

Environmental Supplemental Guidance

The A/E is required to address all environmental regulations as well as guidance provided by Tyndall BCE, including but not limited to: *Installation Restoration Program and Aqueous Film Forming Foam Guidelines for MILCON Rebuild* dated 5 April 2021; *Environmental Protection* "General Environmental Requirements for Contracts v2"; Tyndall Map PFOS & PFOA Areas; Final AFFF SI Report delivered to regulators; Basewide Conceptual Site Model, Tyndall Air Force Base; DoD Vapor Intrusion Handbook; Environmental Restoration Program Site Reports; IRP Map 2016 May 10 Base Map – Restoration Sites (with wetlands); Wetlands Delineation Survey; AF813s; and Final NEPA guidance.

The following information is supplemental guidance for vapor intrusion risk determination for projects located within IRP and/or AFFF sites.

1. Follow the requirements of the DoD Vapor Intrusion Handbook
 - 1.1. Vapor intrusion shall be evaluated when volatile chemicals are present in soil, soil gas, or groundwater that underlies existing structures or has the potential to underlie future buildings and there may be a complete human exposure pathway. A/E shall conduct screening level evaluations as required for facility designs. If design model data exceeds the generic screening levels then the A/E shall provide the requirements for a vapor intrusion system in the RFP.

The following information is supplemental guidance for demolition:

1. Existing buildings shown to be demolished within the zone limits shall be demolished by others prior to construction contract award.
2. Any data required for design (construction methods and environmental testing) shall be provided by Tyndall Base Civil Engineering Office (BCE).
3. The A-E is responsible for showing demolition of any pavements and underground utilities interfering with construction and including related design requirements in the contract drawings and specifications.

The following information is supplemental guidance for boring activities.

1. General Requirements:
 - 1.1. The Contractor shall develop a Site-specific Safety and Health Plan (SSHP) in accordance with 29 CFR 1910.120 and EM 385-1-1. SSHP will be submitted to USACE PM and TL for Mobile District Safety Office approval prior to drilling. The plan shall define emergency procedures, discuss any site hazards that could be encountered during execution of this performance work statement, address accident prevention, and present appropriate action levels for potential contaminants to be encountered.

For all drilling sites that are within documented areas of known soil and/or groundwater contamination, this SSHP must include at a minimum: the identification of the known contaminants and respective hazard evaluations, procedures for managing Investigative Derived Wastes (IDW), the selected personal protective equipment, and address all decontamination procedures for personnel and equipment

- 1.2. All borings and piezometers outside of designated IRP sites or AFFF site boundaries, which penetrate depths greater than 9 feet, shall be backfilled and tremie grouted per contract requirements. Cuttings that are not redeposited in bore hole shall be spread in the vicinity of the bore hole or handled in accordance with Environmental requirements and guidance addressed above. Note that storage of containerized materials shall remain within the vicinity of the boring location on the site.
2. Installation Restoration Program (IRP) Sites:

1.1. Boring activities within designated IRP sites, including soil and/or within 50 feet of and within groundwater contamination plume, are required to adhere to the following:

1.1.1. All cuttings shall be recovered and containerized in 55 gallon drums, sampled and tested for full Resource Conservation and Recovery Act (RCRA) Toxicity Characteristic Leaching Procedure (TCLP), evaluated based on industry limits and disposed of at an appropriate offsite facility. All test results shall be provided to the appropriate facility environmental representative. Note that storage of containerized materials shall remain within the vicinity of the boring location on the site until time of removal.

1.1.2. Waste Profile and all waste manifests to be signed by 325th CES prior to disposal.

1.1.3. The entire borehole shall be grouted using tremie pipe from the bottom of the maximum penetration depth continuously to the ground surface.

1.1.4. Borings that approach and/or exceed a confining layer are required to adhere to the following:

1.1.4.1. Continuous sampling for the entire exploration depth.

1.1.4.2. If required to bore through a confining layer to satisfy the required sampling depth for geotechnical design purposes, a casing shall be installed between the ground surface and the top of the confining layer and sealed with grout before boring may extend below the top of the confining layer.

1.1.5. Decontamination of drilling equipment is required after completion of drilling within each IRP site, and within 50 feet of and within each IRP groundwater plume.

2. Aqueous Film Forming Foam (AFFF) Sites:

2.1. Borings within AFFF site boundaries are required to follow the Installation Restoration Program and Aqueous Film Forming Foam Guidelines for MILCON Rebuild dated 5 April 2021. Preferred disposal will follow Tyndall RPM guidance.

2.1.1. Decontamination of drilling equipment is required after completion of drilling within designated AFFF sites.