



NAVFAC

Naval Facilities Engineering Systems Command

NAVFAC SOUTHEAST

NAVFAC SE Industry Forum

Planning, Design & Construction

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Agenda

- Introduction
 - What changed?—from DC to PDC
- What are we doing to improve project delivery?
 - Industry engagement
 - Best practices
 - Key Performance indicators (KPIs)
- Listening session
 - Dealing with PFAS during construction
 - Alternative Construction Methods (ACM)
 - Project Labor Agreements (PLA)

What is PFAS?

- Commonly referred to simply as “PFAS”, Polyfluoroalkyl Substances are a group of manufactured chemicals that have been used in industry and consumer products since the 1940s.
- Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS), for example, are two of the most widely used and studied chemicals in the PFAS group.
- PFOA and PFOS have been replaced in the United States with other PFAS in recent years.
- Current scientific research suggests that exposure to certain PFAS may lead to adverse health outcomes.
- EPA added PFAS to its list of hazardous materials on 19APR24. Substance were designated hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as “Superfund.”
- The Environmental Protection Agency (EPA) is the authority for defining safe levels of PFAS in drinking water and materials.
- EPA has defined enforceable maximum contaminant levels (MCL) for public water systems, but construction site dewatering limits and soil contamination limits are not yet developed.

Key PFAS Contributor on Naval Installations – Aqueous Film-Forming Foam (AFFF)

- In 2019, the Department of Defense announced a PFAS Task Force to deal with the rising problem of PFAS contamination at military installations, across the country and overseas, with a focus on AFFF
- Areas exposed to AFFF usage such as airfields and surrounding areas are the primary candidates for PFAS contamination
- In absence of defined acceptable levels of PFAS for dewatering and soil disposal, the Navy has taken a proactive stance and incorporated requirements in projects anticipated to encounter PFAS during construction

PFAS Remediation for Construction Projects - Dewatering

- **Dewatering:**
 - **Current NAVFAC Position - Groundwater removed during construction dewatering activities that will be discharged to surface water or injected underground must comply with the Clean Water Act or underground injection requirements including dewatering permits and construction stormwater permits.**
 - **For the NAS Key West airfield project, we are using the 4 PPT allowable dewatering discharge inheriting (conservatively) the Clean Water Act requirements stipulated by EPA.**
 - **All dewatering discharge will be processed through a Granular Activated Carbon (GAC) (ex situ method).**
 - **GAC for PFAS removal has been used for over 20-years and utilizes a physical mass transfer method for treatment not chemical like that used for other contaminants.**
 - **GAC removal capacity for PFOS is greater than PFOA, but both can be effectively removed.**



PFAS Remediation for Construction Projects – Waste Soil Disposal

- **Waste Soil Disposal:**
 - **Current NAVFAC Position – The Navy is following the EPA’s ‘Interim Guidance on the Destruction and Disposal of Perfluoroalkyl and Polyfluoroalkyl Substances and Materials Containing Perfluoroalkyl and Polyfluoroalkyl substance.’**
 - **Disposal methods include:**
 - Permitted hazardous waste landfills
 - Solid waste landfills
 - Thermal treatment technologies
 - **For the NAS Key West airfield project, we are re-utilizing soil to the greatest extents possible and expect zero removal from Government property.**
 - **If soil removal was required, we would have included testing via EPA test method 1633 ‘Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS’. This method was developed by the EPA and DoD to test for 40 different types of PFAS.**
 - **Other projects in development will require excess insitu soils to be disposed of off Government property at certified waste sites. The Government is identifying the availability of waste sites with the geographical area, but it is the Contractor’s responsibility to qualify a site prior to submission of bid.**



NAS Key West firefighters applying AFFF foam around an old Skywarrior military plane during a training class. (1992)



<https://www.floridamemory.com/items/show/102210>

Alternate Construction Methods (ACM)

- VectorGram (VG) 2024-003
- As part of project development we need to consider:
 - Modular construction
 - Prefabricated building
 - TFS
 - Pre-Engineered Metal Buildings (PEMB)
- Project planners need to work with “resource sponsors and supported commands to validate proposed” ACM methods
- Will be “discussed” at the PDS milestone of the process
- Key Issues:
 - Customer buy in for getting ACM vs traditional construction (nobody wants to live in a trailer)
 - Need heavy Limited detail on cost and life span for ACM vs tradition makes cost benefit difficult
 - Heavy cost engineering engagement (?)
 - Planner traditional focus is on mission scope (size), function (cat code) and location. And applying unit cost guidance to scope. Will need unit ACM cost guidance for various cat codes and ACM recommended methods to do analysis
 - While planner can discuss at the PDS and SMIG 1391 stages, most heavy lifting will be done during PDA stage when designing start working design proposals and UFC issues.
 - Who will hold authority to make decision?

Project Labor Agreements (PLA)

- Intent of Executive Order & applicability
- From industry perspective, how does the requirement for PLAs affect labor pool in Southeast? Location Specific?
- Does “Project Labor Agreement” necessarily mean “Union”? How do industry partners comply?

Questions ?