff to fueling areas, and treating and/or recycling collected effluent;
 - iii) materials (e.g., greases, used oil/oil filters, cleaning solvents, hydraulic and transmission fluids, petroleum and oil-related products) must be stored in designated storage areas with appropriate storage vessels to contain the materials and prevent contamination of effluent; examples include storing the materials indoors and installing berms/dikes around area(s); proper storage of all materials shall comply with local and federal laws;
 - iv) vehicle and equipment (e.g., tank, fuel lines) cleaning areas must have measures to prevent or minimize contamination of effluent from all areas used for vehicle and equipment cleaning; these areas must have appropriate containment and/or diversionary structures or equipment to ensure wash water is filtered and recycled where feasible; and
 - v) vehicle and equipment maintenance areas must have measures that prevent or minimize contamination of effluent from all areas used for vehicle and equipment maintenance such as performing maintenance activities indoor; using drip pans, and treating and/or recycling collected effluent.
- (4) minimizing exposure: where practicable, industrial materials and activities must be protected to prevent exposure to rain or runoff.

- (5) preventive maintenance program, which includes timely inspections and maintenance of water management devices, (e.g., cleaning oil/water separators) as well as inspecting, testing, maintaining and repairing facility equipment and systems to avoid breakdowns or failures that may result in discharges of pollutants to surface waters; all BMPs must be maintained in effective operating condition to control source runoff.
 - (6) spill prevention and response procedures: the permittee is required to develop and implement a Spill Prevention, Control and Countermeasure (SPCC) Plan in accordance with 40 CFR § 112; the SPCC Plan must describe the procedures that will be followed for cleaning up spills or leaks and for disposal of oil and hazardous waste; measures for cleaning up spills or leaks and disposal of such materials must be consistent with applicable RCRA regulations at 40 CFR §§ 264 and 265 and CWA regulations at 40 CFR § 112.
 - (7) routine facility inspections: qualified personnel must inspect all areas of the facility where industrial materials or activities are exposed to water (i.e., storage areas for vehicles/equipment awaiting maintenance, fueling areas, vehicle/equipment maintenance areas, material storage areas, line-flushing area, vehicle/equipment cleaning areas, and loading/unloading area, location(s) of oil/water separators, storm drains, etc.); inspections must include an evaluation of existing BMPs; and inspections shall occur at least once per week.
 - (8) pollution prevention training program for the facility; Prior to operating in areas where industrial materials or activities generate effluent, all employees and contractors shall be trained in spill response, good housekeeping and material management practices, proper fueling practices, and proper painting or sandblasting procedures for the removal of paint. All employees and contractors shall be re-trained at least once per year. A log of training dates, the topics covered, and participants in each training must be maintained onsite.
 - (9) sediment and erosion control: structural, vegetative, and/or stabilization BMPs to limit erosion must be implemented in areas of the facility that have a potential for significant soil erosion.
3. Control measures, including BMPs, must be designed to meet the following non-numeric technology-based limitations:
- (1) Minimize the potential for violations of the terms of this permit, taking corrective actions, when necessary;
 - (2) Minimize the number and quantity of pollutants and/or the toxicity generated, discharged, or potentially discharged at the site;

- (3) Minimize discharges of pollutants from the dewatering activities, by preventing contamination of groundwater from material storage areas, treatment and material handling areas, loading and unloading operations, and accidental leaks or spills, and minimizing contamination of groundwater by stormwater on the site through use of on-site control measures and implementation of material compatibility and good housekeeping practices; and

Use pollution control technologies to meet the discharge limitations and requirements in this permit, including the proper operation and maintenance of the treatment system.

B. Pollution Prevention Plan

1. Prior to operation of the treatment facility and prior to any discharge, the permittee shall prepare a Pollution Prevention Plan ("Plan") that describes the pollution prevention measures or BMPs that shall be implemented at the facility, which must meet the minimum requirements detailed under Part III.A of this permit.
2. The Plan must identify the potential sources of pollution that may reasonably be expected to affect the quality of the effluent discharges from the facility and describe the design specifications and implementation practices that will be used to reduce the pollutants in effluent discharges from the facility and assure compliance with the terms and conditions of this permit. The Plan must be retained onsite.
3. The Plan shall include at a minimum the following contents:
 - a. the identification of a pollution prevention committee (with name of each individual member) or individual(s) (by name or title) within the facility organization responsible for developing, implementing and maintaining the Plan.
 - b. a description of the facility that includes:
 - (1) a description of the nature of the industrial activity(ies) at the facility;
 - (2) a general location map (e.g., USGS quadrangle, or other map) with enough detail to identify the location of the facility and the receiving waters within one mile of the facility;
 - (3) treatment system schematics, drawings, and/or maps, including up-to-date facility site plans;
 - (4) a drainage site map identifying the directions (using arrows) of water flow; locations of all existing structural BMPs and all surface water bodies; locations of potential pollutant sources and locations of significant materials and activities (e.g., fueling stations, vehicle and equipment cleaning areas, loading/unloading areas, locations used for treatment, storage and disposal of wastes, processing and storage areas, liquid storage tanks, location of transfer

of substance in bulk, etc.) that exposed to precipitation; and locations of outfalls.

- c. the name of the nearest receiving water(s) that receives or may receive effluent discharges from the facility.
 - d. a summary of potential pollutant sources that includes: a description of each separate area of the facility where industrial materials or activities that generate effluent and those that are exposed to stormwater (e.g., on-site waste storage or disposal, dirt/gravel parking areas for vehicles for vehicles awaiting maintenance, fueling areas, bulk storage areas) are located and a list of associate pollutant(s) or parameters (e.g., pH, BOD, etc.) for each material or activity.
 - e. a plan for compliance with the terms of this permit documenting how control measures will be implemented, including BMPs, to meet the technology-based limitations in Part III.A.3.
 - f. a description of existing and planned BMPs for discharge controls; the Plan shall describe the type and location of existing non-structural and structural BMPs selected for each of the areas where industrial materials or activities are exposed to stormwater or generate non-stormwater discharges.
 - g. a copy of this permit.
- 4. The Plan must have management approval and shall display the date of the most recent management approval.
 - 5. The Plan shall be updated whenever there is a change in design, construction, operation, or maintenance of the facility which has a significant effect on the discharge, or potential for discharge, of pollutants from the facility.
 - 6. The Plan shall be updated whenever there is indication of pollutants in the effluent discharge that may impact water quality standards; indication of pollutants requires the permittee to evaluate potential pollutant sources and corresponding BMPs and make appropriate Plan revisions; the permittee shall implement timely corrective actions and revise BMPs, as necessary.
 - 7. The most current version of the Plan must be retained on-site and be made available, upon request by EPA or ASEPA.

Part IV. STANDARD CONDITIONS

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

A. All NPDES Permits

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

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

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

- a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under 405(d) of the CWA within the time provided in the regulations that established these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
- b. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the CWA, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the CWA, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the

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

- c. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.¹

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

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

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

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

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

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

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

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or

¹ The civil and administrative penalty amounts are adjusted annually for inflation pursuant to the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015, and the current penalty amounts are set forth in 40 CFR § 19.4.

used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

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

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

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

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

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

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

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

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

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

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

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR § 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time.
- c. Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) The date(s) analyses were performed
 - (4) The individuals(s) who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.
- d. Monitoring must be conducted according to test procedures approved under 40 CFR § 136 or, in the case of sludge use or disposal, approved under 40 CFR § 136 unless otherwise specified in 40 CFR § 503, unless other test procedures have been specified in the permit.
- e. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

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

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

- (1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

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

- (2) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
- b. All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described in paragraph (a) of this section;
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or well field, superintendent, position of equivalent responsibility, or an individual or

position having overall responsibility for environmental matters of the company, (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,

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

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

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

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

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

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

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

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

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

- (3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, an such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
- b. Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- c. Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the CWA. (See 40 CFR § 122.61; in some cases, modification or revocation and reissuance is mandatory.)
 - (1) Transfers by modification. Except as provided in paragraph (2) of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under 40 CFR § 122.62(b)(2)), or a minor modification made (under 40 CFR § 122.63(d)), to identify the new permittee and incorporate such other requirements as may be necessary under CWA.
 - (2) Automatic transfers. As an alternative to transfers under paragraph (1) of this section, any NPDES permit may be automatically transferred to a new permittee if:
 - (A) The current permittee notifies the Director at least 30 days in advance of the proposed transfer date in paragraph (b)(2) of this section;
 - (B) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - (C) The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under 40 CFR § 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (b)(2) of this section.
- d. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - (1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices. As of December 21,

2016 all reports and forms submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR § 127.2(b), in compliance with this section and 40 CFR § 3 (including, in all cases, subpart D to part 3), 40 CFR § 122.22, and 40 CFR § 127.

- (2) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR § 136 or, in the case of sludge use or disposal, approved under 40 CFR § 503, or as specified in the permit, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.
 - (3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
- e. Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- f. Twenty-four hour reporting.
- (1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A report shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times), and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combine sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. As of December 21, 2025 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR §

127.2(b), in compliance with this section and 40 CFR § 3 (including, in all cases, subpart D to part 3), 40 CFR § 122.22, and 40 CFR § 127.

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

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

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

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

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

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

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

13. Bypass; at 40 CFR § 122.41(m).

a. Definitions.

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

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

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

c. Notice.

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).
- (3) As of December 21, 2025 all notices submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR § 127.2(b), in compliance with this section and 40 CFR § 3 (including, in all cases, subpart D to part 3), 40 CFR § 122.22, and 40 CFR § 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.

d. Prohibition of bypass.

- (1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
 - (i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
 - (iii) The permittee submitted notices as required under paragraph (m)(3) of this section.
- (2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

14. Upset; at 40 CFR § 122.41(n).

- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does

not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated; and
 - (3) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (24 hour notice).
 - (4) The permittee complied with any remedial measures required under paragraph (d) of this section.
- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

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

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

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

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

- a. Correct typographical errors;
 - b. Require more frequent monitoring or reporting by the permittee;
 - c. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement; or
 - d. Allow for a change in ownership or operational control of a facility where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the Director.
 - e. Change the construction schedule for a discharger which is a new source. No such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge under 40 CFR § 122.29.
 - f. Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.
 - g. Incorporate conditions of a publicly owned treatment works ("POTW") pretreatment program that has been approved in accordance with the procedures in 40 CFR § 403.11 (or a modification thereto that has been approved in accordance with the procedures in 40 CFR § 403.18) as enforceable conditions of the POTW's permits.
17. Termination of permits; at 40 CFR § 122.64.
- a. The following are causes for terminating a permit during its term, or for denying a permit renewal application:
 - (1) Noncompliance by the permittee with any conditions of the permit;
 - (2) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;
 - (3) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
 - (4) A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit (for example, plant closure or termination of discharge by connection to a POTW).

18. Availability of Reports; pursuant to CWA § 308

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

19. Removed Substances; pursuant to CWA § 301

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

20. Severability; pursuant to CWA § 512

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

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

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

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

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

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

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

B. *Specific Categories of NPDES Permits*

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

1. Existing manufacturing, commercial, mining, and silviculture dischargers; at 40 CFR § 122.42 (a). All existing manufacturing, commercial, mining, and silviculture dischargers must notify the Director as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
 - (1) One hundred micrograms per liter (100 µg/l);
 - (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
 - (4) The level established by the Director in accordance with 40 CFR § 122.44(f).
 - b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
 - (1) Five hundred micrograms per liter (500 µg/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7).
 - (4) The level established by the Director in accordance with 40 CFR § 122.44(f).

Attachment A: Definitions

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

measured during a calendar week divided by the number of “daily discharges” measured during that week.

3. “Best Management Practices” or “BMPs” are schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural, and/or managerial practices to prevent or reduce the pollution of waters of the U.S. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may further be characterized as operational, source control, erosion and sediment control, and treatment BMPs.
4. A “composite” sample means a time-proportioned mixture of not less than eight discrete aliquots obtained at equal time intervals (e.g., 24-hour composite means a minimum of eight samples collected every three hours). The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling, but not less than 100 ml. Sample collection, preservation, and handling shall be performed as described in 40 CFR § 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR § 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.
5. A “daily discharge” means the “discharge of a pollutant” measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the “daily discharge” is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the “daily discharge” is calculated as the average measurement of the pollutant over the day.
6. A “daily maximum allowable effluent limitation” means the highest allowable “daily discharge.”
7. A “DMR” is a “Discharge Monitoring Report” that is an EPA uniform national form, including any subsequent additions, revisions, or modifications for reporting of self-monitoring results by the permittee.
8. “Free product” is light non-aqueous phase liquid (e.g., petroleum oil, gasoline, diesel fuel) that has a density less than water and is immiscible with water.
9. A “grab” sample is a single sample collected at a particular time and place that represents the composition of the discharge only at that time and place. Sample collection, preservation, and handling shall be performed as described in 40 CFR § 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR § 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.
10. The “method detection limit” or “MDL” is the minimum concentration of an analyte that can be detected with 99% confidence that the analyte concentration is distinguishable from the method blank results, as defined by a specific laboratory method in 40 CFR §

136. The procedure for determination of a laboratory MDL is in 40 CFR § 136, Appendix B.

11. The “minimum level” or “ML” is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed in a specific analytical procedure, assuming that all the method-specific sample weights, volumes, and processing steps have been followed (as defined in EPA’s draft National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality-Based Effluent Limitations Set Below Analytical Detection/Quantitative Levels, March 22, 1994). If a published method-specific ML is not available, then an interim ML shall be calculated. The interim ML is equal to 3.18 times the published method-specific MDL rounded to the nearest multiple of 1, 2, 5, 10, 20, 50, etc. (When neither an ML nor MDL are available under 40 CFR § 136, an interim ML should be calculated by multiplying the best estimate of detection by a factor of 3.18; when a range of detection is given, the lower end value of the range of detection should be used to calculate the ML.) At this point in the calculation, a different procedure is used for metals, than non-metals:
 - a. For metals, due to laboratory calibration practices, calculated MLs may be rounded to the nearest whole number.
 - b. For non-metals, because analytical instruments are generally calibrated using the ML as the lowest calibration standard, the calculated ML is then rounded to the nearest multiple of (1, 2, or 5) x 10ⁿ, where n is zero or an integer. (For example, if an MDL is 2.5 µg/l, then the calculated ML is: 2.5 µg/l x 3.18 = 7.95 µg/l. The multiple of (1, 2, or 5) x 10ⁿ nearest to 7.95 is 1 x 10¹ = 10 µg/l, so the calculated ML, rounded to the nearest whole number, is 10 µg/l.)
12. A “NODI(B)” means that the concentration of the pollutant in a sample is not detected. NODI(B) is reported when a sample result is less than the laboratory’s MDL.
13. A “NODI(Q)” means that the concentration of the pollutant in a sample is detected but not quantified. NODI(Q) is reported when a sample result is greater than or equal to the laboratory’s MDL, but less than the ML.

Attachment B: Location Map

Figure B-1: Former Aua Fuel Farm and Pipeline Location Map



Figure B-2: Monitoring Well Location Map



Figure B-3: Temporary Wastewater Treatment Facility, Trench, and Discharge Location Map



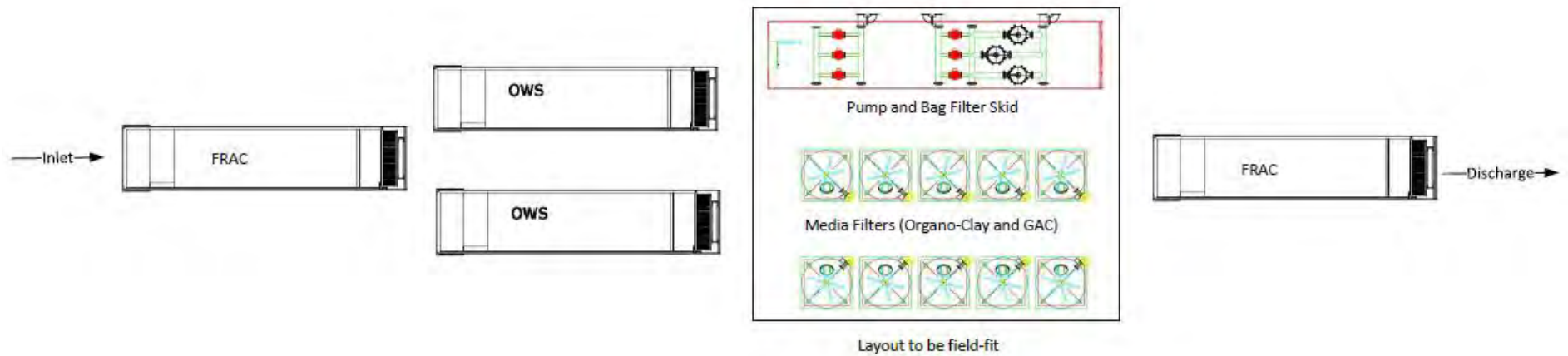
Figure B-4: Staging/Thermal Treatment Area Map (Onesosopo Park)



Figure B-5: Aua Valley Topographic Map



Attachment C: Wastewater Flow Schematic



Attachment D: 401 Water Quality Certification, [DATE]

DRAFT

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DRAFT PERMIT FACT SHEET
November 2023

Permittee Name: U.S. Army Corps of Engineers and Engineering/Remediation Resources Group

Mailing Address: USACE, CEPOH-PPE, Building 230, Ft. Shafter, HI 96858-5440

Facility Location: Village of Aua, AS 96799, Eastern County

Contact Person(s): Matthew Haith, Contracting Officer Representative, (808) 835-4097
matthew.c.haith@usace.army.mil

NPDES Permit No.: AS0020048

I. STATUS OF PERMIT

The U.S. Army Corps of Engineers and Engineering/Remediation Resources Group (“USACE” and “ERRG” or the “permittee”) have applied for a National Pollutant Discharge Elimination System (“NPDES”) permit to authorize the discharge of treated construction dewatering effluent from the Former Aua Fuel Farm Temporary Water Treatment System to outer Pago Pago Harbor located on the island of Tutuila, American Samoa. A complete application was submitted on August 7, 2023, and supplemental information was provided on September 22, 2023. The U.S. Environmental Protection Agency (“EPA”) Region IX has developed this permit and fact sheet pursuant to Section 402 of the Clean Water Act (“CWA”), which requires point source dischargers to control the amount of pollutants that are discharged to waters of the United States through obtaining a NPDES permit.

This permittee has been classified as a minor discharger.

II. GENERAL DESCRIPTION OF FACILITY

USACE has contracted ERRG to provide labor, equipment, and materials to support management and disposal of petroleum-contaminated dewatering effluent and soil encountered during trenching operations associated with sewer installation work and fuel pipeline removal at the site of the former Aua Fuel Farm in the village of Aua on the island of Tutuila in the Territory of American Samoa. Dewatering effluent will be processed through a temporary water treatment train (the “facility”), which will be located in the village of Aua, prior to discharge to outer Pago Pago Harbor. The facility will be operated by ERRG. Location maps and facility schematics are available in Attachments B and C or the draft permit.

History of Aua Fuel Farm and Related Contamination

The Aua Fuel Farm, constructed in 1943, was historically operated by the U.S. Navy for bulk fuel oil storage and distribution. The site consisted of 12 above-ground storage tanks (“ASTs”), each with a 9,540-barrel capacity. The fuel farm infrastructure also included 12 fuel oil pumps,

13 pump houses, and approximately 7,200 feet of 12-inch diameter above-ground pipeline. Use of the fuel farm was discontinued in 1945, at which point the ASTs had been drained to the level of the output valves (12 inches from the bottom of the tanks). Approximately 205,506 gallons of fuel oil remained in the ASTs. Although there are no records of dismantling of the ASTs, observations during various environmental investigations have concluded that the ASTs were likely crushed, folded, and buried under approximately 3 feet of imported fill material.

From 2010 to 2021, multiple investigations and response actions were conducted at the former Aua Fuel Farm site to assess the nature and extent of petroleum-contaminated groundwater and soil, and to address the contamination. The most recent response action was conducted in 2021 by ERRG, under contract with USACE, and included removal of the remaining buried ASTs to the extent practicable, excavation and thermal treatment of petroleum-contaminated soils, and monitoring of groundwater and surface waters to evaluate the nature and extent of free product and dissolved-phase contamination in the substrate. Pollutants determined to have contaminated groundwater and soil at the site include total petroleum hydrocarbons (“TPH”) as diesel-range organics, TPH as residual range organics, and polycyclic aromatic hydrocarbons (“PAH”).

Description of Treatment Facility and Operations

Approximately 397.7 linear feet of sewer line remain to be installed. This section of the municipal sewer system is located in an area of the former Aua Fuel Farm with petroleum-contaminated groundwater and soil, which will need to be properly handled and disposed of during the installation. The sewer installation trenches will be approximately 6 feet wide by 12 feet deep. Groundwater is anticipated to occur at approximately 3 feet below ground surface. Excavation dewatering will be required to complete the installation of the sewer pipe and associated backfill materials, as well as removal of former fuel pipelines. Anticipated dewatering rates are 1,500 gallons-per-minute (“GPM”) at initial start-up, and 1,100 GPM for sustained operations.

Due to capacity limits, the existing wastewater treatment infrastructure in Aua will be unable to process wastewater from the dewatering projects. Therefore, ERRG will construct a temporary water treatment system near the sewer excavation site to process dewatering effluent from the sewer line and fuel pipeline excavation trenches. Total discharge from the projects is expected to be just over 22 million gallons. The facility process train is anticipated to include an intake tank (20,000-gallon capacity frac tank) followed by two oil-water separators in parallel (fabricated in two additional frac tanks), a treatment skid containing control systems, pumps (six 500-gpm Grundfos CR95 Series, or similar), media filters (lead vessels will contain organo clay for hydrocarbon removal, following vessels will contain virgin coconut shell carbon [granular activated carbon] for polishing), and a bag filter skid (for particulate/solids removal). An additional holding tank (20,000-gallon capacity frac tank) will follow the treatment skid, and will be equipped with a petroleum sensor and alarm, shut-off valve, and sampling port. The final holding tank will be used to reduce water turbulence and allow for visual observation of sheens and collection of water samples. Treated effluent is proposed to be discharged to Pago Pago Harbor at Outfall 001, but 5 alternative discharge locations have been included in Attachment B-3 of the proposed permit. The maximum treatment capacity of the facility will be 1,500 GPM. The facility activities fall under the Standard International Classification (“SIC”) codes 1629 and 8711, and North American Industry Classification System (“NAICS”) codes 541620 and 562910.

Petroleum-contaminated soil removed from the sewer and excavated fuel pipeline trenches is planned to be transported to a thermal desorption area and treatment plant that will likely be established at Onesosopo Park, approximately 0.75 miles from the facility. Excavated soil will be treated by thermal desorption and sampled prior to reuse as excavation backfill material or municipal purposes. The maximum amount of contaminated soil that will be excavated, treated, and disposed of for the sewer installation portion of the project is 1,060.53 bank cubic yards, or 1,590.79 loose cubic yards. Up to an additional 5,000 cubic yards of contaminated soil may be excavated, treated, and disposed of as part of the fuel pipeline removal activities.

III. DESCRIPTION OF RECEIVING WATER

The facility will discharge to Pago Pago Harbor, the largest natural harbor in American Samoa and a major location for industrial activity (canning, ship repair, port facilities, fuel terminal), wildlife (sea birds, sea turtles, coral reef flats), and human water contact (recreation including swimming and boating, scuba diving, fishing, and tourism).

Pago Pago Harbor is a near-shore territorial water of American Samoa and is classified as an embayment that consists of an inner, middle, and outer harbor with fringing reefs throughout the middle and outer harbor areas. The harbor is approximately three miles long with the entrance facing to the south and depths ranging from 60 to over 200 feet. Pago Pago Harbor is connected to the South Pacific Ocean and fed by numerous small streams. Due to the small size and relatively limited development of those watersheds, the majority of point-source pollutant discharges to the harbor are direct discharges from shoreline facilities, which include all NPDES-permitted industrial facilities in American Samoa. In addition to the point source dischargers, stormwater runoff from urban area, agriculture and livestock facilities, runoff or spills from animal feeding operations, and legacy sediment contamination are major non-point source pollutant discharges to the harbor (2014 American Samoa Bacteria TMDL, section 5.1.2).

IV. DESCRIPTION OF DISCHARGE

Discharges to Pago Pago Harbor via Outfall 001 will consist of treated dewatering effluent from construction sewer line and pipeline excavation trenches. As described above, the dewatering effluent is petroleum-contaminated, and will be treated prior to discharge. Total discharge for the sewer line project is estimated to be approximately 1 million gallons-per-day (“MGD”) with a total of 22 million gallons discharged over a period of 2 months. Total discharge for the pipeline excavation project is estimated to be approximately 80,000 gallons over a period of 2-3 months. The maximum discharge rate from the facility throughout both projects will be 1,500 GPM.

The permittee’s NPDES application included data from 14 monitoring wells spread throughout the area of the Former Aua Fuel Farm. The monitoring wells sampled untreated groundwater within the Former Aua Fuel Farm Area, as the treatment system had not been installed at the time of drafting this permit. Figure B-2 of Attachment B to the draft permit shows the location of the monitoring wells, labeled as MW-01 through MW-15. Data from MW-05 was not available. Sampling was conducted in September 2019, May 2021, June 2021, and

September 2021. Table 1 shows data highest daily maximum result reported for the 14 monitoring wells in the permittee's NPDES application.

Table 1. Former Aua Fuel Farm Monitoring Well Sampling Data from September 2019 to September 2021

Parameter	Units	Monitoring Well Data	
		Highest Daily Maximum	Number of Samples
Benzo(a)anthracene	µg/L	ND ¹ (<0.045)	49
Benzo(a)pyrene	µg/L	ND ¹ (<0.045)	49
Benzo(b)fluoranthene	µg/L	ND ¹ (<0.045)	49
Benzo(g,h,i)perylene	µg/L	ND ¹ (<0.045)	49
Benzo(k)fluoranthene	µg/L	ND ¹ (<0.045)	49
Chrysene	µg/L	ND ¹ (<0.091)	49
Dibenzo(a,h)anthracene	µg/L	ND ¹ (<0.045)	49
Fluoranthene	µg/L	ND ¹ (<0.45)	49
Fluorene	µg/L	ND ¹ (<0.45)	49
Indeno(1,2,3-cd)pyrene	µg/L	ND ¹ (<0.045)	49
1-Methylnaphthalene	µg/L	ND ¹ (<0.45)	49
2-Methylnaphthalene	µg/L	ND ¹ (<0.45)	49
Naphthalene	µg/L	2.3	49
Phenanthrene	µg/L	ND ¹ (<0.45)	49
Pyrene	µg/L	ND ¹ (<0.45)	49
TPH-DRO (C10-C28)	µg/L	590	49
TPH-RRO (>C28-C40)	µg/L	145	49
Lead	µg/L	6.1	49

¹ Not detected. Number included in parentheses is the reported detection limit.

VI. DETERMINATION OF NUMERICAL EFFLUENT LIMITATIONS

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

A. Applicable Technology-Based Effluent Limitations

Technology-based effluent limitations represent the minimum level of control that must be imposed under sections 301(b) and 402 of the CWA. Permits issued to facilities other than publicly owned treatment works (“non-POTWs”) must require compliance with a level of treatment performance equivalent to Best Practicable Control Technology Currently Available (“BPT”), Best Available Technology Economically Achievable (“BAT”), or Best Conventional Pollutant Control Technology (“BCT”) for existing sources, and consistent with New Source Performance Standards (“NSPS”) for new sources. Where federal effluent limitations guidelines (“ELGs”) have been developed for a category of dischargers, the technology-based effluent

limits in a permit must be based on the application of these guidelines. Technology-based treatment requirements may be imposed on a case-by-case basis under section 402(a)(1) of the CWA, to the extent that EPA promulgated effluent limitations are inapplicable (i.e., the regulation allows the permit writer to consider the appropriate technology for the category or class of point sources and any unique factors relating to the applicant) (40 CFR § 125.3(c)(2)).

EPA has established national standards based on the performance of treatment and control technologies for wastewater discharges to surface waters for certain industrial categories. ELGs represent the greatest pollutant reductions that are economically achievable for an industry, and are based on BPT, BCT, and BAT (sections 304(b)(1), 304(b)(4), and 304(b)(2) of the CWA, respectively). EPA has not promulgated ELGs for the discharge of construction dewatering effluent. As stated above, if ELGs are not available, a permit must include requirements at least as stringent as BPT/BAT/BCT developed on a case-by-case using best professional judgment (“BPJ”) in accordance with the criteria outlined at 40 CFR § 125.3(d). Therefore, EPA has established technology-based effluent limits for total suspended solids (“TSS”), oil and grease, naphthalene, and Group II polycyclic aromatic hydrocarbons (“PAHs”) in this permit utilizing BPJ to meet the above stated criteria for BAT/BCT described in CWA section 304(b). The rationale for establishing numeric technology-based effluent limitations for these parameters is discussed in section VI.C of this fact sheet.

B. Water Quality-Based Effluent Limitations

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

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

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

1. Applicable standards, designated uses and impairments of receiving water;
2. Dilution in the receiving water;
3. Type of industry; and
4. Existing data on toxic pollutants.

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

The American Samoa Water Quality Standards (“ASWQS”), 2018 Revision, Administrative Rule No. 001-2019 (§§ 24.0201 et seq.), establish water quality criteria for the following protected uses in Pago Pago Harbor:

- (A) Recreational and subsistence fishing except for exclusions as specified under federal regulations such as no take zones;
- (B) Boat-launching ramps and designated mooring areas;
- (C) Subsistence food gathering; e.g. shellfish harvesting except for exclusions as specified under federal regulations such as no take zones;
- (D) Aesthetic enjoyment;
- (E) Whole and limited body-contact recreation, e.g. swimming, snorkeling, and scuba diving;
- (F) Support and propagation of marine life;
- (G) Industrial water supply;
- (H) Mari-culture development except for exclusions as specified under federal regulations such as no take zones;
- (I) Normal harbor activities; e.g. ship movements, docking, loading and unloading, marine railways and floating drydocks; and
- (J) Scientific investigations.

Pago Pago Harbor is listed as impaired for several pollutants according to the CWA Section 303(d) List of Water Quality Limited Segments. The existing impairments for which a TMDL has been developed include the following:

- Ocean Shorelines in the Pago Pago watershed are listed as impaired for enterococci (American Samoa Bacteria TMDL for Beaches and Streams, approved August 28, 2015). The enterococci limits specified in the bacteria TMDL are identical to those specified in the ASWQS. Therefore, compliance with ASWQS for enterococci ensures compliance with the requirements of that TMDL. The TMDL does not specify a wasteload allocations (“WLA”) for the facility, and the nature of the discharge is not expected to contribute bacteria to the receiving water. Therefore, no bacteria limits are set in the permit.
- The inner harbor is listed for lead (Pago Pago Harbor Lead TMDL, approved June 23, 2001), with a particular emphasis on contaminated sediments in the inner harbor. The lead TMDL does not provide a WLA for the facility, and since discharge from the facility is to the outer harbor watershed, not the inner harbor watershed, no provisions from this TMDL apply to the discharge.
- The inner harbor is also listed for mercury, PCBs, and arsenic (Pago Pago Inner Harbor Mercury, PCBs, and Arsenic TMDL, approved Feb. 23, 2007). The mercury, PCBs, and arsenic TMDL does not provide a WLA for the facility as its analysis is limited to the inner harbor watershed. As the facility discharge is to the outer harbor watershed, no provisions from this TMDL apply to the discharge.

2. Dilution in the Receiving Water

Section 24.0207 of the ASWQS require that water quality standards be achieved without mixing zones unless the permittee applies and is approved for a mixing zone. The permittee does not have an approved mixing zone, nor has the permittee applied for a mixing zone, so dilution is not considered in the calculation of water quality-based effluent limits for the proposed permit.

3. Type of Industry

EPA previously evaluated the characteristics of contaminated or formerly contaminated sites and the types of remediation and/or dewatering activities conducted at such sites for development of EPA's Region 1 Dewatering and Remediation General Permit ("R1 DRGP")¹. EPA then evaluated the parameters present or likely present in remediation and/or dewatering discharges. Information used for the evaluation included 1) existing information regarding dewatering and remediation sites previously covered under EPA's R1 DRGP; 2) available information regarding the toxicology, physical characteristics, chemical characteristics, and fate and transport of potential parameters; 3) available toxicity data pertaining to potential parameters; 4) available water quality standards and supporting documentation applicable to potential parameters; and/or 5) available pollution control technologies capable of effectively treating discharges containing these potential parameters. Pollutants likely to be in dewatering and remediation effluent from contaminated sites included inorganics, non-halogenated volatile organic compounds ("VOCs"), halogenated VOCs, non-halogenated semi-VOCs, and fuels parameters.

4. Existing Data on Toxic Pollutants – Conducting a Reasonable Potential Analysis

Data submitted with the permittee's application indicated the potential presence of 21 parameters, all of which were identified as "indicator parameters" associated with dewatering activities at petroleum-contaminated sites in EPA's R1 DGRP. These parameters include acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, 1-methylnaphthalene, 2-methylnaphthalene, naphthalene, phenanthrene, pyrene, TPH-DRO (C10-C28) ("TPH diesel"), TPH-RRO (>C28-C40) ("TPH residual"), and lead.

Section 122.44(d)(1) of 40 CFR requires that permits include limitations on all pollutants or parameters which "are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." Due to the likely presence of these pollutants in the facility effluent, and irregularities with the reported data, EPA did not follow the standard statistical methodology described in EPA's TSD for analysis using site-specific effluent data. Instead, EPA used an alternative reasonable potential analysis methodology described in section 3.2 of the TSD that uses a variety of factors and information in accordance with 40 CFR §122.44(d)(1)(ii), including the type of effluent (treated, petroleum-contaminated groundwater), the lack of available dilution, the maximum discharge flow rate (1,500 GPM), the quality of the receiving water, and the concentration of other industrial and municipal discharges to the receiving water. Due to the factors considered in the analysis, and to provide for a conservative measure of water quality protection, EPA determined that the discharge has the reasonable potential to exceed the water quality criteria for each

¹ NPDES General Permit Nos. MAG910000, NHG910000, CTG910000, RIG910000, and VTG910000: General Permit for Dewatering and Remediation Discharges (EPA, 2022). Available at <https://www.epa.gov/npdes-permits/dewatering-and-remediation-general-permit-drqp>

indicator parameter identified in the permittee's application. Effluent limitations for these parameters are established in the draft permit, and discussed in section VI.C of this fact sheet,

C. Rationale for Numeric Effluent Limits and Monitoring

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

Flow

The treatment technology for the facility includes two oil-water separators. This device separates the lower-density oils from water; resulting in an oil phase above the oil-water interface and a heavier particulate phase on the bottom of the separator. To ensure proper operation of the installed oil-water separators, such that the oil and/or particulate phases are not entrained to the waterway, it is important that the flow through the separator be maintained at or below the maximum design flow rate of 1,500 GPM. Therefore, the draft permit contains a flow limit and monitoring requirement for continuous field measurement during discharge.

Visible Sheen and Foam Monitoring

The draft permit establishes daily monitoring requirements for visible sheen and foam due to the nature of the discharge as treated petroleum-contaminated dewatering effluent. Visual monitoring will ensure that the discharge will be suspended and the treatment system inspected if petroleum byproducts are observed in the receiving water.

Temperature

The draft permit establishes monitoring requirements for temperature to determine compliance with the narrative requirements in Part I.A.5.e of the draft permit. Temperature shall be taken as a field measurement at the time of sampling during each discharge.

Total Suspended Solids ("TSS")

The draft permit establishes a maximum daily technology-based effluent limit of 100 mg/L for TSS. TSS is a conventional pollutant that may include inorganic (e.g., silt, sand, clay, and insoluble hydrated metal oxides) and organic matter (e.g., flocculated colloids and compounds that contribute to color). TSS can cause interference with proper operation and maintenance of the pollution control technologies used by operators for dewatering and remediation discharges similar to those from the facility. Suspended solids also provide a medium for the transport of other pollutants (e.g., hydrocarbons, metals) via adsorption. The control of TSS in discharges from the facility will help minimize the discharge of pollutants adsorbed to particulate matter. In addition, control of TSS will ensure proper operation of treatment units employed in the facility treatment train (e.g., by preventing clogging of carbon adsorption treatment systems). The establishment of an effluent limit for TSS is based on BPJ since 1) there are no applicable ELGs and performance standards for TSS, and 2) TSS is a good indicator of effluent quality.

Specifically, the release of heavy metals and PAHs can be reduced by regulating the amount of suspended solids discharged.

Section 402(a)(1) of the CWA provides for the establishment of BPJ-based effluent limits when ELGs and performance standards are not available for a pollutant of concern. EPA selected a maximum daily TSS limitation of 100 mg/L based on the application of EPA-promulgated BPT/BCT limitations contained in numerous industrial point source categories and the information in the supporting documentation for those ELGs. The limit is also consistent with similar facilities that treat oily wastewater. EPA also considered TSS limitations included in NPDES permits for similar pipeline and/or tank dewatering discharges covered under individual permits. Treatment technologies for TSS are well understood, and widely used at remediation and/or dewatering sites. Properly designed treatment systems, such as those utilizing filtration, can readily remove TSS to concentrations at or below the proposed technology-based effluent limit. The draft permit also includes monitoring requirements for TSS to confirm compliance with the effluent limitation.

Turbidity

ASWQS specify turbidity standards for Pago Pago Harbor (ASWQS § 24.0206(m)). The standards require that turbidity not exceed 1.5 nephelometric units (“NTUs”) more than 2 percent of the time, or 1.0 NTU more than 10 percent of the time. The standards also establish a median for turbidity of 0.75 NTU. Facility and site activities will involve the generation and treatment of fine solids, which may impact the efficacy of the treatment system. Therefore, EPA has determined that the facility has reasonable potential to exceed the water quality criteria, and established effluent limits in the draft permit of a monthly median of 0.75 NTU, and a maximum daily of 1.5 NTU. The draft permit also includes monitoring requirements for turbidity to confirm compliance with the effluent limitations.

Oil and Grease

The draft permit establishes a maximum daily technology-based effluent limit of 15 mg/L for oil and grease. Oil and grease is not a single chemical constituent, but includes a large range of organic compounds, which can be both petroleum-related (e.g., hydrocarbons) and non-petroleum (e.g., vegetable and animal oils and greases, fats, and waxes). These compounds have varying physical, chemical, and toxicological properties. Generally, oils and greases in surface waters either float on the surface, are solubilized or emulsified in the water column, adsorb onto floating or suspended solids and debris, or settle on the bottom or banks. Oil and grease, or certain compounds within an oil and grease mixture, can be lethal to fish, benthic organisms and water-dwelling wildlife. The establishment of an effluent limit for oil and grease is based on BPJ since 1) there are no applicable ELGs and performance standards for oil and grease, and 2) the discharge consists of treated petroleum-contaminated dewatering effluent.

Section 402(a)(1) of the CWA provides for the establishment of BPJ-based effluent limits when ELGs and performance standards are not available for a pollutant of concern. EPA has historically used 15 mg/l to approximate the concentration at which visible oil sheen is likely to occur, and believes that this standard is a reasonable target value. EPA has previously imposed maximum daily oil and grease limits of 15 mg/l as a technology-based standard in permits at facilities (such as oil terminals and drydock shipyards) that have a reasonable potential for oil and grease discharge, and this limit is consistent with other similar facilities that treat oily

wastewater. The draft permit also includes monitoring requirements for oil and grease to confirm compliance with the effluent limitation.

pH

ASWQS specify a pH standard for Pago Pago Harbor based on both a fixed range (minimum of 6.5 standard units (“SU”) and maximum of 8.6 SU) and a peak allowable deviation from natural conditions of 0.2 SU, where natural is defined as “free of substances or conditions, which are attributable to the activities of man”. (ASWQS §§ 24.0206(m) and 24.0201). Since pH is a significant parameter due to its direct effects on aquatic organisms, the draft permit establishes a fixed range pH limitation of 6.5 SU as a minimum and 8.6 SU as a maximum. pH shall be taken as a field measurement at the time of sampling during each discharge.

Metals

The metals present at contaminated or formerly contaminated sites vary widely depending on the types of contamination at a site, the activities occurring at a site, and the surficial and bedrock geology present. Petroleum-related sources can contain de minimis quantities of antimony, arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc, depending upon the type of fuel. Many metals are directly toxic to humans, including lead, mercury, arsenic and cadmium. Some metals, while required by the human body in small amounts, including copper, zinc, and chromium, can be toxic at high doses. Metals such as copper, lead, and zinc can be toxic to aquatic life, and can bioaccumulate in living organisms, which can lead to biomagnification within a food chain. Chemical interactions with groundwater, surface water or site contaminants, including naturally occurring deposits in surrounding surficial or bedrock geology, can mobilize metals such as arsenic, especially under reducing conditions. Since the facility will be treating dewatering effluent from a petroleum-contaminated site, and to confirm that there is no exceedance of the applicable water quality criteria, the draft permit establishes monitoring requirements for metals associated with this type of contamination. Metals that are required to be monitored are antimony, arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc.

Lead

Lead is commonly found in fuel oil and oily wastewaters, including those associated with petroleum contamination. Monitoring well data for the former Aua Fuel Farm indicated that concentrations of lead are regularly detectable in groundwater at the site. EPA has determined that the facility has the reasonable potential to exceed the water quality criteria for lead as discussed in section VI.B.4 of this fact sheet. To establish the appropriate effluent limits, EPA compared the technology-based effluent limit for lead established in EPA's R1 DRGP, which is applicable to similar discharges, to the water-quality based effluent limits calculated using methods described in section 5.4 of EPA's TSD. EPA's R1 DRGP established a technology-based effluent limit for lead of 160 ug/L as a maximum daily limit, based on BCT/BAT. Water quality-based effluent limits were calculated based on the most stringent applicable water quality criteria for lead in EPA's National Recommended Water Quality Criteria. The most stringent criterion for total recoverable lead applicable to the receiving water was the saltwater chronic criterion of 8.52 ug/L for the protection of aquatic life. The calculated water-quality based effluent limits for lead are 7.0 ug/L as an average monthly and 14 ug/L as a maximum daily. Since the calculated water quality-based effluent limits were more stringent than the technology-based effluent limits, they were established as the applicable effluent limits in the draft permit. The draft permit also requires regular monitoring for lead to confirm compliance with the effluent limitations.

Group I Polycyclic Aromatic Hydrocarbons ("PAH")

PAHs are a group of organic compounds that form through the incomplete combustion of hydrocarbons and are present in petroleum derivatives and residuals. There are 16 PAH compounds identified as priority pollutants. Group I PAHs have higher molecular weights (i.e., contain four to seven aromatic rings), and are therefore more resistant to oxidation, reduction, and vaporization, are less water soluble, and are generally persistent (i.e., less degradable). Group I PAHs are generally less toxic to aquatic organisms but are carcinogenic. Group I PAHs include benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.

As discussed in section VI.B.4 of this fact sheet, EPA has determined that the facility has the reasonable potential to exceed the water quality criteria for the seven Group I PAH parameters listed above. To determine the effluent limits for the seven Group I PAH parameters, EPA compared the technology-based effluent limit for Total Group I PAHs established in EPA's R1 DRGP, which is applicable to similar dewatering discharges, to the water-quality based effluent limits calculated for each individual Group I PAH parameter using methods described in section 5.4 of EPA's TSD. EPA's R1 DRGP established a technology-based effluent limit for Total Group I PAHs of 1.0 ug/L as a daily maximum. The technology-based DRGP limit was calculated as the sum of the seven individual MLs achievable through analysis by multiple 40 CFR § 136 test methods using selected ion monitoring (e.g., Method 625) rounded up to the next whole number. Since the ML for each parameter was 0.1 ug/L, the sum of 0.7 ug/L was rounded up to 1.0 ug/L for the Total Group I PAHs technology-based effluent limit. Water quality-based effluent limits were calculated based on the most stringent applicable water quality criteria for each Group I PAH parameter, the human health criterion, which is equal to the calculated average monthly effluent limits. A comparison of the group technology-based effluent limit and the individual water-quality based effluent limits is presented in Table 2 below.

Table 2. Technology-Based and Water Quality-Based Effluent Limits for Group I PAHs

Parameter	Units	Technology-Based Effluent Limit (Maximum Daily)	Water Quality-Based Effluent Limit (Maximum Daily)	Water Quality-Based Effluent Limit (Average Monthly)
Benzo(a)anthracene	µg/L	----	0.0026	0.0013
Benzo(a)pyrene	µg/L	----	0.00026	0.00013
Benzo(b)fluoranthene	µg/L	----	0.0026	0.0013
Benzo(k)fluoranthene	µg/L	----	0.026	0.013
Chrysene	µg/L	----	0.26	0.13
Dibenzo(a,h)anthracene	µg/L	----	0.00026	0.00013
Indeno(1,2,3-cd)pyrene	µg/L	----	0.0026	0.0013
Total Group I PAHs	µg/L	1.0	No Criteria	No Criteria

Since both the average monthly and maximum daily water quality-based effluent limits for each individual Group I PAH parameter was more stringent than the technology-based effluent limit for the Total Group I PAHs, the water quality-based effluent limits were established in the draft permit as the applicable effluent limits for each individual Group I PAH parameter. The draft permit also establishes monitoring requirements for these parameters to confirm compliance with the effluent limitations.

Group II Polycyclic Aromatic Hydrocarbons ("PAH")

Group II PAHs have lower molecular weights (i.e., contain two or three aromatic rings). As a result, Group II PAHs are more water-soluble and transform more quickly than higher molecular weight PAHs, mainly through volatilization and biodegradation. Group II PAHs are not generally considered carcinogenic. However, Group II PAHs can enhance or inhibit the response of the carcinogenic Group I PAHs and have significant acute toxicity to aquatic organisms. Group II PAHs include acenaphthene, acenaphthylene, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, 1-methylnaphthalene, 2-methylnaphthalene, naphthalene, phenanthrene, and pyrene.

As discussed in section VI.B.4 of this fact sheet, EPA has determined that the facility has the reasonable potential to exceed the water quality criteria for the 11 Group II PAH parameters listed above. To determine the effluent limits for these parameters, EPA compared the technology-based effluent limit for Total Group II PAHs established in EPA's R1 DRGP, which is applicable to similar dewatering discharges, to the water-quality based effluent limits calculated for each individual Group II PAH parameter using methods described in section 5.4 of EPA's TSD. EPA's R1 DRGP establishes a technology-based effluent limit for Total Group II PAHs of 100 ug/L as a daily maximum. This value represents the sum of acenaphthene, acenaphthylene, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, phenanthrene, and pyrene. The R1 DRGP also includes a technology-based effluent limit for the Group II PAH naphthalene of 20 ug/L as a daily maximum. Water quality-based effluent limits were calculated based on the most stringent applicable water quality criteria for each Group II PAH parameter. A comparison of the technology-based effluent limits and the individual water-quality based effluent limits is presented in Table 3 below.

Table 3. Technology-Based and Water Quality-Based Effluent Limits for Group II PAHs:

Parameter	Units	Technology-Based Effluent Limit (Maximum Daily)	Water Quality-Based Effluent Limit (Maximum Daily)	Water Quality-Based Effluent Limit (Average Monthly)
Acenaphthene	µg/L	----	181	90
Acenaphthylene	µg/L	----	No Criteria	No Criteria
Anthracene	µg/L	----	804	400
Benzo(g,h,i)perylene	µg/L	----	No Criteria	No Criteria
Fluoranthene	µg/L	----	40	20
Fluorene	µg/L	----	141	70
1-Methylnaphthalene	µg/L	----	No Criteria	No Criteria
2-Methylnaphthalene	µg/L	----	No Criteria	No Criteria
Naphthalene	µg/L	20	2,350	2,350
Phenanthrene	µg/L	----	No Criteria	No Criteria
Pyrene	µg/L	----	60	30
Total Group II PAHs	µg/L	100	No Criteria	No Criteria

Since no criteria have been established for acenaphthylene, benzo(g,h,i)perylene, 1-methylnaphthalene, 2-methylnaphthalene, or phenanthrene, water quality-based effluent limits could not be calculated for these parameters. Anthracene was the only Group II PAH parameter with water quality-based effluent limits (400 ug/L as a daily maximum and 804 ug/L as a monthly average) that exceeded the technology-based effluent limit for Total Group II PAHs (100 ug/L as a daily maximum). Although the daily maximum water quality-based effluent limits for acenaphthene and fluorene (181 ug/L and 141 ug/L, respectively) exceeded the technology based effluent limit for Total Group II PAHs, the monthly average water quality-based effluent limits for acenaphthene and fluoranthene (90 ug/L and 70 ug/L, respectively) are more stringent than the technology-based effluent limits for Total Group II PAHs. Therefore, to ensure protection of the water quality of the receiving water, the draft permit establishes the effluent limits listed in Table 4 below for Group II PAHs. The draft permit also establishes monitoring requirements for these parameters to confirm compliance with the effluent limitations.

Table 4. Final Effluent Limits for Group II PAHs:

Parameter	Units	Maximum Daily	Average Monthly
Acenaphthene	µg/L	----	90
Fluoranthene	µg/L	40	20
Fluorene	µg/L	----	70
Naphthalene	µg/L	20	----
Pyrene	µg/L	60	30
Total Group II PAHs ⁽¹⁾	µg/L	100	----

(1) Total Group II PAHs shall mean the sum of acenaphthene, acenaphthylene, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, phenanthrene, and pyrene.

Total Petroleum Hydrocarbons (“TPH”)

TPH generally refers to gasoline range, diesel range, and/or oil range hydrocarbon compounds. Measurement of all individual hydrocarbon compounds in a petroleum product released to the environment is generally not practical, cost-effective, or necessary to attain and maintain water quality standards. As discussed in section VI.B.4 of this fact sheet, EPA has determined that the facility has the reasonable potential to exceed the water quality criteria for TPH-Diesel and TPH-Residual. To determine the effluent limits for TPH-Diesel and TPH-Residual, EPA compared the technology-based effluent limit for these parameters established in EPA’s R1 DRGP, which is applicable to similar dewatering discharges, to the water-quality based effluent limits calculated using methods described in section 5.4 of EPA’s TSD. EPA’s R1 DRGP establishes a technology-based effluent limit for combined TPH of 5.0 mg/L as a maximum daily limit. Water quality-based effluent limits were calculated based on the Tropical Pacific Environmental Screening Levels (“TPESL”) calculator groundwater screening level of 640 ug/L for conditions of unrestricted land use and non-drinking water source. Since the TPESL for each parameter is more stringent than the combined TPH technology-based effluent limit, the draft permit establishes the TPESL of 640 ug/L as a maximum daily effluent limit for TPH-Diesel and TPH-Residual. The draft permit also establishes monitoring requirements for these parameters to confirm compliance with the effluent limitations.

Benzene, Ethylbenzene, Toluene, and Xylene

Refined petroleum products contain numerous types of hydrocarbons. Benzene, toluene, ethylbenzene, and xylene are commonly detected in various concentrations at various petroleum-related facilities, such as bulk fuel storage facilities and shipyards. Environmental investigations have shown the site of the former Aua Fuel Farm to contain petroleum-contaminated groundwater and soil. The facility will also treat petroleum-contaminated dewatering effluent. EPA has determined the facility has the reasonable potential to exceed the water quality standards applicable to benzene, ethylbenzene, toluene, and xylene based on the nature of the discharge as treated petroleum-contaminated dewatering effluent, and the lack of available dilution.

In EPA’s update of human health ambient water quality for benzene (2015), EPA recommends using the lower criteria based on the carcinogenic effects of benzene (EPA 820-R-15-009). Therefore, using methods in EPA’s TSD, the effluent limit for benzene is established as a monthly average of 16 ug/l, and a daily maximum of 32 ug/L. The water quality criteria for ethylbenzene, toluene, and xylene, based on human health consumption of organisms, are 130 ug/L, 520 ug/L, and 10,000 ug/L, respectively. Therefore, the draft permit establishes effluent limits for ethylbenzene of 130 ug/L as a monthly average and 261 ug/L as a daily maximum;

effluent limits for toluene of 520 ug/L as a monthly average and 1,045 ug/L as a daily maximum; and effluent limits for xylene of 10,000 ug/L as a monthly average and 20,100 ug/L as a daily maximum. The draft permit establishes monitoring requirements for these parameters to confirm compliance with the effluent limitations.

D. Anti-Backsliding

Section 402(o) and 303(d)(4) of the CWA and 40 CFR § 122.44(l)(1) prohibits the renewal or reissuance of an NPDES permit that contains effluent limits and permit conditions less stringent than those established in the previous permit, except as provided in the statute and regulation.

Since this is a new permit issuance, this permit does not establish any effluent limits less stringent than those in the previous permit and does not allow backsliding.

E. Antidegradation Policy

EPA's antidegradation policy under CWA § 303(d)(4) and 40 CFR § 131.12 and Section 24.0202 ASWQS require that existing water uses and the level of water quality necessary to protect the existing uses be maintained. As described in this fact sheet, the permit establishes effluent limits and monitoring requirements to ensure that all applicable water quality standards are met. The permit does not include a mixing zone, therefore these limits will apply at the end of pipe without consideration of dilution in the receiving water.

The facility is not expected to result in significant degradation of the receiving water. Although inner Pago Pago Harbor is impaired for arsenic, lead, mercury, and PCBs, the discharge will be to outer Pago Pago Harbor. The facility effluent is expected to contain low levels of toxic pollutants based on data from monitoring wells at the site of the former Aua Fuel farm, and the discharge will be temporary.

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

VII. NARRATIVE WATER QUALITY-BASED EFFLUENT LIMITS

Section 24.0206 of the ASWQS contains narrative water quality standards applicable to the receiving water. Therefore, the permit incorporates applicable narrative water quality standards in Part I, section A.5.

VIII. MONITORING AND REPORTING REQUIREMENTS

The permit requires the permittee to conduct monitoring for all pollutants or parameters where effluent limits have been established, at the minimum frequency specified. Additionally, where effluent concentrations of toxic parameters are unknown or where data are insufficient to

determine reasonable potential, monitoring may be required for pollutants or parameters where effluent limits have not been established.

A. Effluent Monitoring and Reporting

The permittee shall conduct effluent monitoring to evaluate compliance with the draft permit conditions. The permittee shall perform all monitoring, sampling, and analyses in accordance with the methods described in the most recent edition of 40 CFR § 136, unless otherwise specified in the draft permit. All monitoring data meeting these requirements shall be reported on monthly DMRs and submitted quarterly as specified in the draft permit. All DMRs are to be submitted electronically to EPA using NetDMR. In accordance with the NPDES Electronic Reporting Rule, these program reports must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR § 127.2(b), in compliance with this section and 40 CFR § 3 (including, in all cases, subpart D to part 3), 40 CFR § 122.22, and 40 CFR § 127.

B. Receiving Water Visual Monitoring

Receiving water visual monitoring is necessary to assess compliance with narrative ASWQS for Pago Pago Harbor established in Part I.A of the draft permit. The draft permit requires the permittee to keep a record of all visual monitoring, including any observations of sheen, foam, discoloration, or floating debris. Receiving water visual monitoring shall be conducted daily while there is discharge from the facility and shall be submitted as an attachment to the facility's DMRs.

IX. SPECIAL CONDITIONS

A. Development and Implementation of Best Management Practices and Pollution Prevention Plan

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

The Pollution Prevention Plan requirements in the draft permit are based on EPA's NPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, effective June 4, 2015, and on the circumstances of the facility. This permit authorizes discharge of treated groundwater, which is produced in part by rainwater falling on and moving through the soil in the project area. Since the Pollution Prevention Plan requirements in the draft permit apply to all the discharges authorized, the language in this section refers generally to all effluent discharges rather than specifically to stormwater and/or non-stormwater discharges.

X. OTHER CONSIDERATIONS UNDER FEDERAL LAW

A. Consideration of Environmental Justice

EPA's Environmental Justice policy establishes fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. As part of the environmental permitting process, EPA considers cumulative environmental impacts to disproportionately impacted communities.

In American Samoa, EPA is aware of several environmental burdens facing communities with limited resources, including but not limited to ongoing boil water notices on the local drinking water system, domestic wastewater treatment only to primary standards, industrial discharges, runoff from small-scale piggeries, unsewered area, and an abundance of cesspools for individual residences.

This permit was written to regulate a dewatering discharge from contaminated soil remediation and construction of new sanitary sewer pipelines in the village of Aua. This project is intended to clean up former contamination of soil and groundwater, and provide sanitary sewer service to residences and community buildings that previously had no sewer connection, thereby improving environmental conditions for the residents of Aua. This permit requires also all discharges to Pago Pago Harbor to meet water quality-based requirements that ensure the receiving water is protected for all applicable beneficial uses.

As a result of the analysis, EPA is aware of the potential for cumulative burden of the permitted discharge on the impacted community and will issue this permit in consideration of the village of Aua and surrounding communities in American Samoa and consistent with the CWA, which is protective of all beneficial uses of the receiving water, including human health.

B. Impact to Threatened and Endangered Species

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

The applicant, USACE, is performing ESA Section 7 Consultation with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) for this discharge, which is part of a larger project being undertaken by USACE.

EPA will provide the USFWS and NMFS with copies of the draft fact sheet and the draft permit during the public notice period.

C. Impact to Coastal Zones

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

The American Samoa Coastal Zone Management program, the Department of Commerce, provided a general concurrence for all NPDES permit renewals in American Samoa (June 2010). Therefore, the permittee has demonstrated consistency with the Coastal Zone Management program.

D. Impact to Essential Fish Habitat

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

The draft permit contains technology-based effluent limits and numerical and narrative water quality-based effluent limits as necessary for the protection of applicable aquatic life uses.

EPA will send the draft EFHA to NMFS during the public notice period.

E. Impact to National Historic Properties

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

XI. STANDARD CONDITIONS

A. Reopener Provision

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

B. Standard Provisions

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

XII. ADMINISTRATIVE INFORMATION

A. Public Notice (40 CFR § 124.10)

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

B. Public Comment Period (40 CFR § 124.10)

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

C. Public Hearing (40 CFR § 124.12)

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

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

For States, Territories, or Tribes with EPA approved water quality standards, EPA requests certification from the affected State, Territory, or Tribe that the permit will meet all applicable water quality standards. Certification under section 401 of the CWA shall be in writing and shall include the conditions necessary to assure compliance with referenced applicable provisions of sections 208(e), 301, 302, 303, 306, and 307 of the CWA and appropriate requirements of Territory law. American Samoa EPA provided § 401 certification of this permit on <DATE>.

XIII. CONTACT INFORMATION

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

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<https://www.epa.gov/npdes-permits/dewatering-and-remediation-general-permit-drgrp>
[Accessed 24 August 2023]
- Tetra Tech Inc.. 2007. *Total Maximum Daily Loads for Mercury and PCBs, and Arsenic Analysis for Pago Pago Inner Harbor, Territory of American Samoa*. [online] Available at:
<https://attains.epa.gov/attains-public/api/documents/actions/21AS/33697/100000>
- Tetra Tech Inc. 2014. *American Samoa Bacteria TMDLs for Beaches and Streams*.

Receipt No. _____

BUILDING PERMIT
GOVERNMENT OF AMERICAN SAMOA
BUILDING BRANCH, PWD

NOTICE

This permit is issued in accordance with chapter 17.01 of the Code of American Samoa 1961 edition and with the express condition that all work done under this permit shall conform with statements certified in the application, the approved plans and specifications with the code of American Samoa. A violation of this chapter will subject the violator to a fine of \$100.00 or imprisonment for not more than three months or both, and the building may be removed or altered at the order of the Governor, at the expense of the owner.

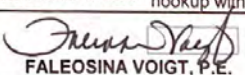
Permit No. 24 - 242B
March 28, 2024
 Building Valuation _____
 Permit Fee _____ NA
 Applic. _____
 Other Fee _____ 0.00
 Total _____ NA

Permission is hereby granted to USACE Honolulu District c/o Mathew Haith

{	to	<input type="checkbox"/> Erect	{	<input type="checkbox"/> Type I	<input type="checkbox"/> Building	<u>FCC</u>
		<input type="checkbox"/>		<input type="checkbox"/> From	<u>733-1095</u>	
		<input type="checkbox"/> Remove		<input type="checkbox"/> Type III	<input type="checkbox"/> To	_____
		<input type="checkbox"/> Change the use of		<input type="checkbox"/> Type IV	<input type="checkbox"/> In	_____
		<input type="checkbox"/> Grade or Excavate		<input type="checkbox"/> Type V	<input type="checkbox"/> From	_____
		<input type="checkbox"/> Install (Electrical, Plumbing, Mechanical)		On/at the land known as _____		
		<input type="checkbox"/> Connect to main sewer		Owned by _____		

In the village of Aua, American Samoa

The purpose of Structure or Work Federal Consistency Certification, Thermal Treatment of Soil utility pole
 hookup with utilities to include staging area


FALESSINA VOIGT, P.E.
 Director of Public Works

Signature TAAFUJA TAAFI
 Title General Manager Building Division

THIS NOTICE MUST BE POSTED AT THE CONSTRUCTION SITE IN A CONSPICUOUS PLACE AND MUST REMAIN POSTED UNTIL FINAL APPROVAL IS NOTED BELOW BY THE INSPECTOR

INSPECTION RECORD

job the builder is responsible for notifying the building inspector when the building or job is ready for these inspections.

NOTICE: No reinforcing steel or structural framework of any part of any building or structure shall be covered or canceled without first obtaining the approval of the Building Official.

INSPECTION	DATE	INSPECTOR
Foundation		
Framing		
Rough Electrical		
Rough Plumbing		
Rough Mechanical		
Final Inspection		

This building is hereby approved for occupancy as note above

BUILDING INSPECTOR _____ DATE _____

PROJECT NOTIFICATION REVIEW SYSTEM (PNRS)
AMERICAN SAMOA GOVERNMENT
DEPARTMENT OF COMMERCE

LAND USE PERMIT

NO:

2	4	9	1	7	9	L		
---	---	---	---	---	---	---	--	--

THIS PERMIT IS ISSUED TO USACE Honolulu District c/o Mathew Haith
MAILING ADDRESS P.O.BOX GD PHONE: 733-1095
THIS PERMIT ALLOWS WORK ON LAND LOCATED IN Aua Maoputasi
VILLAGE COUNTY

PHYSICAL BOUNDARIES ARE SET FORTH AND DESCRIBED IN THE APPROVED SITE PLAN FOR USACE, WHICH IS ATTACHED AND INCORPORATED INTO THE TERMS OF THIS PERMIT.

THE WORK PERMITTED IS: Federal Consistency Certification, Thermal Treatment of Soil,
utility pole hookup with utilities to include staging area
ADDITIONAL DESCRIPTION & CONDITIONS ATTACHED



SITE PLAN IS INCORPORATED AS PART OF THIS PERMIT.

SPECIAL CONDITIONS WHICH MUST BE MET: *DEVIATION FROM THE APPROVED SITE PLAN IS PROHIBITED.*

REVIEW

RECEIPT #

PROCESSING FEE: \$0.00

ASCMP OR CZM

DATE: 3/11/2024

DEPARTMENT OF COMMERCE/ ASCMP GRANTS PERMISSION TO PERFORM THE WORK
DESCRIBED ABOVE BY:

DATE: 3/11/2024

DIRECTOR OR DESIGNEE

NOTICE - CAUTION

The work approved by this permit must begin 1 year and be completed within 2 years of the date of approval by the Director of Commerce. If the work is not commenced within 1 year of the date the permit shall be voidable by the Board. If the work is discontinued for a period off 1 year or longer the permit is considered abandoned and a new land use permit application is required. If the project is not completed within 2 years of the date of approval the permit may be extended by request of the applicant made within 6 months of the permit expiration day. This permit authorized **ONLY** the work specified. Separate permits are required for any work not described in this permit.

FA'AALIGA MA LAPATAIGA

O le galuega ua pasia i lenei pemitā e tatau ona amata i totonu o le 1 tausaga, ma mae'a lelei i le 2 tausaga. I le lua tausaga mai le aso na pasia ai. Afai o se galuega e le'i mafai ona fa'atinoina i totonu o le 1 tausaga mai le aso na pasia ai, o le a fa'aleaogaina lea pemitā. Afai o se galuega ua le mafai ona fa'aauauina i totonu o le tasi (1) tausaga pe sili atu fo'i, o lea pemitā ua tulaga tu'ua, ma e tatau ona faia se talosaga fou mo se isi pemitā. Afai o se galuega e le'i mae'a i totonu o le 2 tausaga mai le aso na pasia ai, ua tatau i le e ana le pemitā ona talosaga mo se taimi fa'aopoopo i totonu o le 6 masina mai le aso na fa'amuta ai le aoga o le pemitā. O lenei pemitā e fa'agataina ai **NA'O** galuega ua ta'ua ai, o galuega uma e le'o ta'ua ai, e tatau ona fai se isi pemitā.

I agree to honor the terms and conditions of this permit.

Ua ou malamalama i aiaiga uma o lenei pemitā:

Signature of permittee



Effective date



AMERICAN SAMOA GOVERNMENT

DEPARTMENT OF PUBLIC WORKS

Department of Public Works Building, 1st Floor

Tafuna, American Samoa 96799

Tel: (684) 699-9921 Fax: (684) 699-9913



Lemanu P. S. Mauga
Governor

La'apui Talauega E. V.
Ale
Lt. Governor

Faleosina Voigt, P. E.
Director

Fa'alava'i Ta'ase
Deputy Director, Engineering & Operations

Laupule Tilei
Deputy Director, Administration & Finance

TO: Fofoga Pila

FROM: Reuben Siatu'u, Chief Engineer of Civil Highway
(Office Use Only)

REF: Public Road Excavation Authorization #PW-001-24
Cutting & Restore-Asphalt Pavement

CC: Location: Aua Village, Maoputasi
Faleosina Voigt, P.E, Director of DPW
Alofa Tanuvasa, Project Manager, DPW

SCHEDULE DATE: 04/01/2024
COMPLETION DATE: 10/30/2024
(CHD Office Use Only)

ISSUE DATE: March 28, 2024
DATE SUBMITTED: March 20, 2024

In reply refer to:
—PW/Permit #001-24

It is our understanding that you will perform the following, which shall be considered part of the Conditions to the permit shown above, for the utility line installation project:

1. Any excavation backfill for utility conduit installation performed within the road travel way, or across the travel way, shall require compaction testing. Compaction test(s) shall be performed for every 6-in. layer lift, or as adequate by the instruction of the DPW Engineer/Inspector on site. All test results shall be forwarded to this office.
2. All excavation backfill for utility conduit installation performed alongside the roadway, that fall within the road right of way, shall have compaction testing at every 100 ft. for each 6-in. layer lift. Restoration backfill elevations for road shoulder areas shall not be higher than the existing road levels. Restoration slopes shall follow the existing cross fall of the road, or as directed by the DPW Engineer/Inspector on site.
3. Excavated trench (es) within the travel way shall be restored, using the same pre-existing material (i.e. asphalt roads shall be repaired with asphalt), immediately once compaction tests are approved. Steel plates only shall be used during the interim until permanent restoration work is in place.
4. Non-compliance with the conditions above will affect processing of future road excavation applications, or may cause the cancellation of issued roadway excavation permits, as seen fit by this office.

Frequency rates mentioned above may be modified based on the approval by the DPW Project Engineer. Inspector notified 48 hours before scheduled roadway excavation. If you have any questions or comments on this matter, please do not hesitate to contact me.

RECEIVED BY: [Signature]

DATE: 3/28/24

By signing this document, I/we acknowledge receipt of and agree to all terms and conditions in the Important Disclosure and all other terms and conditions as per the Road Excavation Permit.



PETTI T. MATILA
DIRECTOR

AMERICAN SAMOA GOVERNMENT
DEPARTMENT OF COMMERCE
A.P. LUTALI EXECUTIVE OFFICE BUILDING, 2ND FLOOR
PAGO PAGO, AMERICAN SAMOA 96799
www.doc.as.gov

TELEPHONE: 684.633.5155
Serial No: DOC23-0558

March 11, 2024

USACE Honolulu District c/o Mathew Haith
P.O.BOX GD
Pago Pago, AS 96799

Subject: Land Use Permit No. 24-9179-L: Federal Consistency Certification, Thermal Treatment of Soil, utility pole hookup with utilities to include staging area- **Aua**

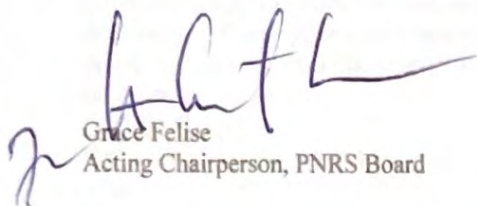
Dear Mathew Haith:

On March 6, 2024, the Board for the Project Notification and Review System (PNRS) approved your permit. The permit is **granted** subject to special conditions detailed in the permit decision.

By copy of this letter and permit decision, relevant agencies and/or permitting authorities are informed of conditions imposed by the land use permits, and are requested to carry out monitoring and enforcement efforts according to their authorities. Please note that several of the conditions must be met before the issuance of a building permit.

If you have any questions concerning this permit decision or your future permit requirements, contact our office at 633-5155.

Sincerely,


Grace Felise
Acting Chairperson, PNRS Board

cc:	Fainu'ulelei F. A. Utu	Office of the Attorney General	Wallon Young	(Ryan Tuatoo) ASPA/WD
	Taotasi Archie Soliai	(Kim Woo-Ching) DMWR	Ken Tupua	(Dave Godinet) DPR
	Fa'amao Asalele	(Frank Asi) ASEPA	Letitia M. Folau	(Letitia M. Peau-Folau) ASHPO
	Tuileama Nua	(Aileen Solaita) DOH	Faleosina Voigt	(Taafua Taafua JR) DPW/BB
	Petti T. Matila	(Aokusotino Mao) DOC		(Alofa Tanuvasa) DPW/CHD
		(Gina Faiga) DOC		



PETTI T. MATILA
DIRECTOR

AMERICAN SAMOA GOVERNMENT
DEPARTMENT OF COMMERCE
A.P. LUTALI EXECUTIVE OFFICE BUILDING, 2ND FLOOR
PAGO PAGO, AMERICAN SAMOA 96799
www.doc.as.gov

TELEPHONE: 684.633.5155
Serial No: DOC23-0558

Land Use Permit PNRS Decision and Special Conditions

Applicant: USACE Honolulu District c/o Mather Haith

Work: Federal Consistency Certification, Thermal Treatment of Soil, utility pole hookup with utilities to include staging area

Location: Aua, Maoputasi

Permit Number: 24-9179-L

- I. **Permit Process:** The Director of the Department of Commerce, upon the recommendation of the Project Notification and Review System (PNRS) Board, hereby approves a land use permit as referenced above.
- II. **Findings:** The PNRS Committee has determined that the intent of the proposed project is consistent with the Coastal Management Program's policies and objectives.
- III. **Conditions:** Because the goal of the Coastal Management Program is to avoid adverse impacts on the Territory's coastal resources and to limit foreseeable adverse impacts, this Land Use Permit is issued with the following conditions:

CONDITION 1:

If, during construction, any previously unidentified archaeological sites or remains (such as artifacts, shell, bone, or charcoal deposits, human burials, rock or coral alignments, pavings, or walls) are encountered, the permittee shall stop work and immediately contact American Samoa Historic Preservation Office at 699-2316. Work in the immediate area shall also stop until ASHPO is able to assess the impact and make further recommendations for mitigative measures.

CONDITION 2:

Any solid waste generated as a result of construction at the site shall be disposed of at the Futiga landfill or scrap metal yard at Tafuna. Contact ASEPA at 633-2304 for assistance.

CONDITION 3:

The permittee shall ensure that adequate solid waste storage and disposal is provided at the site. Solid waste and scrap metal **will not be allowed** to accumulate at the site. All solid waste shall be properly disposed of at the Futiga landfill or scrap metal yard at Tafuna.

CONDITION 4:

Permittee must ensure that storm water generated on the property during and after construction be contained. Drainage must not impact property. This includes minimizing runoff onto roads.

CONDITION 5:

Permittee must ensure that any and all excess dirt, cinder, spoils, and construction activities must be disposed of at the Futiga landfill. Any other uses of these materials shall require a separate land use permit.

CONDITION 6:

The permittee shall make every effort to prevent soil erosion and the escape of debris to neighboring properties.



PETTI T. MATILA
DIRECTOR

AMERICAN SAMOA GOVERNMENT
DEPARTMENT OF COMMERCE
A.P. LUTALI EXECUTIVE OFFICE BUILDING, 2ND FLOOR
PAGO PAGO, AMERICAN SAMOA 96799
www.doc.as.gov

TELEPHONE: 684.633.5155
Serial No: DOC23-0558

CONDITION 7:

Permittee must ensure that any and all solid waste as a result of demolition and reconstruction shall not be placed or stored within a **fifty (50) foot** setback zone from all wetlands, streams, or shoreline areas. Excess dirt, cinder, spoils, concrete, pavement, and/or excavated materials, must be properly disposed of at the Futiga landfill. Any other uses of these materials shall require a separate land use permit. *(This includes your responsibility to ensure the contractor(s) adheres to this condition).*

CONDITION 8:

All silt fences, curtains, and other structures must be installed properly and maintained throughout the construction period where fill and exposed soils might cause transport or sediment or turbidity beyond the immediate construction site.

CONDITION 9:

Permittee shall complete an Erosion Control plan for the project site for submittal to AS-EPA for review and approval prior to the start of construction. Permittee shall ensure that the approved Erosion Control plan is completely implemented. Please contact the AS-EPA with any questions at 633-2304.

CONDITION 10:

The work shall be discontinued during flooding, intense rainfall, storm surge, or high surf conditions where runoff and turbidity cannot be controlled. The work shall be conducted during the dry season or when any affected stream has minimal or no flow, to the extent practicable.

CONDITION 11:

The permittee must identify a contractor and staging areas for the project. Staging areas must maintain a 35-ft setback from the centerline of the main road

CONDITION 12:

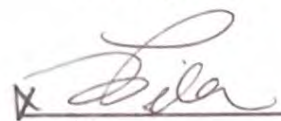
Any other work conducted at this site other than that described in this permit shall require a separate landuse permit.

IV. Violation of Conditions: Violation of any condition of this Land Use Permit may result in legal action against the permittee and/or all responsible parties.

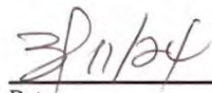
V. Inquiries: If you have any questions regarding the above conditions, please contact Aokusotino Mao at the Department of Commerce, at 633-5155, for assistance.

VI. Permit Limitations: This Permit **does not** relieve you of obligations imposed by other **Territorial or Federal laws**, either statutory or otherwise. Work must be performed in the precise manner and location indicated in the application and Permit. The American Samoa Coastal Management Program has the authority to issue a stop order, require corrective measures, and seek legal enforcement.

VII. Acknowledgment: I have received all of the attachments referred to in this document and agree to honor the foregoing Land Use Permit special conditions.



Permittee



Date

cc: Fainu'ulelei F. A. Utu
Taotasi Archie Soliai
Fa'amao Asalele
Tuileama Nua
Petti T. Matila



Office of the Attorney General
(Kim Woo-Ching) DMWR
(Frank Asi) ASEPA
(Aileen Solaita)DOH
(Aokusotino Mao) DOC
(Gina Faiga) DOC

Wallon Young
Ken Tupua
Letitia M. Folau
Faleosina Voigt

(Ryan Tuatoo) ASPA/WD
(Dave Godinet) DPR
(Letitia M. Peau-Folau)ASHPO
(Taafua Taafua JR)DPW/BB
(Alofa Tanuvasa)DPW/CHD

Figure 1. Potential Water Treatment System Locations
 Petroleum-Contaminated Soil Removal at Former Auaa Fuel Farm
 a. District Tutuila, American Samoa



 Potential Water Treatment System Location (20' x 200')
 Approximate Extent of Former Auaa Fuel Farm

APPROVED
 STATE DEPARTMENT OF
 ENVIRONMENT & NATURAL RESOURCES
 DATE: 3/11/24

Coordinate System: Universal Transverse Mercator,
 Zone 2 South, NAD 1983 (9411)

0
 100 Feet

AMERICAN SAMOA GOVERNMENT
LAND USE PERMIT APPLICATION

Application Number:

SECTION 1: Information About the Applicant

NAME: Last USACE-Honolulu District

PHONE NO. Home N/A Work 808-835-4097

First NA

OTHER CONTACT: Matthew Haith (Contracting Officer's Representative)

ADDRESS: USACE, CEPCO-PPE, Building 230, Ft Shafter, HI 96858-6440

Email: matthew.c.haith@usace.army.mil

SECTION 2: Proposed Land Use

- | | | | |
|---|---|---------------------------------------|---|
| <input type="checkbox"/> RESIDENTIAL | <input type="checkbox"/> COMMERCIAL | <input type="checkbox"/> INDUSTRIAL | <input type="checkbox"/> AGRICULTURE |
| <input type="checkbox"/> RELIGIOUS | <input type="checkbox"/> EDUCATIONAL | <input type="checkbox"/> RECREATIONAL | <input type="checkbox"/> TRANSPORTATION |
| <input type="checkbox"/> ASG FACILITIES | <input type="checkbox"/> COMMUNICATIONS | <input type="checkbox"/> CULTURAL | <input checked="" type="checkbox"/> OTHER |

SECTION 3: Proposed Activities

- | | | | | |
|---|--|--|---|---|
| <input type="checkbox"/> New Construction | <input type="checkbox"/> Roads/Driveways | <input type="checkbox"/> Filling | <input type="checkbox"/> Dredging | <input type="checkbox"/> Drilling |
| <input type="checkbox"/> Repair | <input type="checkbox"/> Paving | <input type="checkbox"/> Walls/Fences | <input type="checkbox"/> Clearing | <input type="checkbox"/> Mining |
| <input type="checkbox"/> Demolition | <input type="checkbox"/> Extension | <input checked="" type="checkbox"/> Excavation | <input checked="" type="checkbox"/> Other | <small>Staging, Thermal Treatment of Soil,
Utility Pole Hookup, Treatment of Water
Removed from Excavations</small> |

PROJECT DETAILS

Building footprints (sq. ft.) N/A Gross Floor Area (All Floors) N/A

Building Height N/A Number of Floors N/A If Residential, Number of Units N/A

Number of Proposed Parking Spaces N/A If Commercial, What Type N/A

If Industrial, What Type N/A

Do you have a Business License for the proposed activity? ☐ YES ☒ NO

If YES, Bus. Name N/A Estimated Project Start Date 03/01/2024

Estimated Project Completed Date 10/31/2024 Estimate Project Cost 10,543,366.82

Is any of the proposed work underway or completed? ☐ YES ☒ NO. If YES, describe the work and provide an explanation for why you began the work without first obtaining permits.

WHITE: DOC

YELLOW: Applicant

PINK: Building Branch

DOC-LUP/BLDG APPL (Rev 9/93)

Application for Land Use and Building Permits – Page 2

SECTION 4: Authority to Use and Occupy the Land

Is this land Registered? ☐ YES ☒ NO If YES, Attach a copy of the Certificate of Registration and Survey

Is the land Leased? ☒ YES ☐ NO If YES, Attach a copy of the Lease Agreement and Survey (i.e., only Onesosopo Park)

(Complete the appropriate part below)

COMMUNALLY – OWNED LAND

If a legal description and survey are available, please attach a copy. If not, please provide a detailed description of the land to be used in your project:

Name of Land Aua Village Along Highway 1 & Onesosopo Park Village Aua County Ma'oputasi

If the land is communally owned, you must present this application to your (Sa'o) Matai, or if there is no matai, to at least two senior matais in your family for their consideration and signature.

I/We, N/A and N/A certify that I/We are matai of the
N/A Family, which owns the land described in this Application, and hereby grant the

Application permission to use the land as proposed.

See executed rights-of-entry (attached)

N/A

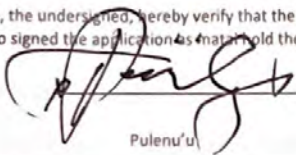
N/A Sa'o/Matai

N/A Date

VERIFICATION OF COMMUNAL OWNERSHIP

If the land is communally owned, you must also present this Application to your Pulenu'u and to the Office of Samoan Affairs for verification of the of the communal land ownership described above.

We, the undersigned, hereby verify that the land described in this Application is owned by the _____ family and that the individual(s) who signed the application as matai hold the titles necessary to grant permission to use the land.


Pulenu'u

Date


Secretary of Samoan Affairs

Mar 3-24
Date

FREEHOLD OR INDIVIDUALLY-OWNED LAND

If the land is freehold or individually-owned, you must attach a copy of the Certificate of Registration to the land and have the owner certify that he permits your project(s).

I, N/A, certify that I own the land described in this application and grant the applicant permission to use the land as proposed. N/A Owner N/A Date

GOVERNMENT-OWNED LAND

If the land is government-owned, you must hold a valid Lease or Agreement to Lease before you can submit this Application. If you do not hold a valid Lease or Agreement to Lease, you must submit an Application for Real Property Lease to the Real Property Management Board (RPM B), for review and will forward a recommendation to the Governor for his Approval or Disapproval.

GOVERNOR'S DECLARATION: I declare that the property described in this Application is owned by the American Samoa Government, and that the applicant holds a valid Lease or Agreement of Lease. Permission to use the land for the purpose stated in this Application is contingent upon the applicant first obtaining both Land Use and Building Permits.

Governor

Date

Application for Land Use and Building Permits – Page 3

SECTION 5: Agents for the Applicant

WHO WILL BE DOING THE WORK:

Architect/Engineer: Engineering/Remediation Resources Group

Address 677 Ala Moana Boulevard Suite 308, Honolulu, HI 96813 Telephone 808-829-4090

License Number 743750

Contractor/Tradesman: N/A

Address _____ Telephone _____

License Number _____

SELF BUILT: ☐

All construction must conform to the current Uniform Building Code as adopted by the ASG, and will be inspected by the Department of Public Works.

SECTION 6: Applicant's Certification

I have read and understand the contents of this Application and certify that all of the information provided is true. I understand that I am not permitted to begin work until I obtain both Land Use and Building Permits. I authorize employees and representatives of the American Samoa government to enter upon and inspect the property involved in this Application.

[Signature]
Applicant

11/27/2023
Date

SECTION 7: Staff Evaluation and Certification

THIS SECTION TO BE COMPLETED BY DOC & DPW STAFF

IS A ZONING VARIANCE REQUIRED? ____ YES ____ NO If YES, what type(s) _____

IS THE PROPERTY SUBJECT TO FLOODPLAIN MANAGEMENT REGULATIONS ____ YES ____ NO

T-MAP SHEET NO. _____ T-MAP COORDINATES X _____ Y _____

STATISTICAL INFORMATION

LAND OWNERSHIP/USE/ACTIVITY CODE

☐☐☐

STAFF CERTIFICATION

(Please complete the appropriate section)

1. I certify that I have reviewed this application and have determined that no Zoning Variance are required for this project
[Signature] 3/11/24
2. I certify that I have reviewed this application and instructed the applicant to make a separate application to Zoning Board for a Variance before a Land Use Permit will be issued.

FINAL CERTIFICATION OF COMPLETION

I hereby certify that this Application is complete.

[Signature]
DOC Compliance Division Manager

02/27/24
3/11/2024
Date

WHITE: DOC

YELLOW: Applicant

PINK: Building Branch

DOC-LUP/BLDG APPL (REV 9/93)

COPI



APPLICANT NAME : USACE-HONOLULU DISTRICT

PHONE NO. : 733-1095 OR 808-835-4382

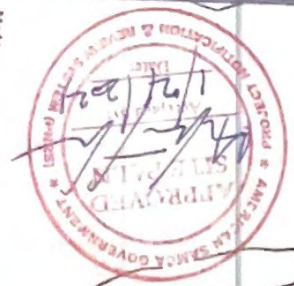
COUNTY : MA'OPUTASI

DISTRICT : CENTRAL

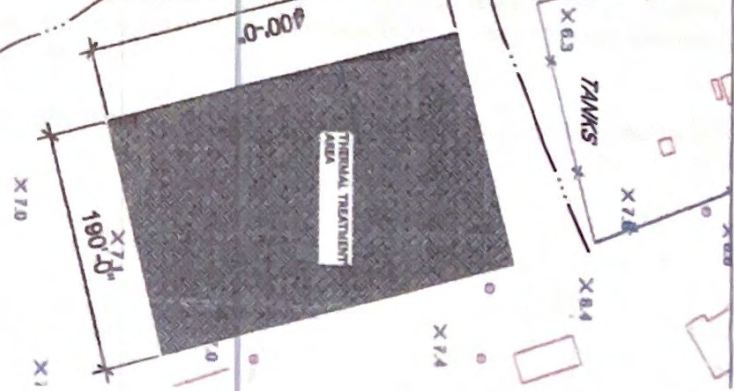
T-MAP No. : 12.23

COORD. X = 255463.07
Y = 306601.53

DATE : SEPT 24, 2020



NOTES
PROPOSED THERMAL TREATMENT OF SOIL, STAGING AREA, STORAGE & ELECTRICAL INSTALLATION AND NEW LEASE AGREEMENT FOR LAND USE PERMIT.





DEPARTMENT OF COMMERCE

American Samoa Government
Pago Pago, American Samoa 96799
Tel: (684)633-5155 Fax: (684)633-4195



Lemanu P.S. Mauga
Governor

Talauega Eleasalo Alo
Lt. Governor

Petti T. Matila
Acting Director

In reply refer to:
Serial No:

Uili Leauanae
Deputy Director

Sandra Fuimaono Lutu
Deputy Director

January 15, 2021

USACE Honolulu District
c/o Tracey Tenholder
P.O. BOX PPB
Pago Pago, AS 96799

Subject: Land Use Permit No. 20-7122-L: Proposal for Federal Consistency Certification, Thermal Treatment of Soil, and utility pole hookup with utilities to include staging area- Aua

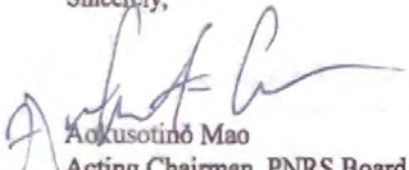
Dear Tracey Tenholder,

On December 16, 2020, the Board for the Project Notification and Review System (PNRS) approved your permit. The permit is granted subject to special conditions detailed in the permit decision.

By copy of this letter and permit decision, relevant agencies and/or permitting authorities are informed of conditions imposed by the land use permits, and are requested to carry out monitoring and enforcement efforts according to their authorities. Please note that several of the conditions must be met before the issuance of a building permit.

If you have any questions concerning this permit decision or your future permit requirements, contact DOC at 633-5155.

Sincerely,


Aokusotino Mao
Acting Chairman, PNRS Board

cc: Fainu'ulelei F. A. Utu
Taotasi Archie Soliai
Fa'amao Asalele
Tuileama Nua
Petti T. Matila

Office of the Attorney General
(Katie Nalesere) DMWR
(Jewel Tuasosopo) ASEPA
(John Fuimaono) DOH
(Aokusotino Mao) DOC
(Sandra A. F. Lutu) DOC

Reno Vivao
Ken Tupua
Elvis Zodiacal
Faleosina Voigt

(Samuela Tubui) ASPA/WD
(Dave Godinet) DPR
(Lance Te'i) ASHPO
(Taafua Taafua JR) DPW/BB
(Alofa Tanuvasa) DPW/CHD

American Samoa Government
Land Use Permit
PNRS Decision and Special Conditions

Applicant: USACE Honolulu District c/o Tracey Tenholder

Work: Federal Consistency Certification; Thermal Treatment of Soil, utility pole hookup with utilities to include staging area

Location: Aua, Maoputasi

Permit Number: 20-7122-L

- I. **Permit Process:** The Director of the Department of Commerce, upon the recommendation of the Project Notification and Review System (PNRS) Board, hereby approves a land use permit to
- II. **Findings:** The PNRS Committee has determined that the intent of the proposed project is consistent with the Coastal Management Program's policies and objectives.
- III. **Conditions:** Because the goal of the Coastal Management Program is to avoid adverse impacts on the Territory's coastal resources and to limit foreseeable adverse impacts, this Land Use Permit is issued with the following conditions:

CONDITION 1:

The permittee must comply with the regulations of Section 106 of the National Historic Preservation Act of 1966, (36 CFR Part 800) prior to the start of the project. For further information contact the American Samoa Historic Preservation Office at 699-2316 seventy-two hours prior to conducting any work.

CONDITION 2:

If, during construction, any previously unidentified archaeological sites or remains (such as artifacts, shell, bone, or charcoal deposits, human burials, rock or coral alignments, pavings, or walls) are encountered, the permittee shall stop work and immediately contact American Samoa Historic Preservation Office at 699-2316. Work in the immediate area shall also stop until AS/HPO is able to assess the impact and make further recommendations for mitigative measures.

CONDITION 3:

Any solid waste generated as a result of construction at the site shall be disposed of at the Futiga landfill or scrap metal yard at Tafuna. Contact ASEPA at 633-2304 for assistance.

CONDITION 4:

The permittee shall ensure that adequate solid waste storage and disposal is provided at the site. Solid waste and scrap metal **will not be allowed** to accumulate at the site. All solid waste shall be properly disposed of at the Futiga landfill or scrap metal yard at Tafuna.

CONDITION 5:

Permittee must ensure that storm water generated on the property during and after construction be contained. Drainage must not impact property. This includes minimizing runoff onto roads.

CONDITION 6:

Permittee must ensure that any and all excess dirt, cinder, spoils, and construction activities must be disposed of at the Futiga landfill. Any other uses of these materials shall require a separate land use permit.

CONDITION 7:

Prevention and avoidance of water pollution by project construction is required. The methods to be utilized, but are not limited to best management practices such as site planning, proper use, storage, and disposal of hazardous materials, avoidance of sensitive areas, and proper operation and maintenance of drainage structures, or others as required by ASEPA.



Lemanu P.S. Mauga
Governor

Talauga Eleasalo Ala
LL Governor

DEPARTMENT OF COMMERCE

American Samoa Government
Pago Pago, American Samoa 96799
Tel: (684)633-5155 Fax: (684)633-4195



Petti T. Matila
Acting Director

In reply refer to:
Serial No:

Ulili Leauanae
Deputy Director

Sandra Fuimaono Lutu
Deputy Director

January 15, 2021

FEDERAL CONSISTENCY CERTIFICATION

Concurrence with Federal Consistency Certification:

Agency: USACE – Honolulu District c/o Tracey Tenholder

Proposal: Thermal Treatment of soil, and utility pole hookup with utilities to include staging area

Land Use Permit #: 20-7122-L

Location: Aua, American Samoa

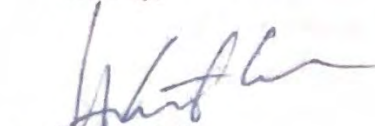
The American Samoa Coastal Management Program ("ASCMP") is pleased to inform you that it concurs with our consistency certification for the proposed project.

Under the federal consistency provision of the Coastal Management Act of 1972, as amended, all federal projects, federally licensed activities, or federally funded project occurring within a coastal zone must be conducted in a manner consistent with that state's or territory's approved management program (Coastal Management Act, § 307(c)(3)(A)). The ASCMP was approved in 1980 and codified in law in 1991. No federal permits or federal funding will be issued until ASCMP has issued a federal consistency determination.

ASCMP has reviewed the proposed project, and concurs with the certification's findings that the project will comply with the approved ASCMP policies and will be conducted in a manner consistent with the program. This concurrence is conditioned on the terms and conditions of the land use permit.

This certification should remain in your project documents file.

Sincerely,


Petti T. Matila
Director

cc: Sandra A. F Lutu
Deputy Director

CONDITION 8:

The permittee shall make every effort to prevent soil erosion and the escape of debris to neighboring properties.

CONDITION 9:

All silt fences, curtains, and other structures must be installed properly and maintained throughout the construction period where fill and exposed soils might cause transport or sediment or turbidity beyond the immediate construction site.

CONDITION 10:

Permittee shall complete an Erosion Control plan for the project site for submittal to AS-EPA for review and approval prior to the start of construction.

CONDITION 11:

Any other work conducted at this site other than that described in this permit shall require a separate landuse permit.

- IV. **Violation of Conditions:** Violation of any condition of this Land Use Permit may result in legal action against the permittee and/or all responsible parties.
- V. **Inquiries:** If you have any questions regarding the above conditions, please contact Aokusotino Mao at the Department of Commerce, at 633-5155, for assistance.
- VI. **Permit Limitations:** This Permit does not relieve you of obligations imposed by other Territorial or Federal laws, either statutory or otherwise. Work must be performed in the precise manner and location indicated in the application and Permit. The American Samoa Coastal Management Program has the authority to issue a stop order, require corrective measures, and seek legal enforcement.
- VII. **Acknowledgment:** I have received all of the attachments referred to in this document and agree to honor the foregoing Land Use Permit special conditions.


Permittee

1/21/21
Date

cc: Fainu'ulelei F. A. Utu
Taotasi Archie Soliai
Fa'amao Asalele
Tuileama Nua
Petti T. Matila

Office of the Attorney General
(Katie Nalesere) DMWR
(Jewel Tuasosopo) ASEPA
(John Fuimaono) DOH
(Aokusotino Mao) DOC
(Sandra A. F. Lutu) DOC

Reno Vivao
Ken Tupua
Elvis Ze'iaical
Faleosina Voigt

(Samuela Tubui) ASPA/WD
(Dave Godinet) DPR
(Lance Te'i) ASHPO
(Taafua Taafua JR) DPW/BB
(Alofa Tanuvasa) DPW/CHD

PROJECT NOTIFICATION REVIEW SYSTEM (PNRS)
AMERICAN SAMOA GOVERNMENT
DEPARTMENT OF COMMERCE

LAND USE PERMIT

NO: 20 7122 L

THIS PERMIT IS ISSUED TO USACE Honolulu District c/o Tracey Tenholder

MAILING ADDRESS P.O. BOX GD

PHONE: 733-1095

THIS PERMIT ALLOWS WORK ON LAND LOCATED IN

Aua

Maoputasi

VILLAGE

COUNTY

PHYSICAL BOUNDARIES ARE SET FORTH AND DESCRIBED IN THE APPROVED SITE PLAN FOR
USACE, WHICH IS ATTACHED AND INCORPORATED INTO THE TERMS OF THIS PERMIT.

THE WORK PERMITTED IS: Federal Consistency Certification, Thermal Treatment of Soil,
and utility pole hookup with utilities to include staging area



ADDITIONAL DESCRIPTION & CONDITIONS ATTACHED



SITE PLAN IS INCORPORATED AS PART OF THIS PERMIT.

SPECIAL CONDITIONS WHICH MUST BE MET: DEVIATION FROM THE APPROVED SITE PLAN IS PROHIBITED.

REVIEW

RECEIPT #

PROCESSING FEE: \$0.00

ASCMP OR CZM

DATE: 1/21/2021

DEPARTMENT OF COMMERCE/ASCMP GRANTS PERMISSION TO PERFORM THE WORK
DESCRIBED ABOVE BY:

[Signature]
DIRECTOR OR DESIGNEE

DATE: 1/21/2021

NOTICE - CAUTION

The work approved by this permit must begin 1 year and be completed within 2 years of the date of approval by the Director of Commerce. If the work is not commenced within 1 year of the date the permit shall be voidable by the Board. If the work is discontinued for a period of 1 year or longer the permit is considered abandoned and a new land use permit application is required. If the project is not completed within 2 years of the date of approval the permit may be extended by request of the applicant made within 6 months of the permit expiration day. This permit authorized **ONLY** the work specified. Separate permits are required for any work not described in this permit.

FA'AALIGA MA LAPATAIGA

O le galuega ua pasia i lenei pemitā e tatau ona amata i totonu o le 1 tausaga, ma mae'a lelei i le 2 tausaga i le lua tausagamai le aso na pasia ai. Afai o se galuega e le'i mafai ona fa'atinoaina i totonu o le 1 tausaga mai le aso na pasia ai, o le a fa'aleaogaina lea pemitā. Afai o se galuega ua le mafai ona fa'aauauina i totonu o le tasi (1) tausaga pe sili atu fo'i, o lea pemitā ua tulaga tu'ua, ma e tatau ona faia se talosaga fou mo se isi pemitā. Afai o se galuega e le'i mae'a i totonu o le 2 tausaga mai le aso na pasia ai, ua tatau i le e ana le pemitā ona talosaga mo se taimi fa'aopoopo i totonu o le 6 masina mai le aso na fa'amuta ai le aoga o le pemitā. O lenei pemitā e fa'agataina ai **NA'O** galuega ua ta'ua ai, o galuega uma e le'o ta'ua ai, e tatau ona fai se isi pemitā.

I agree to honor the terms and conditions of this permit.

Ua ou malamalama i aiaiga uma o lenei pemitā:

[Signature]
Signature of permittee



1/21/21
Effective date

SECTION 4: Authority to Use and Occupy the Land

Is the land Leased? ☐ YES ☐ NO If YES, Attach a copy of the Lease Agreement and Survey

(Complete the appropriate part below)

COMMUNALLY – OWNED LAND

Name of Land Multiple Properties Village Aua County Ma'oputasi

I/We, N/A and N/A certify that I/We are matai of the
N/A Family, which owns the land described in this Application, and hereby grant the

See executed rights-of-entry (attached)

N/A

N/A

Sa'o/Matal

Date
N/A

Date _____

If the land is communally owned, you must also present this Application to your Pule'u'u and to the Office of Samoan Affairs for verification of the of the communal land ownership described above.

We, the undersigned, hereby verify that the land described in this Application is owned by the _____ family and that the individual(s) who signed the application as rental hold the titles necessary to grant permission to use the land.

Pulenu'u

Date _____

Secretary of Samoan Affairs

Date _____

FREEHOLD OR INDIVIDUALLY-OWNED LAND

I, N/A, certify that I own the land described in this application and grant the applicant permission to use the land as proposed.

Owner

Date _____

AMERICAN SAMOA GOVERNMENT
LAND USE PERMIT APPLICATION

Application Number: 20-71122-L-1

SECTION 1: Information About the Applicant

NAME: Last USACE - Honolulu District

PHONE NO. Home N/A

Work 808-835-4382

First N/A

OTHER CONTACT: Tracey Tenholder (Contracting Officer)

ADDRESS: USACE, CEPOH-PPE, Building
230, Ft Shafter, HI 96858-5440

Email: tracy.n.tenholder@usace.army.mil

SECTION 2: Proposed Land Use

- | | | | |
|---|---|---------------------------------------|---|
| <input type="checkbox"/> RESIDENTIAL | <input type="checkbox"/> COMMERCIAL | <input type="checkbox"/> INDUSTRIAL | <input type="checkbox"/> AGRICULTURE |
| <input type="checkbox"/> RELIGIOUS | <input type="checkbox"/> EDUCATIONAL | <input type="checkbox"/> RECREATIONAL | <input type="checkbox"/> TRANSPORTATION |
| <input type="checkbox"/> ASG FACILITIES | <input type="checkbox"/> COMMUNICATIONS | <input type="checkbox"/> CULTURAL | <input checked="" type="checkbox"/> OTHER |

SECTION 3: Proposed Activities

- | | | | | |
|---|--|--|---|-----------------------------------|
| <input type="checkbox"/> New Construction | <input type="checkbox"/> Roads/Driveways | <input type="checkbox"/> Filling | <input type="checkbox"/> Dredging | <input type="checkbox"/> Drilling |
| <input type="checkbox"/> Repair | <input type="checkbox"/> Paving | <input type="checkbox"/> Walls/Fences | <input type="checkbox"/> Clearing | <input type="checkbox"/> Mining |
| <input type="checkbox"/> Demolition | <input type="checkbox"/> Extension | <input checked="" type="checkbox"/> Excavation | <input checked="" type="checkbox"/> Other | <u>Thermal Treatment of</u> |

Soil, Utility Pole Hookup/
Utilities

PROJECT DETAILS

Building footprints (sq. ft.) N/A Gross Floor Area (All Floors) N/A

Building Height N/A Number of Floors N/A If Residential, Number of Units N/A

Number of Proposed Parking Spaces N/A If Commercial, What Type N/A

If Industrial, What Type N/A

Do you have a Business License for the proposed activity? YES ☒ NO

If YES, Bus. Name N/A Estimated Project Start Date 03/01/2021

Estimated Project Completed Date 08/31/2021 Estimate Project Cost \$7,388,982.88

Is any of the proposed work underway or completed? YES ☒ NO. If YES, describe the work and provide an explanation for why you began the work without first obtaining permits.

WHITE: DOC

YELLOW: Applicant

PINK: Building Branch

DOC-LUP/BLDG APPL (Rev 9/93)

SECTION 5: Agents for the Applicant

Architect/Engineer:

Engineering/Remediation Resources Group

Telephone 808-533-6000*

License Number _____

Contractor/Tradesman:

Address

Telephone

License Number

SELF BUILT:

All construction must conform to the current Uniform Building Code as adopted by the ASG, and will be inspected by the Department of Public Works.

SECTION 6: Applicant's Certification

I have read and understand the contents of this Application and certify that all of the information provided is true. I understand that I am not permitted to begin work until I obtain both Land Use and Building Permits. I authorize employees and representatives of the American Samoa government to enter upon and inspect the property involved in this Application.

SECTION 7: Staff Evaluation and Certification

THIS SECTION TO BE COMPLETED BY DOC & DPW STAFF

IS A ZONING VARIANCE REQUIRED? YES NO If YES, what type(s)

IS THE PROPERTY SUBJECT TO FLOODPLAIN MANAGEMENT REGULATIONS YES NO

T-MAP SHEET NO. _____ T-MAP COORDINATES X _____ Y _____

STATISTICAL INFORMATION

LAND OWNERSHIP/USE/ACTIVITY CODE

--	--

--	--	--	--

--	--

STAFF CERTIFICATION

(Please complete the appropriate section)

I certify that I have reviewed this application and have determined that no Zoning Variance are required for this project

I certify that I have reviewed this application and instructed the applicant to make a separate application to Zoning Board for a Variance before a Land Use Permit will be issued.

FINAL CERTIFICATION OF COMPLETION

I hereby certify that this Application is complete.

11/24/2021

Date _____

WHITE: DOC

YELLOW: Applicant

PINK: Building Branch

DOC-LUP/BLDG APPL (Rev 9/93)

001-24

PUBLIC ROAD EXCAVATION AUTHORIZATION DPW - Civil/Highways Division

This Authorization shall be kept on site at all times during excavation or lane closure.

Application No: (assigned by Civil Highway Personnel)
To be completed by Applicant (Please read carefully the conditions before filling up this application)

LOCATION Village: <u>AUA VILLAGE</u> County: <u>MAOUPITASI</u> Detailed Location: (attach copy of plan/drawing)		ROAD: (check) <input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Asphalt <input type="checkbox"/> Aggregate <input type="checkbox"/> Native DESCRIPTION OF WORK: <input checked="" type="checkbox"/> Cutting & Restore-Asphalt Pavement <input checked="" type="checkbox"/> Trenching & Backfilling <input type="checkbox"/> Other - specify
PURPOSE: (check - attach copy of permit if required) <input type="checkbox"/> Telephone Connection <input type="checkbox"/> Water Connection <input type="checkbox"/> Sewer Connection <input type="checkbox"/> Power Connection <input type="checkbox"/> Drainage Pipe <input checked="" type="checkbox"/> Other Specify - attach additional sheet if necessary		

APPLICANT		CONTRACTOR	
Name: <u>USACE</u>	Name: <u>ERRA - Honolulu, HI 968-</u>	Name: <u>ERRA - Honolulu, HI 968-</u>	Name: <u>ERRA - Honolulu, HI 968-</u>
Address: <u>P.O. Box 60</u>	Address: <u>P.O. Box 2041, AB.</u>	Address: <u>P.O. Box 2041, AB.</u>	Address: <u>P.O. Box 2041, AB.</u>
Phone: <u>733-1095</u>	Phone: <u>733-1095</u>	Phone: <u>733-1095</u>	Phone: <u>733-1095</u>
Fax: <u>733-1095</u>	Fax: <u>733-1095</u>	Fax: <u>733-1095</u>	Fax: <u>733-1095</u>

EXCAVATION INFORMATION		MISCELLANEOUS INFORMATION	
Length: <u>7.000</u> ft.	in	EQUIPMENT (attach sheets as needed)	
Width: <u>3-4</u> ft.	in	TYPE OF FACILITY TO BE SERVED	
Depth: <u>3-10</u> ft.	in	<input type="checkbox"/> Commercial <input type="checkbox"/> Residential <input type="checkbox"/> School <input type="checkbox"/> Factory <input type="checkbox"/> Hotel <input type="checkbox"/> Other - Specify	

(If lane closure is requested for non-excavation road work, complete the following)			
Type of work proposed		Equipment to be used	
<u>Road Crossing & Trenching for pipe repair</u>		<u>10/20 Ton Excavator, plate compactor, roller, Asphalt cutter</u>	
SCHEDULE	Beginning Date	Time	
	<u>April 1st, 2024</u>	<u>8am</u>	
	Completion Date	Time	
	<u>October 30, 2024</u>	<u>4pm</u>	

Completion and acceptance of the work allowed under this permit is subject to the following conditions. I will comply with the following conditions

- Notify Department of Public Safety, at least 48 hours prior to beginning any work (72 hours if work is during a weekend or public holiday). Work may only be done during non-peak hour traffic periods. Work shall not be permitted on weekdays between 07:00 to 08:30 AM and 03:30 to 05:00 PM. Additional requirements may be imposed by American Samoa Government (ASG) if the situation demands. All traffic lanes shall be free and open to traffic during peak hours unless otherwise approved before hand. Flagmen and other traffic safety devices shall be used as required by Department of Public Safety.
- Comply with erosion control requirements in accordance with American Samoa Environmental Protection Agency.
- Comply with Federal Highway Administration regulations, the Manual of Uniform Traffic Control Devices, and ASG traffic safety regulations. All necessary traffic devices will be readied prior to start of work.
- Comply with all safety requirements and Occupational Safety Health Administration regulations especially regarding trenching or open excavation over 5 feet in depth.
- Concrete shall be saw cut at excavation line. Asphalt shall be saw cut at least 4 inches back from the edges of the excavation line. Longitudinal installations shall not exceed 750 lineal feet without prior approval. Any concrete or asphalt sections that break off must be re-cut to obtain straight edges. Minimize trench width as much as possible.
- The installed top of water, wastewater, drainage pipe or power or communication conduit shall be a minimum of 24 inches below the finished grade unless prior approval for a lesser bury is obtained from DPW Civil/Highways Division.
- Construction backfill and surface repair details shall be submitted with permit/authorization application for Civil/Highway Division approval. Federal Aid system highways shall follow construction and maintenance standards in accordance with FHWA Standard Specifications FP-03.
- Where traffic is obstructed, traffic control shall be continuously maintained. Provide lighted work area and flashing warning lights on barricades at night. Detour and/or traffic control operations are subject to review and approval of Department of Public Safety. Attach a sketch map or site map to the application which readily identifies the location of excavation and the impact upon traffic.
- All work shall be guaranteed for materials and workmanship for at least 12 months from date of installation.

<u>3/20/24</u> Applicant Signature and Date	<u>[Signature]</u> Contractor Signature and Date
--	---

001-24

PUBLIC ROAD EXCAVATION AUTHORIZATION
DPW - Civil/Highways Division

Application No: (assigned by Civil Highway Personnel)

For Civil/Highways Division & Public Safety Official Use Only	
Traffic Control	Other Conditions
Barrier/Signs: <u>YES.</u>	<u>FLAGMAN POSTED IF NEEDED.</u>
Detour: <u>IF NEEDED.</u>	
DPS Officer:	
Approved by: <u>[Signature]</u> <u>02/27/2024</u>	Reviewed by: <u>MARIA T. SOLATA</u>
Manager Civil/Highways Division DPW / Date	Director Department of Public Safety / Date

Public Safety Official Use Only

**TRAFFIC CONTROL**

Flagman

Comments

IF NECESSARY

Site/Detour Plan

Comments



Barricade/Signs

Comments

PLACED ON BOTH ENDS OF JOB SITE.

Night Work

Comments

IF NECESSARY.

Authorized Time to Start

Comments

0800-1600 HRS.**WEATHER or ROAD CONDITIONS**

Comments

**DPS TRAFFIC OFFICER**

Comments

Check appropriate box & sign:



Approved



Disapproved

[Signature]Commissioner - Department of Public Safety
(or authorized representative)



LEMANU P.S. MAUGA
Governor

TALAEUGA E.V. ALE
Lt. Governor

AMERICAN SAMOA ENVIRONMENTAL PROTECTION AGENCY
P.O. Box PPA Pago Pago American Samoa 96799
Phone: 684.633.2304 | www.epa.as.gov

FA'AMAO O. ASALELE JR.
Director

WILLIAM S. SILI
Deputy Director

Serial No. 2024-054

February 8, 2024

Diane England
Engineering/Remediation Resources Group (ERRG)
677 Ala Moana Blvd., Suite 308
Honolulu, HI 96813

RE: ERRG's Stationary Air Pollution Source Permit

Dear Diane England:

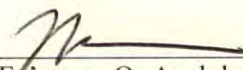
We are pleased to inform you that the American Samoa Environmental Protection Agency (AS-EPA) has completed our review of ERRG's Air Quality Permit application for the Low Temperature Thermal Desorption (LTTD) soil remediation project.

On February 8, 2024, the American Samoa Environmental Quality Commission (EQC) approved the aforementioned Permit application for the Low Temperature Thermal Desorption facility.

Enclosed you will find a signed Air Quality Permit for the aforementioned emission unit. This permit is effective from the start date as indicated on the attached permit. Operation and installation must be in accordance with conditions in the attached permit. It is very important that you read and adhere to all the requirements and conditions contained in your permit.

On behalf of the EQC and AS-EPA, I commend the ERRG for your continued cooperation in the American Samoa air permitting process. Should you have any questions regarding the enclosed permit, please notify AS-EPA's Air Quality program at (684) 633-2304.

Sincerely,


Fa'amao O. Asalele Jr., Director

Enclosure: (1) Stationary Air Pollution Source Permit - LTTD



**American Samoa Environmental Protection Agency
Stationary Air Pollution Source Permit**



Air Quality Permit to Construct, Modify and Operate Minor Source

Emission Unit: Low Temperature Thermal Desorption (LTTD) Soil Remediation Plant

Permit issued to: Engineering/Remediation Resources Group, Inc. (ERRG)
("Permittee") 677 Ala Moana Blvd., Suite 308
Honolulu, Hawaii 96813

Effective Date: February 8, 2024

Expiration Date: February 8, 2025


Executive Secretary

American Samoa Environmental Quality Commission

2/8/24
Date

Information about this Permit

Applicability

This permit authorizes permittee to engage in the construction or modification, and the operation of the specified Emission Unit (herein also "permitted source") pursuant to the provisions of the Federal Clean Air Act Title 1, 40 CFR Part 52.2820, and the American Samoa Air Emissions Rules and Regulations (see American Samoa Administrative Code Title 24 Chapter 5).

Termination

Section 6 of this permit addresses the issuing authority's ability to revise, revoke and reissue, or terminate this permit.

Definitions

The terms used herein shall have the meaning defined in ASAC § 24.0501. If a term is not defined, it shall be interpreted in accordance with accepted standards of industry use and practice.

Permit Terms and Conditions

The following applies only to the permittee, the Emission Unit, and any associated air pollution control equipment listed in the Application.

Section 1 – General Provisions

1. *Construction and Operation*

The permittee shall construct or modify, and operate the Emission Unit and any associated air pollution control equipment in compliance with this permit and all other applicable federal and territorial air quality regulations, in a manner consistent with the Application.

2. *Location*

This permit only authorizes the permittee to construct or modify, and operate the permitted source at the location specified in the Application.

3. *Liability*

This permit does not release the permittee from any liability for compliance with other applicable federal and territorial environmental laws and regulations, including the CAA and the American Samoa Environmental Quality Act (see American Samoa Code Annotated, Title.24, Chapter 1).

4. *Severability*

The provisions of this permit are severable. If any portion of this permit is held invalid, the remaining terms and conditions of this permit shall remain valid and in force.

5. *Compliance*

The permittee must comply with all provisions of this permit, including emission limitations that apply to the Emission Unit. Non-compliance with any permit provision is a violation of the permit and may constitute a violation of the CAA and the American Samoa Air Emissions Rules and Regulations. Such violations may also constitute grounds for an enforcement action and for the issuing authority to revoke and terminate the permit.

6. *National Ambient Air Quality Standards (NAAQS)/Prevention of Significant Deterioration (PSD) Protection*

The permitted source must not cause or contribute to a NAAQS violation and, in an attainment area, must not cause or contribute to a PSD increment violation. NAAQS are standards established by the US EPA under authority of the CAA (42 USC 7401 et seq.).

7. *Unavailable Defense*

In an enforcement action, it is not a defense for the permittee that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the provisions of this permit.

8. *Property Rights*

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

9. *Information Requests*

The permittee shall furnish to the issuing authority, within fifteen (15) business days, any information that the issuing authority may request in writing to determine whether cause exists to revise, revoke and reissue, or terminate the permit or to determine compliance with the permit. For any such information claimed to be confidential, the permittee must submit a claim of confidentiality in accordance with 40 CFR part 2 subpart B.

10. *Inspection and Entry*

Upon presentation of proper credentials, the permittee must allow a representative of the issuing authority to:

- a. Enter upon the premises where a source is located or emissions-related activity is conducted or where records are required to be kept under the conditions of the permit;
- b. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- c. Inspect, during normal business hours or while the source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required under the permit;
- d. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- e. Record any inspection by use of written, electronic, magnetic and photographic media.

11. *Posting of Permit*

Sections 1 through 6 of this permit must be posted prominently at the facility, and at the Emission Unit and any associated air pollution control equipment must be labeled with the identification name or number listed in the permit and in the Application. "Posting" means that a suitably durable copy of the permit sections 1-6 shall be on display in the office of responsible operations or management personnel and in close proximity to the labeled Emission Unit.

12. *Credible Evidence*

For the purpose of establishing whether the permittee violated or is in violation of any requirement of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the permittee had performed the appropriate performance or compliance test or procedure.

13. *Setbacks*

The exhaust from the Emission Unit must be located a minimum of 50 feet from the nearest property line and 100 feet from any adjacent residential establishment or place of public assembly.

Section 2: Emission Unit Limitations and Standards

14. The permittee shall install, maintain, operate and tune-up the Emission Unit, including any associated air pollution control equipment as indicated in the Application, in a manner consistent with good air pollution control practices for minimizing emissions of regulated pollutants and in conformance with manufacturer's recommended operating procedures at all times, including periods of startup, shutdown, maintenance and malfunction. The issuing authority will determine whether the permittee is using acceptable operating and maintenance procedures based on information available to the issuing authority which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, review of operating and maintenance records, and inspection of the permitted source.
15. The Emission Unit must undergo a tune-up consistent with the manufacturer's specifications to ensure oxidizer destruction removal efficiency. The permittee shall perform each tune-up as follows:
 - a. The permittee shall consistently inspect the direct-fired thermal oxidizer and clean or replace any components as necessary.
 - b. The permittee shall inspect the thermal oxidizer and ensure that loads do not exceed 31,665 lbs/hour (30,000 PPM in soil feed of 20 tons/hour, equivalent to 132.7 gal/hour #2 Fuel Oil).
 - c. The permittee shall optimize total emissions of CO. This optimization shall be consistent with the manufacturer's specifications.
 - d. The permittee shall measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made.
16. The Emission Unit shall use butane fuel and No. 2 Fuel Oil. The sulfur content of diesel and biodiesel shall be the lowest sulfur fuel available in American Samoa, but shall not exceed 0.5 percent sulfur by weight in accordance with federal New Source Performance Standards (NSPS) requirements.
17. The Emission Unit shall not cause to be discharged into the atmosphere any gases that exhibit 20 percent (20%) opacity or greater averaged over any six (6) consecutive minute period.
18. The permittee shall maintain the Carbon Monoxide (CO) in the exhaust gas released in

the environment between 50 PPM and 100 PPM to ensure combustion efficiency and sustain emission rate of hazardous air pollutants as a result of combustion. The permittee shall submit CO concentration readings to the issuing authority on a weekly basis. Any exceeding of CO shall be reported to the issuing authority immediately.

19. The Emission Unit stack shall:

- a. Be above the buildings in the vicinity,
- b. Discharge vertically, and
- c. Have no obstructions to gas flow such as rain caps, except for hinged rain caps.

Section 3: Monitoring and Testing Requirements

20. *Visible Emissions Survey*

At least once during each month in which the Emission Unit operates, the permittee shall perform a visible emissions survey of the Emission Unit subject to the opacity limit in Condition 17 above. The survey shall be performed during daylight hours by an individual with sufficient knowledge and understanding of EPA Method 22 while the Emission Unit is in operation. If visible emissions are detected at a level greater than the specified requirement during the survey, the permittee shall either:

- a. Take corrective action so that within 72 hours visible emissions are within the specified limitations; or
- b. Demonstrate compliance with the opacity limits using EPA Method 9 by an individual with sufficient knowledge and understanding of EPA Method 9.

21. *Initial Performance Testing*

Within 14 days after achieving the maximum production rate at which the Emission Unit will operate, but not later than 300 days after the first day of operation after the issuing authority issues the permit, the permittee shall perform an initial performance test to verify compliance with the applicable emission limitations in Section 2.

Performance tests shall be performed:

- a. According to an AS-EPA-approved test plan; the permittee shall prepare and submit the test plan to AS-EPA for review not less than 15 calendar days before the proposed date of the test;
- b. While the permitted source is operating under typical operating conditions;
- c. Using test methods from 40 CFR part 60, Appendix A. In lieu of the test methods from 40 CFR part 60, Appendix A, measurements for CO may be taken using portable analyzers according to ASTM D6522-00, as incorporated by reference in 40 CFR 63.14(b)(27); and

22. *Additional Performance Testing*

Ongoing performance tests meeting the criteria of the initial performance test in Condition 20 shall be performed:

- a. When required by the issuing authority; and
- b. At least once every five (5) years.

Section 4: Recordkeeping Requirements

23. The permittee shall maintain all records required to be kept by this permit onsite throughout the duration of the project unless otherwise stated in this permit.
24. The permit Application and all documentation supporting that application shall be maintained by the permittee for the duration of time the Emission Unit is covered under this permit.
25. The permittee shall keep records of butane and No. 2 fuel supplier certifications to demonstrate compliance with the sulfur content limits in Condition 15. The certification shall contain the sulfur content of the fuel and the method used to determine the sulfur content.
26. The dates and results of each visible emissions survey performed pursuant to Condition 17 shall be recorded. At a minimum, records shall include:
- a. The name of the person, company or entity conducting the survey;
 - b. Whether visible emissions were detected from the Emission Unit;
 - c. Any corrective action taken;
 - d. The result of any corrective action; and
 - e. The results of any Method 9 tests performed.
27. The permittee shall record the concentration of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measures before and after the tune-up of the Emission Unit according to Condition 18.
28. The permittee shall record any corrective actions taken as part of a tune-up of the Emission Unit.
29. The results of each performance test conducted pursuant to Condition 21 and 22 shall be recorded. At a minimum, the permittee shall maintain records of:
- a. The date of each test;
 - b. Each test plan;
 - c. Any documentation required to approve an alternate test method;
 - d. Conditions during the test;

- e. The results of each test; and
- f. The name of the company or entity conducting the test and analysis of results.

Section 5: Notification and Reporting Requirements

30. *Environmental Community Engagement*

The permittee shall conduct a townhall meeting before and after the entirety of the operation. The permittee shall conduct a townhall meeting at least 10 days before the start of the operation to educate the community on the details of the operation. A signed agreement between the village and ERRG on the hours of operation for the specific operations (truck hauling, excavation at the site and treatment plant) must be submitted to AS-EPA at least 30 days before the start of the operation. In addition, the permittee shall conduct a townhall meeting no longer than 10 days after the completion of the program to educate the community on the details of the project and the end-results of the entire operation.

31. *Notification of Construction or Modification, and Operations*

The permittee shall submit a written or electronic notice to the issuing authority within 30 days from when the permittee begins actual construction or modification of the Emission Unit, and when the permittee begins operations or resumes operation.

32. *Notification of Change in Ownership*

If the Emission Unit changes ownership, then the permittee must submit a written or electronic notice to the issuing authority immediately after the change in ownership is effective. In the submittal, the permittee must provide the issuing authority a written agreement containing a specific date for transfer of ownership, and an effective date on which the new owner assumes partial and/ or full coverage and liability under this permit. The submittal must identify the previous owner, and update the name, street address, mailing address, contact information, and any other information about the Emission Unit if it would change as a result of the change of ownership. The permittee shall ensure that the Emission Unit remains in compliance with the permit during any such transfer of ownership.

33. *Notification of Closure*

The permittee must submit a report of any permanent or indefinite closure to the issuing authority in writing immediately after the cessation of all operations at the facility. The notification must identify the owner, the current location, and the last operating location of the Emission Unit. It is not necessary to submit a report of closure for regular, seasonal closures, or closures due to intermittent operational constraints.

34. *Deviation Reports*

The permittee shall promptly report to the issuing authority any deviations from permit requirements including deviations attributable to upset conditions. Deviation reports shall

include:

- a. Identity of the affected emission unit where the deviation occurred;
- b. Nature of the deviation;
- c. Length of time of the deviation;
- d. Probable cause of the deviation; and
- e. Any corrective actions or preventive measures taken as a result of the deviation to minimize emissions from the deviation and to prevent future deviations.
- f. For the purposes of this permit, *promptly* means:
 - i. Immediately or not more than 72 hours of discovery for deviations from any opacity or emission limit in Section 2; or

35. *Performance Test Reports*

The permittee shall submit a test report to the issuing authority within 30 days after the completion of any required performance test. At a minimum, the test report shall include:

- a. A description of the Emission Unit and sampling location(s);
- b. The time and date of each test;
- c. A summary of test results, reported in units consistent with the applicable standard;
- d. A description of the test methods and quality assurance procedures used;
- e. A summary of any deviations from the proposed test plan and justification for why the deviation(s) was necessary;
- f. The amount and type of fuel burned, raw material consumed, and/or product produced, as applicable, during each test run;
- g. Operating parameters of the source and control equipment during each test run;
- h. Sample calculations of equations used to determine test results in the appropriate units; and
- i. The name of the company or entity performing the test and analysis of results.

36. *Reporting and Notification Address*

The permittee shall send all required and requested reports and documentation to the issuing authority at the mailing address below:

Director
American Samoa Environmental Protection Agency
P.O. Box PPA
Pago Pago, AS 96799

37. *Signature Verifying Truth, Accuracy, and Completeness*

All reports and documentation required by this permit shall include the signature of a responsible official as to the truth, accuracy, and completeness of the information. The submittal must state that, based on information and belief formed after reasonable inquiry, the statements and information are true, accurate, and complete. If the permittee discovers

that any reports or notification submitted to the reviewing authority contain false, inaccurate, or incomplete information, the permittee shall notify the issuing authority immediately and correct or amend the submittal as soon as is practicable.

Section 6: Changes to this Permit

38. *Revising, Reopening, Revoking and Reissuing, or Terminating for Cause*

This permit may be revised, reopened, revoked and reissued or terminated for cause by the issuing authority. The filing of a request by the permittee, for a permit revision, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay any permit condition. This provision also applies to the documents incorporated by reference.

39. *Terminating Coverage under this Permit*

The issuing authority may terminate for cause a previously issued permit, and thereby terminate the permittee's authorization to construct or modify, and the Emission Unit authorization to operate under this permit. The issuing authority may provide the permittee with notice of the intent to terminate, and delay the effective date of the termination to allow the permittee to a proposed for cause termination.

Section 7: Abbreviations and Acronyms

ASAC	American Samoa Administrative Code
AS-EPA	American Samoa Environmental Protection Agency
ASTM	American Society for Testing and Materials
Btu	British thermal unit
CAA	Federal Clean Air Act
CFR	Code of Federal Regulations
CO	carbon monoxide
EPA	United States Environmental Protection Agency hp
	horsepower
LPG	liquified petroleum gas
MM	million
NAAQS	National Ambient Air Quality Standards
ppm	parts per million
ppmdv	parts per million, dry volume
PSD	Prevention of Significant Deterioration

Section 8: Definitions

For the purposes of this permit:

Biodiesel means a combustion fuel made from fatty acids or methyl esters that complies with the specifications of ASTM 6751.

Cause means that with respect to the issuing authority's ability to terminate a permitted source's coverage under a permit that:

1. The permittee is not in compliance with the provisions of this permit;
2. The issuing authority determines that the emissions resulting from the construction or modification of the permitted source significantly contribute to NAAQS violations, which are not adequately addressed by the requirements in this permit;
3. The issuing authority has reasonable cause to believe that the permittee obtained this permit by fraud or misrepresentation;
4. The permittee failed to disclose a material fact required by the Request for Coverage or the regulations applicable to the permitted source of which the applicant had or should have had knowledge at the time the permittee submitted the Application.

Construction means any physical change or change in the method of operation including fabrication, erection, installation, demolition, or modification of an emission unit that would result in a change of emissions.

Distillate fuel means fuel oils, including recycled oils that comply with the specifications for fuel oil numbers 1 and 2, as defined by ASTM 396, or equivalent.

Low Temperature Thermal Desorption is a technology that vaporizes contaminants from soils through the application of heat and then destroys these contaminants in downstream air pollution control devices.

Permittee means the owner or operator of a permitted source.

Permitted source means each emission unit for which an issuing authority issues a permit.

Standard cubic foot means a measure of the quantity of a gas equal to a cubic foot of volume at a temperature of 68 °F and a pressure of 29.92 inches of mercury.

- END -

Appendix B: Coastal Zone Management Agency Consistency Determination



PETTI T. MATILA
DIRECTOR

AMERICAN SAMOA GOVERNMENT
DEPARTMENT OF COMMERCE
A.P. LUTALI EXECUTIVE OFFICE BUILDING, 2ND FLOOR
PAGO PAGO, AMERICAN SAMOA 96799
www.doc.as

TELEPHONE: 684.633.5155
Serial No: DOC0559

March 20, 2024

FEDERAL CONSISTENCY CERTIFICATION

Concurrence with Federal Consistency Certification:

Agency: Engineering Remediation Resources Group, Inc

Proposal: Fuel Pipeline and Petroleum Contaminated Soil Removal

Location: Aua, American Samoa

The American Samoa Coastal Management Program ("ASCMP") is pleased to inform you that it **concurs** with our consistency certification for the proposed project.

Under the federal consistency provision of the Coastal Management Act of 1972, as amended, all federal projects, federally licensed activities, or federally funded project occurring within a coastal zone must be conducted in a manner consistent with the state's or territory's approved management program (Coastal Management Act, § 307(c)(3)(A)). The ASCMP was approved in 1980 and codified in law in 1991. No federal permits or federal funding will be issued until ASCMP has issued a federal consistency determination.

ASCMP has reviewed the proposed project, and concurs with the certification's findings that the project will comply with the approved ASCMP policies and will be conducted in a manner consistent with the program. This concurrence is conditioned on the terms and conditions of the land use permit.

This certification should remain in your project documents file.

Sincerely,

Petti T. Matila
Department of Commerce, Director

cc: ASCMP File

Appendix C: American Samoa Historic Preservation Office Coordination Record



PETTI T. MATILA
DIRECTOR

AMERICAN SAMOA GOVERNMENT
DEPARTMENT OF COMMERCE
A.P. LUTALI EXECUTIVE OFFICE BUILDING, 2ND FLOOR
PAGO PAGO, AMERICAN SAMOA 96799
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Concurrence with Federal Consistency Certification:

Agency: Engineering Remediation Resources Group, Inc

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ASCMP has reviewed the proposed project, and concurs with the certification's findings that the project will comply with the approved ASCMP policies and will be conducted in a manner consistent with the program. This concurrence is conditioned on the terms and conditions of the land use permit.

This certification should remain in your project documents file.

Sincerely,

Petti T. Matila
Department of Commerce, Director

cc: ASCMP File

Appendix D: Finding of No Practicable Alternative and Federal Emergency Management Agency Floodplain Maps

FINDING OF NO PRACTICABLE ALTERNATIVE (FONPA)

Pipelines and Petroleum-Contaminated Soil Removal at the Former Aua Fuel Farm,
Aua Village, Island of Tutuila, American Samoa
Formerly Used Defense Site Project No. H09AS000704

INTRODUCTION

The U.S. Army Corps of Engineers (USACE) has determined that elements of the action proposed in the Draft EA to remediate petroleum contamination from fuel pipelines, soils, and water within the former Aua Fuel Farm may be conducted within special flood hazard portions of the 100-year floodplain at Aua Village, Tutuila Island, American Samoa (**Figures 1 and 2**).

Executive Order (EO) 11988, *Floodplain Management*, and EO 13690, *Establishing a Federal Flood Risk Management Standard and a Process for Further Solicitation and Considering Stakeholder Input*, requires federal agencies to determine whether a proposed action would occur within a floodplain and to avoid floodplains to the maximum extent possible when there is a practicable alternative. The 100-year floodplain is defined as an area adjacent to a water body that has a 1 percent or greater chance of inundation in any given year.

PROPOSED ACTION

The proposed action includes the removal of derelict petroleum pipeline infrastructure; petroleum-contaminated soil characterization, removal, and treatment or disposal; free-product removal and disposal; treatment of construction dewatering fluids; post-excavation soil sampling; site restoration; installation of additional groundwater monitoring wells; and groundwater assessments at the former Aua Fuel Farm. Because the proposed action involves remediation of a former fuel storage facility, the removal of contaminated pipelines, soil, and water must occur in situ at the existing site. Therefore, only alternatives for staging equipment and the post-removal soil and water treatment processes could be evaluated.

Alternatives Selection Criteria

The practicability of a given alternative for the proposed remediation site was evaluated by considering pertinent factors such as community welfare, environmental impact, and feasibility in light of the overall purpose and need. USACE developed screening criteria to assess whether an alternative would meet its purpose and need and, therefore, could be considered reasonable. The following criteria were used to evaluate a range of reasonable alternatives for the staging and soil remediation actions:

- **Safety**. Protect public and worker safety, to the maximum extent possible, by reducing the probability of accident or injury in all phases of the remediation process.
- **Time**. Select and implement a remediation approach that adheres to the Tutuila government timeframe for demobilization and refurbishment of Onesosopo Park in 2024 and 2025.
- **Space**. Select and implement a decommissioning option that provides adequate space to perform all associated work activities safely and efficiently.
- **Environmental**. Avoid or minimize adverse effects on protected, beneficial, or valued environmental resources, to the maximum extent possible.

Based on the selection criteria, a Preferred Alternative (proposed action), including four sub-alternatives, and a No Action Alternative were selected for detailed analysis in the Draft Environmental Assessment (EA). The proposed action involves temporarily working in the 100-year floodplain to (1) remove fuel pipeline remnants and petroleum-contaminated soil and waters within historically polluted areas, and (2) to transport and treat soil nearby at Onesosopo Park or the Pago Pago Airport before returning decontaminated soils back to the Aua Valley site for restoration. The action area encompasses the footprint of the former Aua Fuel Farm tank storage area within the Aua Valley (the approximate 44-acre contamination site), and 3 acres at Onesosopo Park or the Pago Pago Airport where soil thermal treatment processing and equipment staging would occur. Removal, treatment, and restoration work will occur during a period of approximately 6 months in 2024 and potentially in 2025, after which time all equipment will be removed from the area.

The proposed areas are the most suitable because they are proximal to the contamination, provide adequate space, and offer the least amount of heavy equipment interference on roadways during transport. No other site is immediately available that provides the space and proximal access necessary for soil decontamination processing and equipment storage. Therefore, there is no practicable alternative.

NOTICE OF FLOODPLAIN INVOLVEMENT

Publication of the Notice of Availability for the combined Draft EA and FONPA commences a 30-day public review and comment period. The notice also states that the 30-day public review period applies to this Draft FONPA. Written comments on the Draft FONPA may be submitted to USACE, Honolulu District, ATTN: HonoluluDistrictFUDSInfo@usace.army.mil.

FINDING OF NO PRACTICABLE ALTERNATIVE

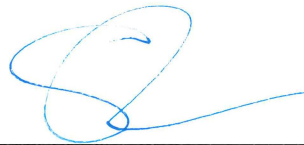
In this instance, avoiding the floodplain entirely for the proposed action is unrealistic due to the site topography of existing contaminated areas and proximity to the proposed treatment area location at Onesosopo Park or Pago Pago Airport, which are the only large, level, available parcels in the project vicinity that can accommodate the thermal treatment equipment necessary for decontamination.

Proposed activities would not alter or interfere with the long-term function of the 100-year floodplain or increase the potential for flooding in the project area. No new impermeable surfaces or permanent structures will be built in wetlands or within the floodplain. The USACE will also mandate full utilization of Best Management Practices, National Pollution Discharge Elimination System permit requirements, site-specific Stormwater Pollution Prevention Plan, and other pre- and post-construction Agency recommendations to reduce the potential adverse impact to water bodies.

After careful consideration of the information presented in the Draft EA, I find there is no practicable alternative to conducting work within the floodplain. This finding fulfills the requirements of EOs 11988 and 13690 for a FONPA.

8 July 24

Date



CHRISTOPHER RYAN PEVEY
LTC, EN
Commanding

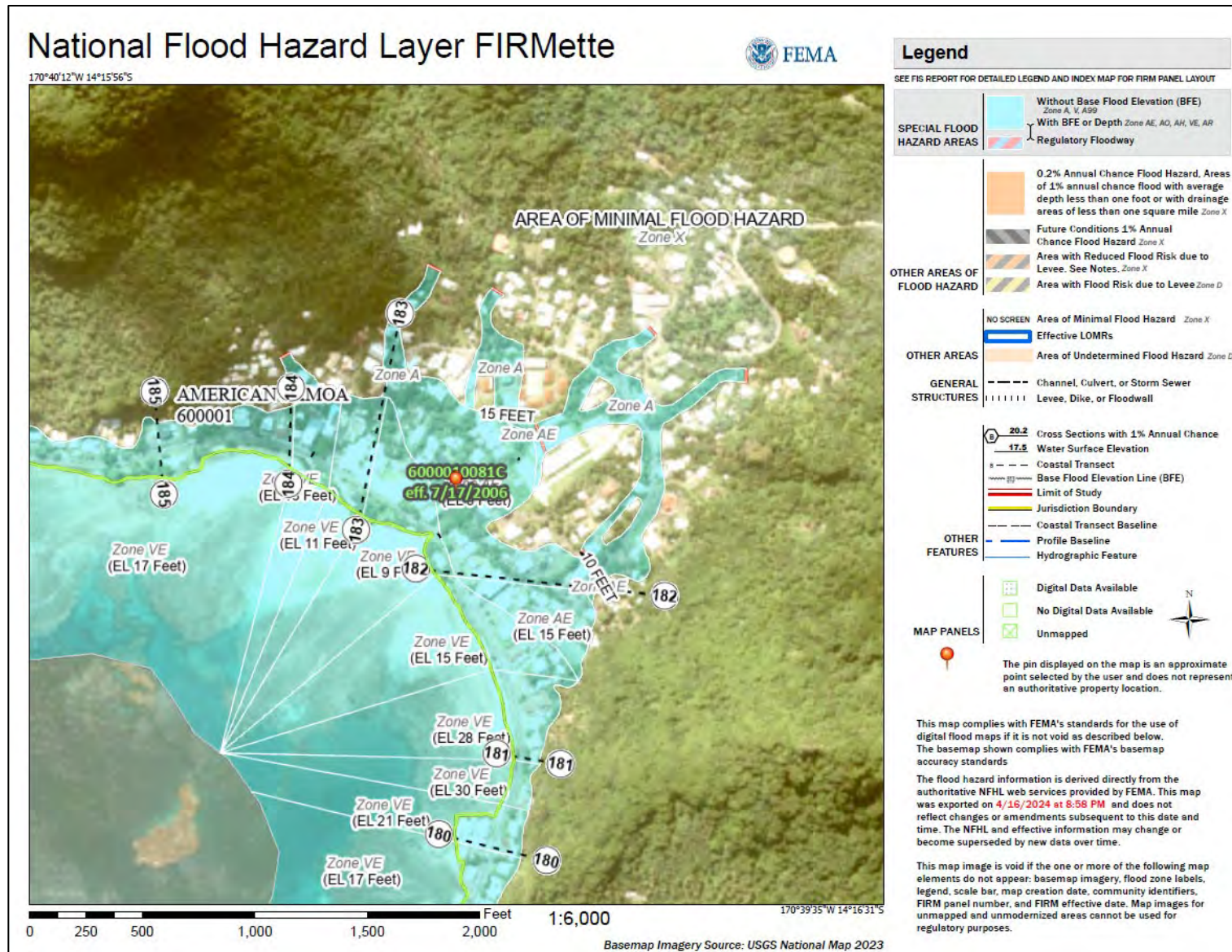


Figure 1. FEMA flood map of the Aua Valley where the proposed project activities would occur. Areas shaded blue indicate high flooding risk during a 1% annual chance storm event.

National Flood Hazard Layer FIRMette

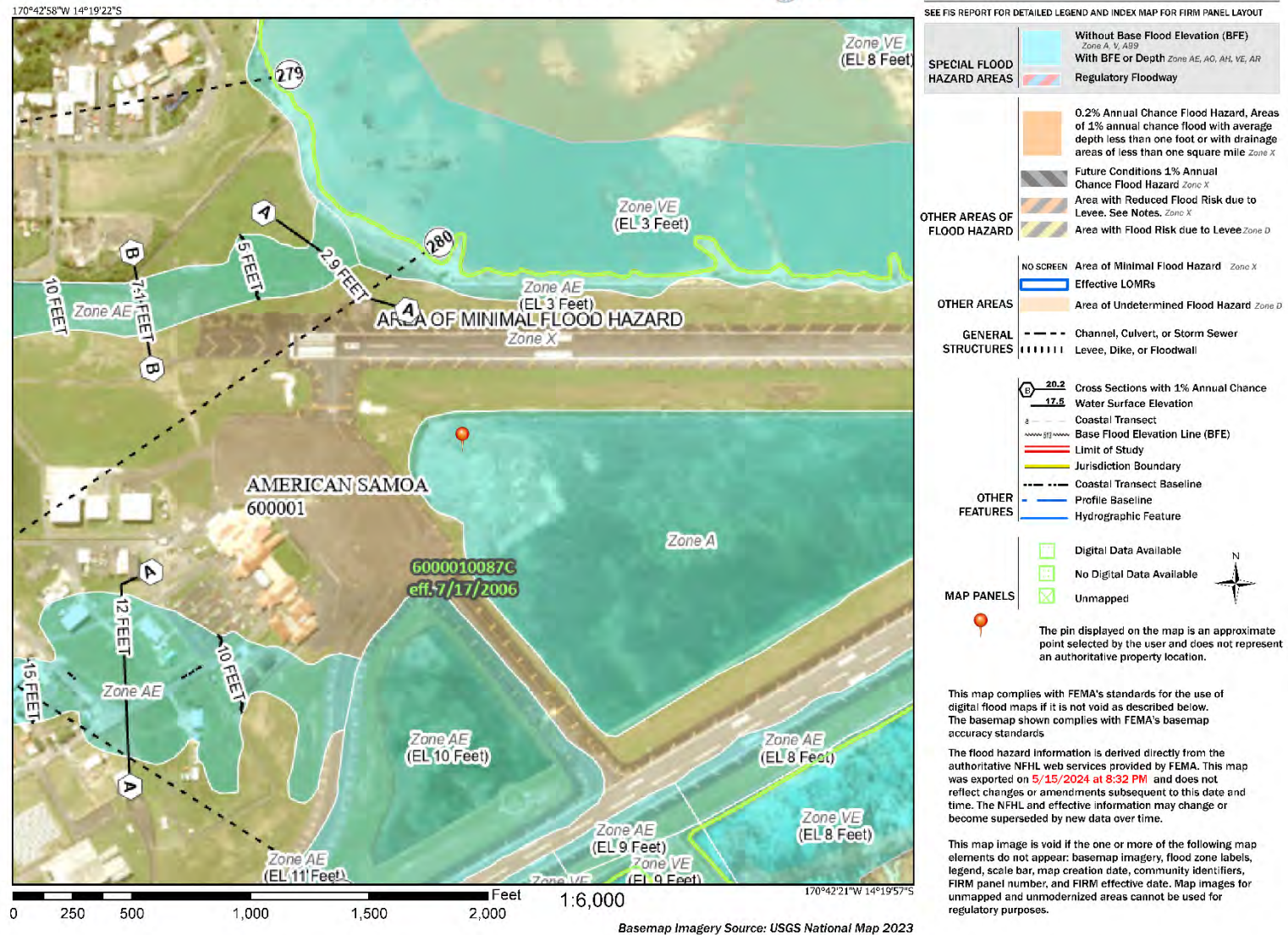


Figure 2. FEMA flood map of the Pago Pago Airport where the proposed project activities would occur. Areas shaded blue indicate high flooding risk during a 1% annual chance storm event.

Appendix E: Endangered Species Act Consultation Record



PETTI T. MATILA
DIRECTOR

AMERICAN SAMOA GOVERNMENT
DEPARTMENT OF COMMERCE
A.P. LUTALI EXECUTIVE OFFICE BUILDING, 2ND FLOOR
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TELEPHONE: 684.633.5155
Serial No: DOC0559

March 20, 2024

FEDERAL CONSISTENCY CERTIFICATION

Concurrence with Federal Consistency Certification:

Agency: Engineering Remediation Resources Group, Inc

Proposal: Fuel Pipeline and Petroleum Contaminated Soil Removal

Location: Aua, American Samoa

The American Samoa Coastal Management Program ("ASCMP") is pleased to inform you that it **concurs** with our consistency certification for the proposed project.

Under the federal consistency provision of the Coastal Management Act of 1972, as amended, all federal projects, federally licensed activities, or federally funded project occurring within a coastal zone must be conducted in a manner consistent with the state's or territory's approved management program (Coastal Management Act, § 307(c)(3)(A)). The ASCMP was approved in 1980 and codified in law in 1991. No federal permits or federal funding will be issued until ASCMP has issued a federal consistency determination.

ASCMP has reviewed the proposed project, and concurs with the certification's findings that the project will comply with the approved ASCMP policies and will be conducted in a manner consistent with the program. This concurrence is conditioned on the terms and conditions of the land use permit.

This certification should remain in your project documents file.

Sincerely,

Petti T. Matila
Department of Commerce, Director

cc: ASCMP File



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawai'i 96850



In Reply Refer To:
2024-0003730-S7-001

October 31, 2023

Madelyn T. Martinez
U.S. Army Corps of Engineers
Honolulu District
Fort Shafter, Hawai'i 96858-5440

Subject: Species List for the Proposed Aua Fuel Farm Soil and Tank Removal Project,
Tutuila, American Sāmoa

Dear Ms. Martinez:

The U.S. Fish and Wildlife Service (Service) received your email on October 4, 2023, requesting a threatened and endangered species list for the Municipal Sewer Installation Support and Fuel Pipeline and Petroleum Contaminated Soil Removal from the former Aua Fuel Farm Project (FUDS Project No. H09AS000704) and Municipal Sewer Installation Support at Aua Village, Ma'oputasi County, in the Eastern District of Tutuila Island, within American Sāmoa. The Fuel Farm project includes the use of heavy equipment to remove, haul, and treat contaminated soils from 12 sites within an abandoned U.S. Military World War II fuel farm. The Municipal Sewer Installation project will lay piping in trenches dug for the Fuel Farm project. In addition, dewatered effluent from the trenches will be treated prior to disposal of soil product in the ocean.

Our response is in accordance with section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 *et seq.*). Our data indicate the endangered *Ostodes strigatus* and *Eua zebrina* (hereafter collectively referred to as American Samoa snails); endangered Central South Pacific (CSP) Distinct Population Segment (DPS) of the lauamei ena'ena (green sea turtle, *Chelonia mydas*) and endangered laumei uga (hawksbill sea turtle, *Eretmochelys imbricata*) (hereafter collectively referred to as sea turtles) may be present within the proposed project area. There is no federally designated critical habitat within the immediate vicinity of the proposed projects.

American Samoa Snails

Eua zebrina is a tree snail found primarily on leaves of understory trees on the islands of Tutuila and Ofu. Snails require native forest canopy and understory plants. *Ostodes strigatus* is a ground-

PACIFIC REGION 1

IDAHO, OREGON*, WASHINGTON,
AMERICAN SĀMOA, GUAM, HAWAI'I, NORTHERN MARIANA ISLANDS

*PARTIAL

dwelling snail found in rocky areas under relatively closed canopy with sparse understory and is endemic to Tutuila. Closed canopies and areas with heavy tree cover appear to be an important habitat factor for this species. Threats for snails include habitat destruction through agriculture, urban development and introduced ungulates, fire, predation by introduced rats and invertebrates, typhoons, public collection, and low numbers of individuals. Threats from the proposed project may also include human activity. If pedestrian and vehicular traffic occur in areas where snails are known to occur, snails can be dislodged from leaves in understory vegetation and be trampled and crushed. Vegetation trimming and disturbance can also dislodge snails so they become vulnerable to trampling. Intact vegetation is important for maintaining microclimates and air movement conditions that allow snails to survive in a given area.

To avoid potential adverse effects to listed tree snails, we recommend you incorporate the following into your project design:

- Where work must be conducted in forested areas, survey proposed project sites for the presence of tree snails.
- If any tree snails are found, determine the extent of the colony by surveying outwards in all directions from the original sighting until individuals are no longer detected.
- Avoid cutting or removing vegetation within 200 feet of the known occurrence to minimize impacts to the tree snails and their habitat.
- Mark the trees and shrubs occupied by tree snails with brightly colored flagging tape and keep foot traffic to a minimum of 33 feet from marked vegetation to avoid inadvertently dislodging and trampling individuals.
- Avoid clearing understory and overstory forest vegetation outside existing developed areas.
- Confine movement of heavy equipment to existing roadways.
- Train personnel who work in tree snail habitat to identify the listed species and their habitat.

Sea Turtles

The Service consults on sea turtles and their use of terrestrial habitats (beaches where nesting and/or basking is known to occur), whereas the National Oceanic and Atmospheric Administration (NOAA) Fisheries consults on sea turtles in aquatic habitats. We recommend that you consult with NOAA Fisheries regarding the potential impacts from the proposed project if it may affect off-shore or open ocean habitats.

Green sea turtles may nest on any sandy beach area in the Pacific Islands. Hawksbill sea turtles exhibit a wide tolerance for nesting substrate (ranging from sandy beach to crushed coral) with nests typically placed under vegetation. Both species exhibit strong nesting site fidelity. Nesting occurs on beaches from October through March.

Construction on, or in the vicinity of, beaches can result in sand and sediment compaction, sea turtle nest destruction, beach erosion, contaminant and nutrient runoff, and an increase in direct and ambient light pollution which may disorient hatchlings or deter nesting females. Off-road vehicle traffic may result in direct impacts to sea turtles or nests, and also contributes to habitat degradation through erosion and compaction.

To avoid and minimize project impacts to sea turtles and their nests we recommend you incorporate the following measures into your project design:

- No vehicle use on or modification of the beach/dune environment during the sea turtle nesting or hatching season (October to March).
- Do not remove native dune vegetation.
- Incorporate applicable best management practices regarding Work in Aquatic Environments (see enclosed) into the project design to minimize sedimentation, erosion, and pollutant impacts to water quality.
- Remove any project-related debris, trash, or equipment from the beach or dune if not actively being used.
- Do not stockpile project-related materials in the intertidal zone, reef flats, sandy beach and adjacent vegetated areas, or stream channels.

Optimal sea turtle nesting habitat is a dark beach free of barriers that restrict sea turtle movement. Nesting turtles may be deterred from approaching or laying successful nests on lighted or disturbed beaches. They may become disoriented by artificial lighting, leading to exhaustion and placement of a nest in an inappropriate location (such as at or below the high tide line). Hatchlings that emerge from nests may also be disoriented by artificial lighting. Inland areas visible from the beach should be sufficiently dark to allow for successful navigation by hatchlings to the ocean.

To avoid and minimize project impacts to sea turtles from lighting we recommend incorporating the following applicable measures into your project design:

- Avoid nighttime work during the nesting and hatching season (October to March).
- Minimize the use of lighting on or near beaches and shield all project-related lights so the light is not visible from any beach.
 - If lights cannot be fully shielded or if headlights must be used, fully enclose the light source with light filtering tape or filters.

We appreciate your efforts to conserve endangered species. If you have questions regarding this response, please contact Joy Browning, Fish and Wildlife Biologist (phone: 808-792-9400, email: joy_browning@fws.gov). When referring to this project, please include this reference number: 2024-0003730-S7-001.

Sincerely,

JINY
KIM
Digitally signed
by JINY KIM
Date:
2023.10.31
15:17:01 -10'00'

Island Team Manager
O'ahu, Kaua'i, Northwest Hawaiian Islands and
American Sāmoa

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

The U.S. Fish and Wildlife Service (Service) recommends the following measures are incorporated into project planning to avoid or minimize impacts to fish and wildlife resources. Incorporation of these BMPs may reduce negative impacts to aquatic habitats from project construction-related activities. These BMPs are recommended in addition to, and do not over-ride any terms, conditions, or other recommendations prepared by the Service, other Federal, state, or local agencies. Please contact the Service Aquatic Ecosystems Conservation Program at 808-792-9400 with any questions.

1. Authorized dredging and filling-related activities that may result in the temporary or permanent loss of aquatic habitats should be designed to avoid indirect, negative impacts to aquatic habitats that extend beyond the planned project area.
2. Dredging/filling in the marine environment should be scheduled to avoid coral spawning and recruitment periods, and sea turtle nesting and hatching periods. Because these periods vary throughout the Pacific islands, we recommend contacting the relevant local, state, or Federal fish and wildlife resource agency for site specific guidance.
3. Turbidity and siltation from project-related work should be minimized and contained within the project area by silt containment devices and curtailing work during flooding or adverse tidal and weather conditions. The BMPs should occur for the life of the construction period until turbidity and siltation within the project area is stabilized. All project construction-related debris and sediment containment devices should be removed and disposed of at an approved site.
4. All project construction-related materials and equipment (i.e., dredges, vessels, backhoes, silt curtains, etc.) to be placed in an aquatic environment should be inspected for pollutants including, but not limited to; marine fouling organisms, grease, oil, etc., and cleaned to remove pollutants prior to use. Project related activities should not result in any debris disposal, non-native species introductions, or attraction of non-native pests to the affected or adjacent aquatic or terrestrial habitats. Implementing both a litter-control plan and a Hazard Analysis and Critical Control Point plan (HACCP – see <https://www.fws.gov/policy/A1750fw1.html>) can prevent attraction and introduction of non-native species.
5. Project construction-related materials (i.e., fill, revetment rock, pipe, etc.) should not be stockpiled in, or in close proximity to aquatic habitats and should be protected from erosion (e.g., with filter fabric, etc.), to prevent materials from being carried into waters by wind, rain, or high surf.
6. Fueling of project-related vehicles and equipment should occur away from the aquatic environment and a contingency plan to control petroleum products accidentally spilled during the project should be developed. The plan should be retained on site with the person responsible for compliance with the plan. Absorbent pads and containment booms should be stored on-site to facilitate the clean-up of accidental petroleum releases.
7. All deliberately exposed soil or under-layer materials used in the project near water should be protected from erosion and stabilized as soon as possible with geotextile, filter fabric or native or non-invasive vegetation matting, hydro-seeding, etc.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
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May 1, 2024

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RE: Request for Informal ESA Consultation and Conference on the U.S. Army Corps of Engineers Formerly Used Defense Site Aua Rapid Response, Aua Village, Tutuila Island, America Samoa (I-PI-23-2207-DG, PIRO-2023-03412/ FUDS #H09AS000704/ NPDES Permit #AS0020048)

Dear Ms. Scott:

On January 12, 2024, NOAA's National Marine Fisheries Service (NMFS) received your written request for informal consultation and conference on the U.S. Army Corps of Engineers (USACE) Aua Rapid Response in Aua Village, Tutuila Island, America Samoa. On October 5, 2023, USACE met with the U.S. Environmental Protection Agency (EPA) to discuss the lead federal action agency to initiate consultation with NMFS and it was agreed that USACE would take the lead. The proposed action may affect the endangered or threatened species, as identified below in Table 1. On January 12, 2024, we requested additional technical information related to the project. On January 12, 2024, the USACE sent updated project details. On January 16, 2024, we received all necessary information to evaluate the proposed action and initiated section 7 consultation. However, on February 14, 2024, USACE notified us of a proposed change to the project design and the consultation was paused pending updated information. On April 9, 2024, we received the supplemental project information and confirmed we received all necessary information to evaluate the proposed action and proceeded with section 7 consultation.

We prepared this response to your request pursuant to section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. §1531 *et seq.*), implementing regulations at 50 CFR 402, and agency guidance for the preparation of letters of concurrence. This letter also underwent pre-dissemination review using standards for utility, integrity, and objectivity in accordance with applicable guidelines issued under the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). A complete record of this consultation is on file at the Pacific Island Regional Office, Honolulu, Hawaii.



Under section 7(a)(4) of the ESA, each Federal agency shall confer with the Secretary on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed or result in the destruction or adverse modification of critical habitat proposed to be designated for such species. While consultations are required when the proposed action may affect listed species, a conference is required only when the proposed action is likely to jeopardize the continued existence of a proposed species or destroy or adversely modify proposed critical habitat. However, Federal action agencies may request a conference on any proposed action that may affect proposed species or proposed critical habitat (USFWS & NMFS 1998).

Proposed Action

The USACE proposes to remove a remnant fuel pipeline and treat contaminated soils at a Formerly Used Defense Site (FUDS) in Aua Village on Tutuila Island, American Samoa, under the authority given to USACE through the Defense Environmental Restoration Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 and the Resource Conservation and Recovery Act (RCRA) of 1976 for certain cleanup activities at former Department of Defense sites in the United States and its territories. In 2021, USACE remediated soils and removed remnant fuel tanks associated with the abandoned U.S. Military World War II fuel farm within Aua Village. However, a review of the project found sheens of petroleum products within the project area, halting the American Samoa Government's plans to install a sewer system. Additional USACE investigations found a 12-inch remnant fuel pipeline that continues to leak petroleum products into the environment. Therefore, USACE will revisit Aua Village to remove the remnant fuel pipeline, remediate soil, and assist with soil dewatering during sewer installation. The project will take approximately six to eight months and begin in May 2024.

The EPA proposes to issue a National Pollutant Discharge Elimination System (NPDES) permit (No.: AS0020048) to USACE for the discharge of treated construction dewatering effluent from the Former Aua Fuel Farm Temporary Water Treatment System to outer Pago Pago Harbor located on the island of Tutuila, American Samoa. USACE applied for the permit on August 7, 2023. USACE contracted Engineering/Remediation Resources Group (ERRG) to provide labor, equipment, and materials to support the management and disposal of petroleum-contaminated dewatering effluent and soil encountered during trenching operations associated with sewer installation work and fuel pipeline removal at the site of the former Aua Fuel Farm. Project personnel will process dewatering effluent through a temporary water treatment train, which will be located in the village of Aua, before discharge into nearshore waters.

The proposed action can be broken down into three phases: 1) construction of a temporary treatment plant to treat effluent and treatment of dewatering effluent, 2) removal and treatment of petroleum-contaminated soil, and 3) investigation and removal of the fuel pipeline.

Temporary Treatment Plant

ERRG will construct a temporary water treatment plant near the main sewer excavation trench to manage the dewatering effluent. The water treatment plant will be 20 feet by 200 feet. The facility process train will include a 20,000-gallon capacity intake tank followed by two parallel oil-water separators, a control systems treatment skid, pumps (six 500-gpm Grundfos CR95 Series, or similar), media filters, and a bag filter skid for particulate/solids removal (Figure 1). An additional 20,000-gallon capacity holding tank will follow the treatment train and will be equipped with a petroleum sensor, alarm, shut-off valve, and sampling port (Figure 1). Project

personnel will use the final holding to reduce water turbulence, conduct visual observation, and collect water samples. Treated water will be discharged into Pago Pago Harbor.

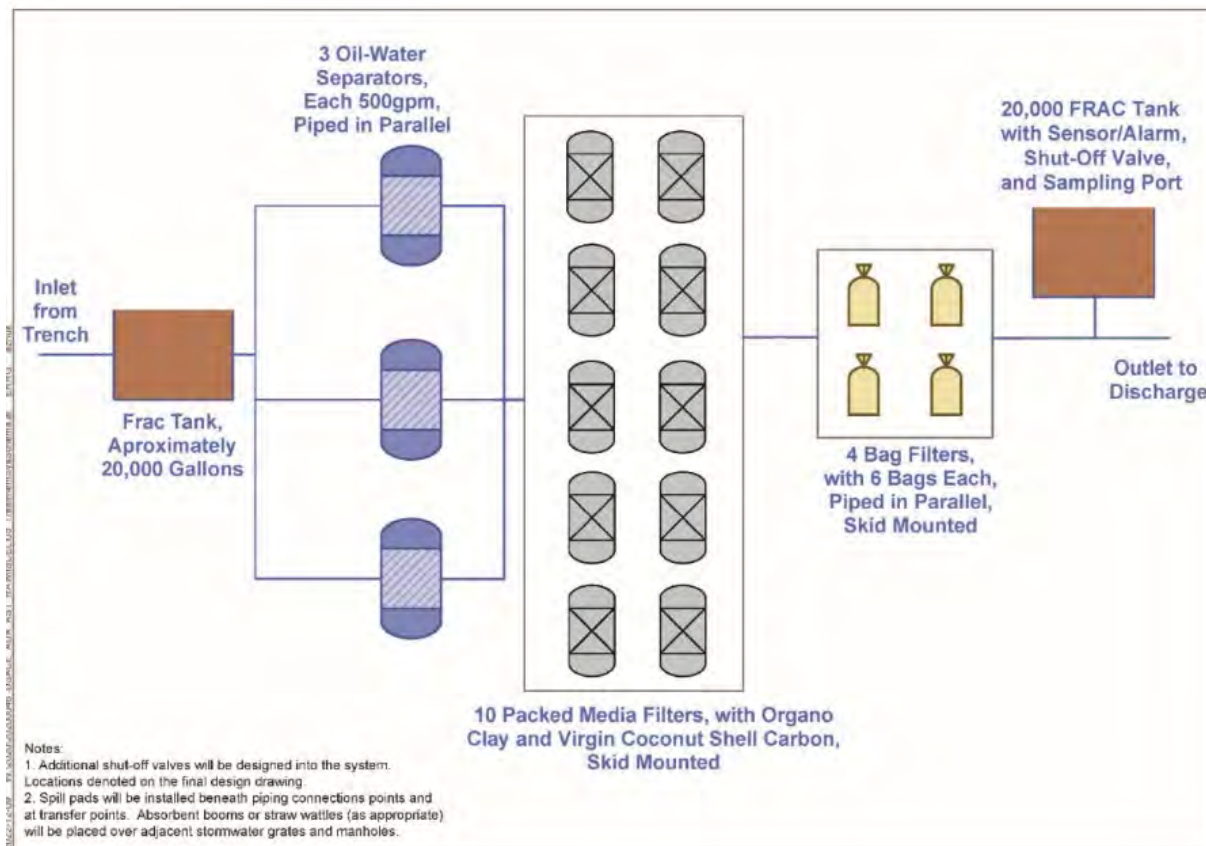


Figure 1. Treatment system schematic for the temporary treatment plant in Aua Village, Tutuila, American Samoa.

The sewer installation trenches will be approximately six feet wide and up to 12 feet deep. Groundwater in the area is anticipated to occur three feet below the surface. Project personnel will excavate and dewater the sewer pipe installation site by connecting dewatering pumps from the sewer excavation site to the water treatment system intake by a series of land-based hoses and/or pipes. The water treatment plant will remove free petroleum products from the dewatering effluent before discharge into Pago Pago Harbor. Based on dewatering rates for the sewer support project, testing, and storage of the effluent pending laboratory results before discharge is not feasible. However, project personnel will process the water through the treatment plant and monitor it in real-time as required in the EPA NPDES permit.

ERRG will place the discharge pipe across the shoreline onto a rock outcropping/revetment. Project personnel will not construct or place the pipe into the water. However, personnel will place a containment boom into the water to capture any accidental petroleum release. Five possible locations for the outfall have been chosen, but site one is the preferred location due to its proximity to the water treatment plant and sewer installation locations. (Figure 2). EPA (2023) NPDES Permit Nos. AS0020048 contains authorizations, effluent limits, and monitoring requirements for the facility as described below.

The total discharge for the sewer line project will be approximately 1 million gallons per day (MGD) with a total of 22 MG discharged over two months. The total discharge for the pipeline excavation project will be approximately 80,000 gallons over a two or three-month period. As per the permit, the maximum discharge rate is 1,500 gallons per minute (gpm).



Figure 2. Aua Village map showing the possible locations of the discharge pipe (1-6), the wastewater treatment plant, and sewer installation work.

Water quality standards consist of designated uses, water quality criteria necessary to protect the designated uses, antidegradation requirements¹, and general policies affecting the application and implementation of water quality standards that states, territories, and authorized tribes may include at their discretion (e.g., mixing zones, variances, critical low-flow policies, etc.). States, territories, and tribes establish water quality standards to meet the objectives set forth in Section 101(a) of the Clean Water Act².

American Samoa Water Quality Standards (ASWQS), 2018 Revision, Administrative Rule No. 001-2019 (§ 24.0205 et seq.) require that embayments are to remain in as near their natural state as possible to support recreational and substance fishing, propagation of marine life, and industrial water supply. Pago Pago Harbor has been designated by the American Samoa Government to be developed into a transshipment center for the South Pacific. Recognizing its

¹ “Where the quality of the waters exceeds levels necessary to support the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected... (50 CFR 131.12(a)(2))

² Restore and maintain the chemical, physical, and biological integrity of the Nation's waters; wherever attainable, achieve a level of water quality that provides for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water.

unique position as an embayment where water quality has been degraded from the natural condition, the ASWQS (§ 24.0201et seq.), establishes water quality criteria for Pago Pago Harbor. The ASWQS regulations require any discharge to be free of contaminants including the discharge of solid waste, toxic, hazardous, and radioactive waste, and the discharge of oil sludge, oil refuse, fuel oil, or bilge water (ASWQS § 24.0205). In addition, the regulations regulate the discharge's temperature, salinity, and dissolved oxygen (ASWQS § 24.0206)

Pursuant to the authority contained in the American Samoa Environmental Quality Act, Title 24, Chapter 1 (§24.0106) which authorized the Environmental Quality Commission to formulate standards of water purity and classification of waters according to their most beneficial uses, the American Samoa EPA (EA EPA) adopted standards of water quality for American Samoa and an anti-degradation policy. However, the EPA has not requested consultation with NMFS on their approval of these water quality standards. Section 24.0207 of the ASWQS requires that water quality standards be achieved without mixing zones unless the permittee applies and is approved for a mixing zone. USACE did not apply for a mixing zone; therefore, no mixing zone is approved for this discharge. Therefore, subject to the prohibitions, criteria, and procedures set forth by the standards, all applicable water quality standards shall be met at the point of discharge.

Removal and Treatment of Soil

Project personnel will use heavy equipment to excavate and remove 1,590.79 cubic yards (yd³) of contaminated soil at the sewer installation site and up to an additional 5,000 yd³ of contaminated soil may be excavated as part of the fuel pipeline removal activities. The soil will be loaded into dump trucks and driven to the thermal treatment area approximately 0.75 miles away at Onesosopo Park. Project personnel will use a mobile direct-fire treatment unit for soil treatment. Treated soil will be sampled to ensure that Tropical Pacific Environmental Screening Levels (TPSELs) are met. Once met, project personnel will use the cleaned soil to backfill excavation sites. Soil that does not meet TPSELs will not be used. Soil treatment will not affect the marine environment and is not discussed further.

Removal of the Fuel Pipeline

ERRG will use ground-penetrating radar to identify the extent of the remnant fuel pipeline. No radar or surveys will take place in the marine environment. Once project personnel have confirmed the extent of the pipeline, accessible sections of the pipeline will be removed. Project personnel will use heavy equipment to excavate soil and transport it for treatment. Dewatering is expected during excavation. Project personnel will use the temporary treatment plant or the American Samoa's Power Authority's disposal facility to clean the effluent before discharging it into Pago Pago Bay. Project personnel will pump dewatering effluent into vacuum trucks for transportation to the treatment locations.

In addition to following effluent limitations for water quality, USACE will implement best management practices (BMPs) to further help avoid, minimize, or reduce adverse effects from the action on ESA-listed species. These measures include:

1. A Project Biologist will conduct a pre-construction survey of each work area (e.g., discharge location) to determine the presence of ESA-listed species. The observers shall report to the workers when motile ESA-listed marine species are within 50 meters (m) of the proposed work and halt work, and shall only begin/resume after the animals have voluntarily departed the area.

2. Project personnel will NOT attempt to feed, touch, ride, or otherwise intentionally interact with any ESA-listed marine species.
3. Oil-absorbent booms will surround the temporary water treatment system and a spill containment kit will be stationed adjacent to the treatment train.
4. Containment booms will fully surround the point of discharge in Pago Pago Harbor.
5. Project personnel will conduct daily receiving water visual monitoring at the outfall for oily sheen, foam, discoloration, or floating debris. Visual observations will be conducted when treated effluent is being discharged from the facility. If free product or a sheen is observed inside the containment structure, dewatering will be suspended, the treatment system will be inspected, and repairs (or modifications) will be made, as needed, before resuming water processing.
6. Project personnel will remove free products within Pago Pago Harbor, as needed.
7. Monitoring for salinity and temperature will be conducted at the receiving water to maintain the ambient temperature and salinity concentration around the outfall as to avoid impacts to surrounding impacts.
8. Project personnel will collect a minimum of two samples during the first week of discharge (i.e., treatment system start-up). For any parameter detected above the effluent limit, monitoring will continue weekly during discharge. All other parameters will be sampled monthly.
9. Earth berms and/or other containment features will be placed around each excavation area to prevent off-site migration of stormwater runoff.
10. Project personnel will install stormwater barriers/filters around tank excavation areas and other ground disturbance areas to control sediment migration and filter stormwater.
11. Exposed soil areas will be covered by reusable geotextile fabric or 100% natural material erosion control blanket during heavy rain events or if there are no project-related activities for 3 days.

Action Area

The action area is defined by regulation as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR §402.02). The action area for the proposed activities encompasses the full extent of the action's modifications to land, water, and air. For this action, the full extent of direct and indirect effects is the disturbance from exposure to discharges. The wastewater treatment plant will discharge into the east side of Pago Pago Harbor at Aua Village, Tutuila, American Samoa. The AS EPA has classified the receiving water as "embayment". The discharges will extend into the marine environment up to 15,708 square feet from shore and construction will take place over 44 acres on the eastern side of Aua village, along Highway Route 1 and Pago Pago Bay (Figure 2).

Listed Species in the Action Area

We are reasonably certain the ESA-listed species and designated critical habitat under our jurisdiction listed in Table 1 occur in the action area, and may be affected by the proposed activities. Detailed information about the biology, habitat, and conservation status of the animals listed in Table 1 is available in their status reviews, recovery plans, federal register notices, and other sources at <https://www.fisheries.noaa.gov/species-directory/threatened-endangered>.

Table 1. Common name, scientific name, ESA status, effective listing date, critical habitat designation, and recovery plans, with Federal Register reference for ESA-listed species considered in this consultation.

Species/ common name	ESA Status	Effective Listing Date/ FR Notice	Critical Habitat	Recovery Plan
<i>Chelonia mydas</i> Central South Pacific Green Sea Turtle	Endangered	05/06/2016 81 FR 20057	Proposed 07/19/2023 88 FR 46572	
<i>Eretmochelys imbricata</i> Hawksbill Sea Turtle	Endangered	06/03/1970 35 FR 8491		5/22/98 63 FR 28359
<i>Sphyrna lewini</i> Indo-West Pacific Scalloped Hammerhead Shark	Threatened	09/02/2014 79 FR 38213		
Corals <i>Acropora globiceps</i>	Threatened	10/10/2014 79 FR 53852	Proposed 11/30/2023 88 FR 83644	
<i>Acropora retusa</i>	Threatened	10/10/2014 79 FR 53852	Proposed 11/30/2023 88 FR 83644	
<i>Acropora speciosa</i>	Threatened	10/10/2014 79 FR 53852	Proposed 11/30/2023 88 FR 83644	

Critical Habitat in the Action Area

Central South Pacific Green Sea Turtle. In areas of American Samoa, proposed critical habitat for green sea turtles includes the marine environment from the mean high water line to 20 m depth. The specific areas within the proposed designation, with their physical and biological features are:

1. From the mean high water line to 20 m depth, sufficiently dark and unobstructed nearshore waters adjacent to nesting beaches proposed as critical habitat by USFWS, to allow for the transit, mating, and internesting of reproductive individuals, and the transit of post-hatchlings.
2. From the mean high water line to 20 m depth, underwater refugia (*e.g.*, caves, reefs, protective outcroppings, submarine cliffs, and “potholes”) and food resources (*i.e.*, seagrass, marine algae, and/or marine invertebrates) of sufficient condition, distribution, diversity, abundance, and density necessary to support survival, development, growth, and/or reproduction.

Detailed information on proposed green sea turtle critical habitat is available at:

<https://www.fisheries.noaa.gov/action/proposed-rule-designate-critical-habitat-green-sea-turtles>

Analysis of Effects

Under the ESA (50 CFR 402.02), “effects of the action” are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other

activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action.

The applicable standard to find that a proposed action is “not likely to adversely affect” listed species or critical habitat is that all of the effects of the action are expected to be discountable, insignificant, or completely beneficial (USFWS & NMFS 1998). Discountable effects are those extremely unlikely to occur. Insignificant effects relate to the size of the impact and should never reach the scale where take³ occurs. Beneficial effects are contemporaneous positive effects without any adverse effects.

Despite the USACE and EPA’s use of all BMPs, we identified the following stressors remain, and have the potential to affect listed marine species and/or critical habitat in the action area:

- Human disturbance
- Turbidity and sedimentation
- Exposure to waste and discharges

We use an exposure-response assessment framework to assess the effects of proposed actions. Effects are discountable if exposure is extremely unlikely to occur. For this reason, we first determine the probability of stressors co-occurring with individuals from the listed species or features of critical habitat. For stressors where exposure is not discountable, we discuss the significance of the species’ response.

Human disturbance

The action may affect green and hawksbill sea turtles, Indo-West Pacific scalloped hammerhead sharks, and ESA-listed coral through potential disturbance from human activity and construction. Human activities in the action area will include the use of heavy equipment in nearshore areas, the placement of the discharge pipe, and containment booms. While the installation and operation of the discharge pipe may result in a disturbance that causes ESA-listed marine species to temporarily disrupt their normal behavior, such responses are unlikely because the project is a nearshore, shallow environment adjacent to a highway, and in-water noise is not expected.

Discharge pipe and boom construction will take place in the coastal intertidal zone. However, the discharge pipe will remain out of the water, and the boom will avoid contact with the seafloor to the greatest extent practicable. NMFS expects that motile marine species will naturally avoid these areas of ongoing human activity. Coals may retract their plops but will return to normal activity once construction concludes. Furthermore, all activities and heavy machinery will operate from land, with no sound expected to transfer into the water column.

BMPs establish that a biologist will survey for the presence of ESA-listed marine species during all aspects of the proposed action. If ESA-listed marine species are noticed within 50 m, work will be postponed, moved to a different location, or halted until after the animals have voluntarily departed the area. Project personnel will not attempt to feed, touch, ride, or otherwise intentionally interact with any ESA-listed marine species. Given the implemented BMPs, we are reasonably certain the effects of disturbances from human activities and equipment operations on

³ Under the ESA, the term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct (16 U.S.C. §1532). We further define “harass” as to create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering (Wieting 2016).

green and hawksbill sea turtles, Indo-West Pacific scalloped hammerhead sharks, and ESA-listed coral will not reach the scale where harm or harassment occur and are therefore insignificant.

Turbidity and sedimentation

The proposed project will result in increased turbidity and sedimentation as excavation, pipe removal, and discharges occur throughout the project site. Project personnel may increase turbidity when conducting water sampling or cleaning activities. The resulting increase in turbidity could affect ESA-listed sea turtles, sharks, and corals. Increased turbidity could cause behavioral shifts such as avoidance, a temporary reduction in foraging, or an increased respiration rate. However, we are reasonably certain motile species would at worst swim away from turbid areas. Corals in adjacent reef areas may be affected should intense turbidity plumes extend for long durations.

ESA-listed coral colonies are not expected within 91 m of construction or the discharge and the location or dispersion of turbid waters is unknown. Turbidity is expected to decrease with distance from the activities as sediment settles out of the water column or is moved away by currents. In addition, USACE has established BMPs that require earth berms and/or other containment features to be placed around each excavation site, treatment tank, and other ground disturbance areas to control sediment migration and filter stormwater. All areas of exposed soil will be covered by reusable geotextile fabric or erosion control blankets during heavy rain events, or if there are no project-related activities for 3 days further limiting the potential for construction-related sedimentation. Finally, the treatment plant will remove and contain particulate matter before discharge. The discharge pipe will be placed on a rock outcropping, have a large diameter, and have a T-shaped diffuser that will help disperse the water flow, which will reduce the amount of re-suspended sediments that occur from the discharge. Therefore due to the limited frequency, duration, and intensity of expected elevated turbidity, BMPs, and the low likelihood of the species' presence in the action area, it is reasonably certain that the likelihood of adverse effects from turbidity to ESA-listed sea turtles, sharks, and corals from this action will not reach the level of harm or harassment and is, therefore insignificant.

Exposure to waste and discharges

ESA-listed species listed in Table 1 may be exposed to wastes from persons or equipment entering the water. Waste and debris, including plastic bags and other debris associated with the action, may accidentally enter the water. ESA-listed animals may view these as food sources and ingest them, which can cause blockage of their digestive systems, internal injuries, and starvation. Discharges may contain petroleum products and depending on their concentration, the effects of exposure may range from temporary avoidance to the death of the exposed animals.

Sea turtles: Green and hawksbill turtles occur in the waters around American Samoa. The discharging facility in this permit will discharge to nearshore water and is expected to have minimal effects on water quality. If a turtle were to enter the discharge area and react negatively to any component of the wastewater, the species is motile and could traverse the maximum affected area within minutes. In addition, the USACE has established BMPs that ensure the debris doesn't enter the water and the discharge site is fully boomed to contain any unplanned petroleum release. Project personnel will conduct daily water monitoring of the receiving water at the outfall for oily sheen, foam, discoloration, or floating debris. Project personnel will also conduct visual observations when treated effluent is being discharged from the facility. If free product or a sheen is observed inside the containment structure, dewatering will be suspended, the free product will be removed, the treatment system will be inspected, and repairs or

modifications will be made, before resuming water processing. Oil-absorbent booms will surround the temporary water treatment system and a spill containment kit will be stationed adjacent to the site. Finally, the NPDES permit requires project personnel to conduct a minimum of two samples during the first week of discharge (i.e., treatment system start-up). If any parameter is detected above the effluent limit, monitoring will continue weekly during discharge.

Although NMFS has not consulted on EPA's approval of water quality standards under section 7 of the ESA, discharges are required to meet water quality standards for the protection of "support and propagation of marine life", based on the applicable beneficial use designations. We determine that based on water quality standards that are protective of marine life, the expected condition of the discharges, the BMPs, and the motility of the marine species, any exposure, and effects are expected to be insignificant.

Elasmobranchs: Anecdotal evidence suggests that the Indo-Pacific scalloped hammerhead sharks may enter Pago Pago Bay and adult sharks are commonly found in waters between 0 to 500 m deep. All discharges will take place at the shoreline and are expected to temporarily affect up to 15,708 square feet of marine habitat. At this distance from shore and depth, it is extremely unlikely any scalloped hammerhead will be present. However, if an elasmobranch were to enter the vicinity of the discharge zone and react negatively to any component of the wastewater, the species is motile and could traverse the maximum affected area within minutes. Based on water quality standards that are protective of marine life, the expected condition of the discharges, the BMPs described above, the presence and motility of the marine species, any exposure, and effects are expected to be insignificant.

Corals: *Acropora globiceps* is typically found on shallow forereefs but may occur in back reef areas within pools and lagoons in a depth range of 0 to 20 m. *Acropora retusa* most commonly occurs on upper reef slopes and in tidal pools at a depth of 0 to 20 m. *Acropora speciosa* is typically found on walls, ledges, and reef slopes in deep water with little wave action in a depth range 20 to 50 m. The discharge area consists of mostly rock surrounded by algae and sparse coral. Surveys conducted by NMFS' Pacific Islands Fishers Science Center (PIFSC) in 2021, show coral cover at two percent near this area with isolated colonies of mounding *Porites spp.* and branching *Pocillopora damicornis* (Joy Smith, PIFSC personnel communication 12/12/23). All marine discharges are at least 91 m from the nearest reef and outside of the proposed coral critical habitat. The proposed permit remains protective through the inclusion of applicable discharge limitations.

Nutrients are generally recognized as beneficial for marine ecosystems. However, coral reefs are adapted to low nutrient levels, so an excess of nutrients can lead to the growth of algae that blocks sunlight and consumes the oxygen corals need for respiration. Low salinity and abrupt temperature changes can affect coral reproduction and recruitment. These changes often result in an imbalance affecting the entire ecosystem. Project personnel will monitor for salinity and temperature at the receiving water to maintain the ambient temperature and salinity concentration around the outfall to avoid impacts to surrounding and downstream coral and habitat. Although discharges have the potential to interact with coral and its larvae, the EPA believes the impacts will be minimal because all marine discharges are outside the range of potential habitat for *A. globiceps*, *A. retusa*, and *A. speciosa*.

Standards for these waters were adopted to allow for the propagation and survival of marine organisms, particularly shellfish, corals, and other reef-related resources, and whole-body contact

recreation. The EPA included numeric effluent limitations for all parameters believed to have the potential of exceeding water quality standards at the discharge site. This includes effluent limitations for total suspended solids, nutrients, pH, and toxics. By establishing reasonable potential with no mixing zone, the EPA took a conservative approach to establish a range of effluent limitations for all pollutants that may affect corals. The discharges are a new permit and comply with anti-backsliding⁴ and antidegradation requirements in the Clean Water Act.

Because the discharges would occur in an area where *A. globiceps* and *A. retusa* are unlikely to occur, outside the habitat for *A. speciosa* (20 to 50 m), the BMPs described above, and the permit conditions are written to comply with American Samoa Water Quality Standards for "embayment" waters, we determine that discharges under the proposed permit have a low risk of exposure to *A. retusa*, *A. speciosa*, and *A. speciosa* and should they be exposed, the concentrations of pollutants would not be appreciable. Therefore effects are expected to be insignificant.

Critical Habitat

Exposure to turbidity and sedimentation associated with this action may affect the essential features of the proposed green sea turtle critical habitat. This may occur during the placement of the discharge pipe, containment boom, and wastewater discharges associated with the action. As discussed in the Turbidity and Sedimentation section, the duration of the activities causing the disturbance of sand will be temporary and confined to the immediate area. In addition, the BMPs are designed to avoid re-suspending sediments during wastewater discharges. Finally, recent PIFSC surveys, show significant sedimentation occurrence, and sand substrate near the proposed discharge site. As a result, we are reasonably certain the probability of exposure to any appreciable increase in turbidity on the proposed green sea turtle critical habitat is discountable.

Exposure to the essential features of the proposed green sea turtle habitats to waste and discharges may occur due to construction, the location of the discharge pipe, and associated changes in temperature and salinity. As discussed in the Exposure to Discharges section, the implemented BMPs will prevent any debris or petroleum discharges into the marine environment, and project personnel will monitor for salinity and temperature at the receiving water to maintain the ambient temperature and salinity concentration around the outfall. As a result, we are reasonably certain the probability of exposure to waste and discharge on the proposed green sea turtle critical habitat is extremely unlikely and is therefore discountable.

Conclusion.

Considering the information and assessments presented in the consultation request and available reports and information, and in the best scientific information available about the biology and expected behaviors of the ESA-listed marine species considered in this consultation, all effects of the proposed action are either discountable or insignificant. Accordingly, we concur with your determination that the proposed action is not likely to adversely affect the following ESA-listed species: endangered Central South Pacific green turtles; endangered hawksbill turtles; threatened Indo-West Pacific scalloped hammerhead sharks; and threatened *A. globiceps*, *A. retusa*, and *A. speciosa*, or proposed critical habitat for the Central South Pacific Green Sea Turtle.

⁴ Anti-backsliding requirements prevent the adoption of less stringent limitations than those in the previous permit. Since this is a new permit issuance, this permit does not establish any effluent limits less stringent than those in a previous permit and does not allow backsliding.

This concludes informal consultation under section 7 of the ESA for species under our jurisdiction. Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act directs Federal agencies to consult with NMFS on all actions or proposed actions that may adversely affect essential fish habitat (EFH). If necessary, it is your responsibility to request EFH consultation for this action with NMFS' Habitat Conservation Division.

Reinitiation Notice

Reinitiation of consultation is required and shall be requested by the USACE or EPA, where discretionary Federal involvement or control over the action has been retained or is authorized by law and if:

- a. Take occurs to an ESA-listed species;
- b. New information reveals effects of the action that may affect ESA-listed species or designated critical habitat in a manner or to an extent not previously considered;
- c. The identified action is subsequently modified in a manner that causes an effect to ESA-listed species or designated critical habitat that was not considered in this concurrence; or
- d. A new species is listed or critical habitat designated that may be affected by the identified action.

If you have further questions, please contact Kristina Dauterman at (808) 725-5136 or kristina.dauterman@noaa.gov. Thank you for working with us to protect our nation's living marine resources.

Sincerely,

GOLDEN.DAWN.KIMBERLY.1365826150
BERLY.1365826150
Digitally signed by GOLDEN.DAWN.KIMBERLY.1365826150
Date: 2024.05.01 12:59:36 -10'00'

Dawn Golden
Assistant Regional Administrator
Protected Resources Division

CC: A. Whitson (EPA)
M. Martinez (USACE)
NMFS File No.: PIRO-2023-03412
PIRO Reference No.: I-PI-23-2207-DG

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<https://www.fisheries.noaa.gov/webdam/download/64572719>
- Wieting, D. S. 2016. Interim Guidance on the Endangered Species Act Term "Harass". U.S. Dept. of Commerce, NOAA, NMFS, Office of Protected Resources, Silver Spring, MD, October 21, 2016. Memorandum from the Director of the NMFS Office of Protected Resources to NMFS Regional Administrators.

Appendix F:

List of Consulting Agencies and Preparers

Appendix F, Agencies Consulted and List of Preparers

Agencies Consulted

US Fish and Wildlife Service

Pacific Islands Fish and Wildlife Office
300 Ala Moana Blvd., Rm. 3-122
Honolulu, HI 96850
Point of Contact: Dr. Dan Polhemus
dan_polhemus@fws.gov

U.S. Department of Commerce

National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Pacific Islands Regional Office
1845 Wasp Blvd., Bldg. 176
Honolulu, Hawai'i 96818
Point of Contact: Kristina Dauterman
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