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ENVIRONMENTAL PROTECTION PLAN, ENVIRONMENTAL MANAGEMENT PLAN and DIRT AND DUST CONTROL PLAN

Repair of Aboveground / Underground Fuel Pipelines & Associated Components in 46 Locations, Mainly Valve Pits, DFSP Guam

NAVFAC EXWC Contract No. N3943015D1632, Task Order 18F4044 APTIM Project No. 501083 23-July-2018

REFERENCE:

<u>Environmental Protection Plan</u> - Section 01 57 19.00 20, *Temporary Environmental Controls*, Paragraph 1.6.

<u>Environmental Management Plan</u> - Section 01 57 19.00 20, *Temporary Environmental Controls*, Paragraph 1.5.3.

<u>Dirt and Dust Control Plan</u> - Section 01 57 19.00 20, *Temporary Environmental Controls*, Paragraph 3.13.1 and Section 01 50 00.05 20, *Temporary Construction Facilities and Controls for Design-Build*, Paragraphs 3.1.1.5 and 3.4.

1. General Environmental Protection and Environmental Management Overview and Purpose

The Environmental Protection Plan (EPP) is prepared for the repair of fuel pipelines and associated components mainly in valve pits. This EPP will conform to the Naval Base Guam (NBG) Environmental Management System (EMS) construction related objectives and targets.

- a. Specific plans required by the contract and prepared separately consist of the following:
 - Storm Water Pollution Prevention Plan; Section 01 57 19.00 20, Paragraph 3.1.2.1
 - Solid Waste Management Plan; Section 01 57 19.00 20, Paragraph 3.3
 - Waste Management Plan; Section 01 74 19, Paragraph 1.6 (combined with Solid Waste Management Plan)
- b. Environmental Compliance: The Environmental Managers for this project will be the QC Manager and QC Alternate. They will have the authority to implement applicable environmental regulations and be responsible to document environmental procedures as required by the contract.
- c. Operating Procedures: The APTIM Delivery System (ADS) consists of documents including those related to Health, Safety and the Environment (HSE). These documents include forms, guidelines, checklists, policy, and procedures. Specific AMS documents applicable for this EPP are:
 - ADS-710-04-PR-00110 Identification and Assessment of Environmental Aspects
 - ADS-710-04-PR-00400 Site Environmental Management Plan
 - ADS-710-04-FM-00112 Environmental Aspects Register (Site)
 - ADS-710-04-FM-00401 Site Environmental Management Plan
- d. Communication and Training: The QC Manager and QC Alternate will complete the on-line Environmental Compliance Assessment Training and Tracking System (ECATTS) training prior to construction. The NBG EMS training will be documented for APTIM and subcontractor personnel. In-

house training will be conducted to familiarize employees of the requirements following ADS procedures and contract.

e. Emergency Contacts, refer to the following table:

Position	Name		Cell Phone	email
Project Manager	Martin Morgan	478-0515	777-9968	martin.morgan@aptim.com
Nite Manager	Mike Ayles	478-0500	TBA	michael.ayles@aptim.com
	Robert Hendrix	478-0517	777-6085	robert.hendrix@aptim.com
OC Manager	Joonu Thomas	478-0504	797-3123	joonu.thomas@aptim.com
	Angelo Talavera	478-0503	929-7739	angelo.talavera@aptim.com
QC Alternate	Andy Smith	478-0519	898-7793	andrew.smith@aptim.com
SSHO	Johnny Cruz	478-0510	747-4619	johnny.cruz@aptim.com

2. General Site Information

The valve pits and pipelines are at 46 locations through Guam at the Lower Sasa Valley, Upper Sasa Valley, Tenjo Vista tank farm, and along Marine Corp Drive. The work sites are the valve pits which are accessible via paved roads. All sites have been previously disturbed (original excavation, construction, grading). Excavation will be required for the scoped work at 19 valve pits. Excavation will be performed around the exterior of the valve pits to a dimension approximately 4 feet beyond the existing walls and approximately 3 feet beneath the pipes. An excavation permit, including underground utility clearances through DZSP21, will be obtained for each valve pit where excavation will be performed.

A Preconstruction Survey of the 46 project sites (39 valve pits, 3 pump house manifold pits, 1 oil/water separator (OWS), 1 flange pit, 2 high-point vents, and 1 piping site) with the Contracting Officer's Representative will document with photographs showing existing environmental conditions at and adjacent to the sites. A report detailing the survey will be submitted for the record.

3. Management of Natural Resources

- a. Land resources. There are no other land uses within the valve pits and tank farms properties. All heavy equipment and vehicle operations will be limited to designated roadways. Ground disturbance will be limited to areas with existing pipeline components and utility corridors. *The work will not produce a discharge*.
- b. Tree protection. Existing trees will not be affected by project activity.
- c. Replacement of damaged landscape features. The valve pits and associated vents and piping will be the project staging areas and will be impacted by vehicles and equipment. The grassed area will be restored as part of demobilization. Clean excavated soil may be reused as common backfill if suitable and supported by a geotechnical report. The services of a geotechnical firm will be used to perform soil investigation and prepare required reports. Alternatively, imported fill materials may be used as a backfill when approved. Surplus excavated material will be removed from the site and relocated to a location specified by DFSP

Guam. Screened, manufactured sand will be used as bedding and backfill around all pipes. Backfill and sand bedding will be placed in 6-inch lifts for approximately 2 feet around each pipe. Turf will be provided to match the existing grades.

- d. Temporary construction. Silt fences will be temporarily erected to retard and divert runoff to protected drainage courses and prevent releases into the environment.
- e. Stream crossings. The nearby streams will not be impacted by project activity.
- f. Fish and wildlife resources. There are no threatened or endangered species in the immediate vicinity of the project sites. No work will be performed in the water and as such will not have an effect on the benthic habitat and will not require an essential fish habitat or threatened and endangered species consultation. U.S. Fish and Wildlife Service (USFWS) Section 7 Endangered Species Act (ESA) is not required for this Task Order noted in Request for Information (RFI) #011 dated 05/21/2018 as shown in Appendix B.
- g. Wetland areas. Five valve locations (Piping by Master Valve Pit 3, and the Marine Corp Drive Valve Pits 1 through 4,) are adjacent to a wetland. The scope of work of this project will have no effect on the adjacent wetland. The work will not produce a discharge and project activities will avoid directly impacting the wetland. If a federal permit is required for work activities at any of the five locations adjacent to wetlands, a Section 401 Water Quality Certification (WQC) application will be prepared and submitted.

4. Protection of Historical and Archaeological Resources.

There are no known historical or archaeological resources at the project sites. A NHPA Project Evaluation was conducted in July 2015 and a finding of "No Adverse Effect" was determined by both Navy Facilities Engineering Command (NAVFAC) and the Department of Parks and Recreation of the Government of Guam as shown in Appendix A. However, archaeological monitoring for project excavations will be required at 5 project sites (Piping by Master Valve Pit 3 and MDVPs 1-4). Monitoring will be conducted in accordance with an approved Archaeological Monitoring and Discovery Plan.

5. Storm Water Management and Control

- a. Ground cover. The existing ground cover at the valve pit sites consists of either mowed grass areas or paved areas.
- b. Erodible soils. The general soil classifications for the Upper and Lower Sasa Valley and Tenjo area are Pulantat clay, shallow, well-drained soil on dissected plateaus and hills, with a slight to moderate erosion hazard, and Akina-Agfayan, well drained and gently sloping to steep soil with a moderate erosion hazard. The general soil classification at the Marine Drive valve pits is considered nearly level urban land-Ustorthents complex with a majority of land covered by roads, buildings and parking lots.
 - Temporary measures. Existing drainage patterns will not be altered by this project. The adjacent areas have vegetation and will not be disturbed.
 - Vegetation at the valve pits will be restored during demobilization. A combination of turf, sand, imported soil, and clean, excavated soil will be used to backfill and restore the existing grades.
- c. Effective selection, implementation and maintenance of Best Management Practices (BMPs). Control of runoff will be accomplished by constructing silt fences around the valve pits prior to mobilization. The silt fences will be inspected and maintained during the project. The excavated areas and pits will be dewatered as necessary to keep the excavation dry in conformance with approved permits.

6. Protection of the Environment from Waste Derived from Contractor Operations

- a. Control and disposal of solid and sanitary waste. Solid waste generation is minimal with covered containers used for collection of daily trash and other debris. The blast grit used to prepare surfaces for valve and pipeline coating will be bagged and disposed of in 10 cubic yard bins (non-hazardous waste) to be hauled off-site by a licensed disposal company. Before waste derived from abrasive blasting/demolition is bagged and hauled off site, lead-abatement measures will be performed in accordance with UFGS 02 83 13.00 20, "Lead in Construction," and UFGS 02 82 33.13 20, "Removal/Control and Disposal of Paint with Lead". After media-blasting, potable water will be utilized to remove residual chlorides before priming and re-coating. All resulting waste, including the wash water, will be removed and properly disposed of. Sanitary waste is controlled by using a portable toilet with twice weekly service by the sanitation company.
- b. Control and disposal of hazardous waste. Anticipated hazardous waste generated by this project is comprised of fuel, water, solids mixture, lead based paint (LBP) and asbestos containing material (ACM). Pipelines will be completely drained (or suctioned) into vacuum trucks and transported to product tanks or the DFSP Guam skim pit. A Lead Assessment and Lead Abatement Plan will be prepared by a CIH, who will require employees to be trained in lead as well as respiratory protection. Existing metal structures to be demolished at various valve pits, including canopies, handrails, base plates and existing piping, may be coated in LBP. Areas anticipated to contain ACM include FOR Valve Pits 'A', 'B', 'C' and 'D'. All waste derived from abrasive blasting will be screened utilizing the proper lead-abasement measures. ACM pipes from valve pits will be removed, packaged and disposed of at a permitted landfill. Should discovery of non-disclosed asbestos occur, work will immediately stop and work area will be vacated.

7. Prevention of Releases to the Environment

The Government will drain fuel from the pipeline segments to the extent that its pumps allow, and will then turn over the pipeline to APTIM. APTIM will assume residual fuel will be present in the pipelines and will drain (or suction) this remaining residual fuel into vacuum trucks and transport it to product tanks or the DFSP Guam skim pit. Absorbent material will be available for quick response to any release of materials other than clean water. Catch basins will be utilized to intercept all fuel leaks and ensure fuel does not reach adjacent soil or water. At some sites, all piping is enclosed in below ground concrete basins. APTIM will take full responsibility for isolating and gas-freeing each pipeline segment prior to performing any media blasting, repair or hot work. Silt fences will also be erected and maintained around the perimeter of excavation and any stockpiled materials to prevent runoff from being released to the environment. Excavated areas will be dewatered as necessary to keep excavation dry in conformance with approved permits. For sites adjacent to wetlands, APTIM's pipe coating subcontractor will be responsible for erecting a containment enclosure around all pipe sections to prevent releases of dust, dirt, cleaning debris and paint drips generated by sandblasting and other work activities near the adjacent wetlands.

8. Regulatory Notification and Permits

The total project area of 7,850 square feet (sqft) does not exceed the 1-acre threshold for the USEPA NPDES construction activity Notice of Intent. Other local permits from the Guam EPA are not anticipated for this Project's scope of work.

9. Clean Air Act Compliance

This is not expected to apply based on the size of equipment being utilized to perform the scope of work.

10. Corrective Action

The job site will be monitored daily for compliance with the requirements of this EPP and the B ase EMS. Daily Job S ite Tailgate meeting will include environmental protection and controls. As situations require remediation then appropriate responses will be implemented.

In the event of any releases of oil, hazardous substances, chemicals, or gases; APTIM will immediately (within 15 minutes) notify the Base or Activity Fire Department, the Activity's Command Duty Officer, and the Contracting Officer.

If the presence of contaminated soil is detected, based on visual or olfactory observations, APTIM will immediately notify the Government. The contaminated soil will be placed in a temporary storage area (TSA) that is constructed by placing two layers of 10-mil polyethylene sheeting on the ground, placing 1-foot earthen berm around the TSA, covering the contaminated soil with one layer of 10-mil polyethylene sheeting, and finally, securing the polyethylene sheeting with sandbags.

11. Dirt and Dust Control

At the valve pit job sites, a light water spray may be used to control airborne dust when necessary. All vehicles and equipment will remain on paved roads and/or mowed grass areas to access the valve pit locations. If roads create a dirt and dust hazard, they will be washed down with water. APTIM will clean up any dirt and debris build up on the road pavements from equipment and vehicles traversing the site. This may include manual shoveling and water spray. Silt fences will be erected and maintained around the perimeter of excavations and any stockpiled materials to prevent the release of runoff into the environment. All earthen material, resulting from excavation activities, will be watered to prevent potential for airborne dirt and dust.