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Doc #38952

Army Aviation Support Facility, Davenport, IA
Site Inspection
Iowa Army National Guard

Technical Project Planning (TPP) Meeting 1 & 2

Preliminary Assessments and Site Inspections (PA/SI) for Perfluorooctanesulfonic Acid (PFOS) and Perfluorooctanoic Acid (PFOA) Impacted Sites

28 April 2020

Agenda

- Introductions
- Safety Moment
- TPP Meeting Goals
- Army National Guard (ARNG) PA/SI Overview
- Davenport AASF ARNG PA Results
- Davenport AASF SI Overview
- Stakeholder Involvement
- Questions and Open Discussion
  - Sample Location Refinement

Introductions

- ARNG-Installation and Environment Division (IED), Cleanup Branch
  - Major Pamela Hess, Toxic Release Program Manager
  - Bonnie Packer, Nationwide Project Manager
  - Mark Leeper, SI Project Manager
- United States Army Corps of Engineers (USACE)
  - Tim Peck, Program Manager
  - Steve Gragert, SI Project Manager
- Iowa Army National Guard (IAARNG)
  - Curtis L. Madsen, Environmental Program Manager
- Iowa Department of Natural Resources (IDNR)
  - Daniel Cook, Environmental Specialist Senior
- AECOM Technical Services, Inc.
  - Jake Wilhelm, SI Task Manager
  - Jady Harrington, SI Senior Lead

Safety Moment

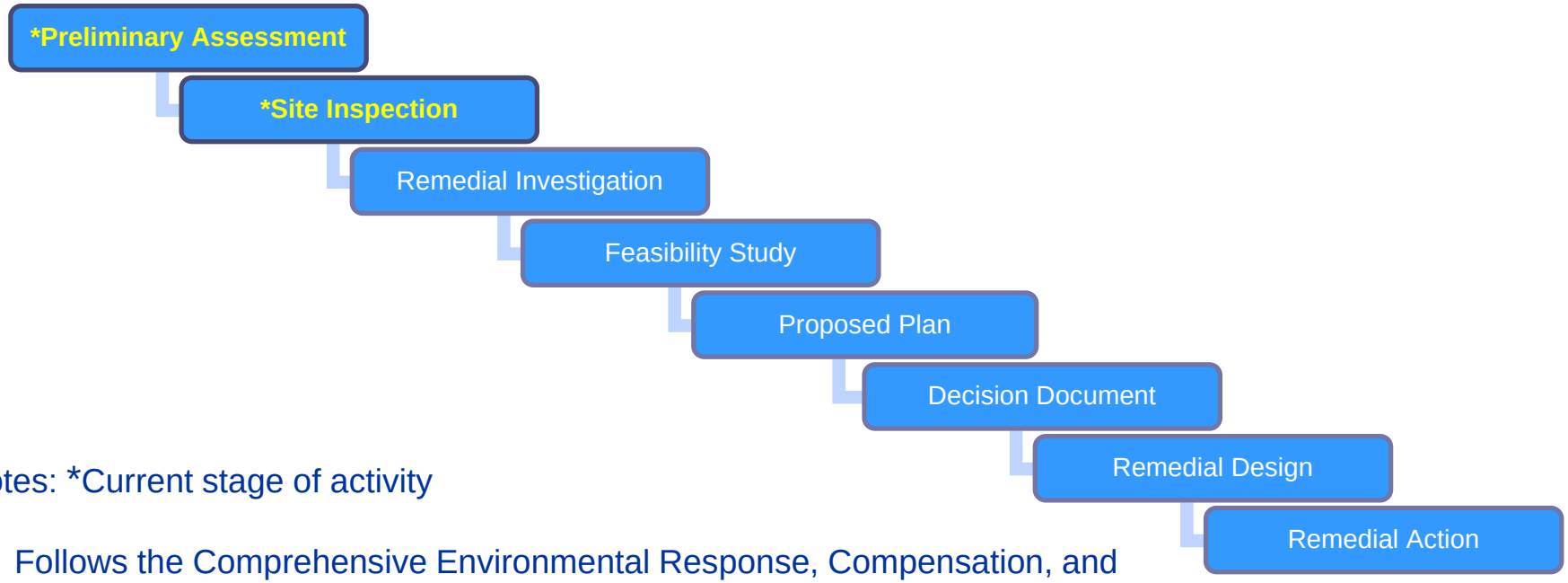
- SI will follow USACE Engineering Manual (EM) 385-1-1 requirements:
  - Accident Prevention Plan addresses all component plans for EM 385-1-1, including Construction Support during drilling operations
  - Site Specific Health and Safety Plan addresses project participants, training, and hazard identification and mitigation
- Planning documents were prepared during SI Work Plan phase
- All Health and Safety documentation has been revised to incorporate COVID-19 updates and protective measures

TPP Meeting Goals

- TPP1:
  - Provide an overview of the ARNG PA/SI Program
    - Regulatory framework
  - Discuss PA Findings
  - Define objectives for SI data collection
  - Encourage stakeholder involvement
  - Review project schedule
  - Capture action items
- TPP2: Discuss proposed SI approach
- TPP3: Discuss SI findings
- Participants:
  - TPP1 and 2: ARNG, USACE, IDNR
  - TPP3: ARNG, USACE, IDNR, other local stakeholders

ARNG PA/SI Overview

Work Phases



Notes: *Current stage of activity

- Follows the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Process
- An interim removal action can be conducted or a No Further Action determination can be made at any phase

ARNG PA/SI Overview

- Activities centrally contracted through USACE and managed by ARNG-IED
  - USACE Baltimore manages the contract, with technical project support from Louisville, Omaha, Seattle, and Sacramento Districts
  - Project support: chemistry, geology, risk screening
- PA ranking (~200 facilities) - state ARNG input
  - Likelihood of release
  - Complete pathway to drinking water receptor
- Priority assigned to facilities with highest likelihood of release near drinking water intake
- PA – facility-wide; SI – areas of interest (AOIs)

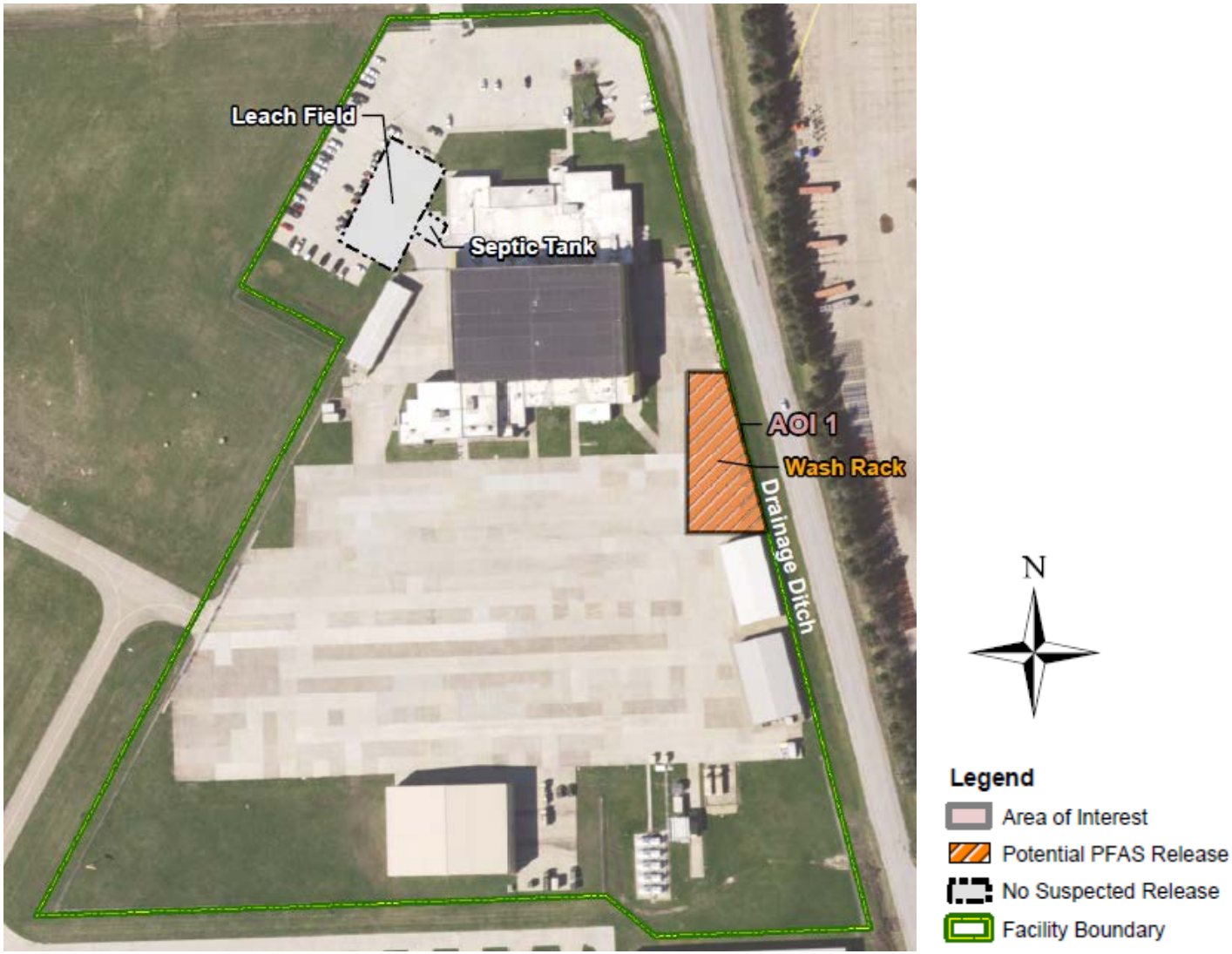
ARNG PA/SI Overview

- ARNG / IAARNG
  - Identify potential per- and polyfluoroalkyl substances (PFAS) release locations
  - Provide facility access and points of contact
  - Gather and provide appropriate documents
  - Identify/schedule personnel to interview
  - Supply final PA to the regulatory agencies
- SI Regulatory Involvement
  - CERCLA SI conducted in conjunction with the appropriate regulatory agency

Davenport AASF ARNG PA Results

- Potential PFAS Release Area: one (AOI 1 Wash Rack) identified during the PA
- PFAS releases attributed to two potential release pathways at Wash Rack:
  - Tri-Max fire extinguishers containing AFFF were emptied at wash rack prior to hydrostatic testing
  - Firetruck washing after training and nozzle testing at Peoria, IL airport

Davenport AASF ARNG PA Results



Davenport AASF
ARNG PA Results

Davenport AASF AOI 1 Wash Rack

- Fire Extinguishers
  - The AASF houses two TriMax-3™, two TriMax-30™, and one TriMax-60™ fire extinguishers inside the hangar
  - Every five years the TriMax™ units undergo hydrostatic testing
    - Prior to 1994, the wash rack emptied to an OWS, then to an adjacent ditch
    - Prior to turn in, fire extinguishers were emptied into the wash rack
    - Wash rack currently empties to sanitary sewer
- Firetruck
  - A firetruck equipped with AFFF and Purple K was housed at the AASF until the early 2000s
  - After fire training exercises off-site, the firetruck was washed at the wash rack
  - No information on type or volume of AFFF used or how frequent the fire training exercises occurred
    - Firetruck had a 1200-gallon tank

Davenport AASF
Potential Adjacent Sources

- Former AASF
  - Located due south of the current AASF
  - AASF moved to current location in 1974
- 1992 Air Show Aircraft Crash
  - IAARNG and City of Davenport responded to crash and an unknown amount of AFFF was dispensed at the crash site by IAARNG
  - Firetruck was washed at the wash rack after the incident
- 2012 Air Show Aircraft Crash
  - City of Davenport Fire Department responded; no information regarding the use of AFFF
- Davenport Municipal Airport Car Crash
  - Car caught on fire during crash
  - City of Davenport Fire Department responded; no information regarding the use of AFFF

SI Overview
Data Quality Objectives (DQOs)

- Primary SI DQOs
  - Confirm the presence/absence of a potential release
  - Gather data for conceptual site model (CSM):

    Understanding of Source-Pathway-Receptor relationships required for establishing sampling strategy
- Extended SI DQOs
  - Determine the presence/absence at facility boundary
  - Check for alternate sources, up- or downgradient
  - Measure PFAS at/near receptor, if warranted

SI Overview

CSM – Surface Water Features

- Refer to SI QAPP Figure 10-3

SI Overview

CSM – Groundwater Features

- Groundwater flow direction is inferred
- Sample locations will be surveyed during the SI to determine flow direction
- Refer to SI QAPP Figure 10-2

Legend

- Facility Boundary
- Water Body
- River/Stream
- Inferred Groundwater Flow Direction

Wells

- Domestic
- Commercial
- Municipal/Public Water Supply
- Unknown/Private

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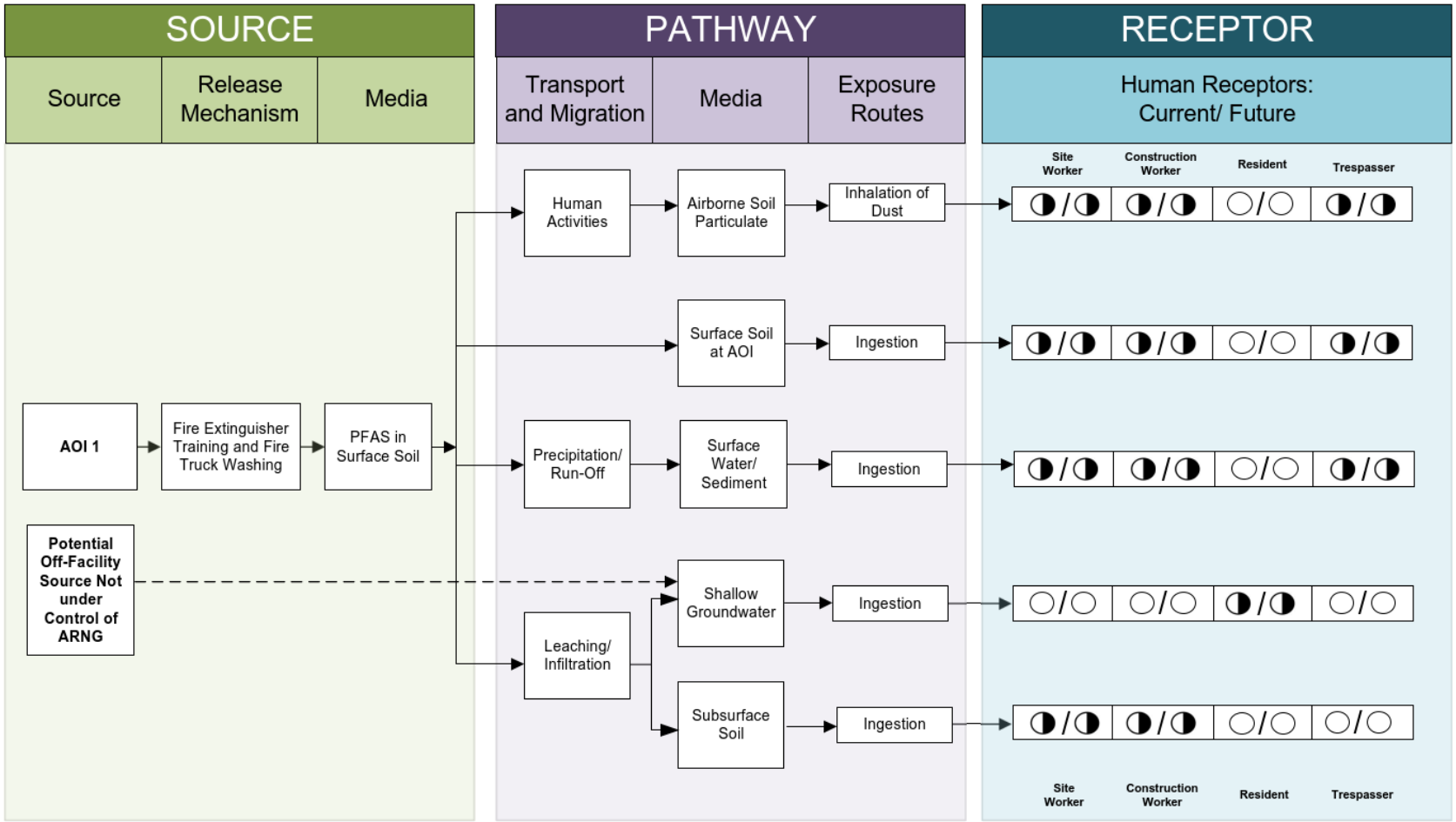
SI Overview
CSM



Note:

1. The residential receptor refers to an off-facility receptor.

LEGEND

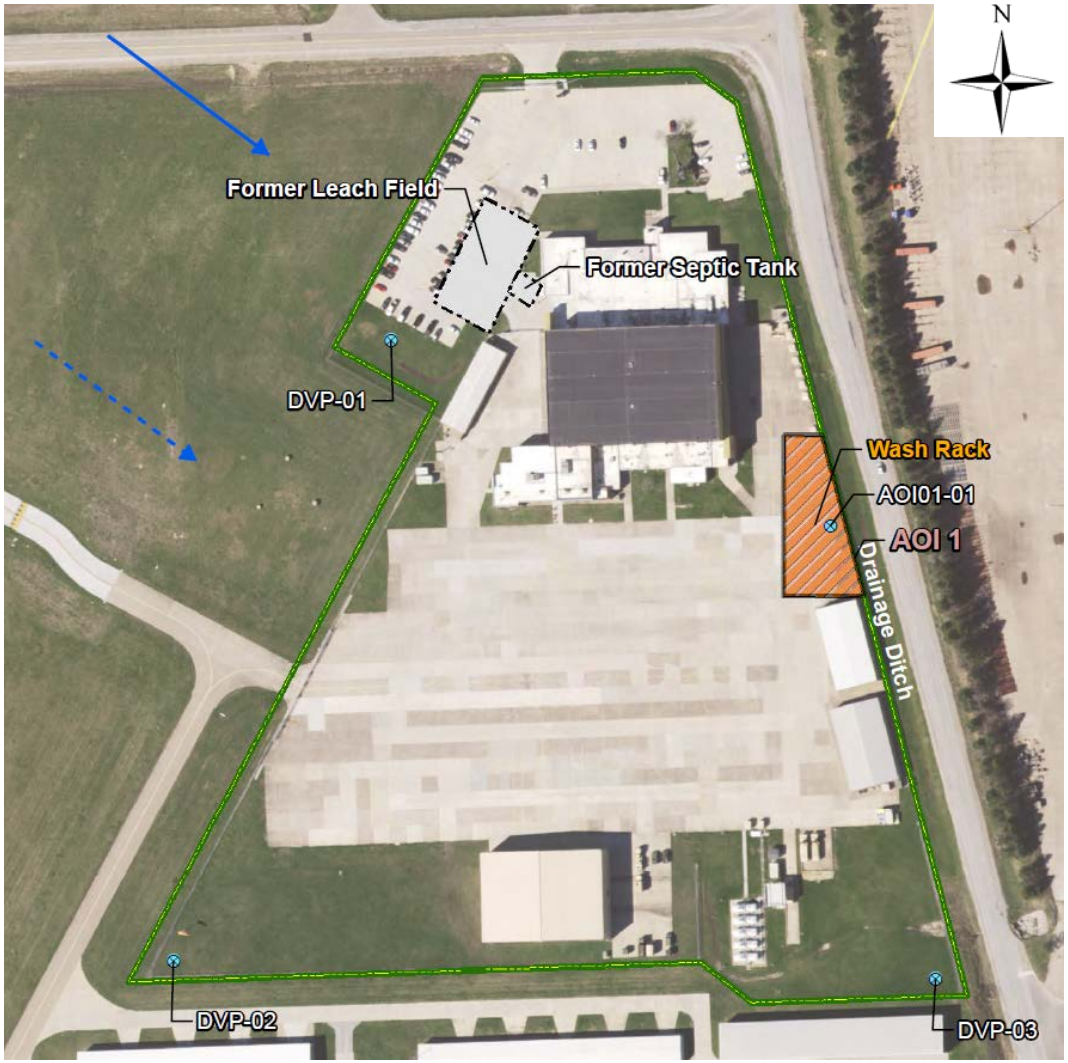
- Flow-Chart Stops
- Flow-Chart Continues
- Partial / Possible Flow
- Incomplete Pathway
- Potentially Complete Pathway
- Complete Pathway

SI Overview
Planning and Sampling

- Finalize Uniform Federal Policy-Quality Assurance Project Plan (UFP-QAPP) Addendum
  - Draft Final submitted on 27 March 2020
  - Final to be submitted following the TPP 1&2 meeting
- Continuous soil cores to target depth
  - Soil samples collected at surface, mid point, above water table for new temporary well locations
- Collect a groundwater sample from each temporary well

SI Overview
Proposed Sampling Locations

- Groundwater collected from 4 locations (4 samples)
- Surface and subsurface soil collected from 4 locations (12 samples)



Legend

- Soil Boring/DPT Temporary Monitoring Well
- Area of Interest
- Potential PFAS Release
- No Suspected Release
- Facility Boundary
- Surface Water Flow Direction
- Inferred Groundwater Flow Direction

SI Overview

AOI	Potential Source Area	Total DPT Boring Locations	Proposed Sampling Locations	Approximate Depth (feet bgs)	Soil Samples	Groundwater Samples
1	Wash Rack	1	AOI01-01	10-15 for DPT	3	1
Upgradient	Off-Facility	2	DVP-01 DVP-02	10-15 for DPT	6	2
Downgradient	On-Facility	1	DVP-03	10-15 for DPT	3	1

SI Overview
Analytical Parameters

Perfluorooctanesulfonic acid (PFOS)	Perfluoroheptanoic acid (PFHpA)
Perfluorohexanesulfonic acid (PFHxS)	Perfluorononanoic acid (PFNA)
Perfluorooctanoic acid (PFOA)	Perfluorobutanesulfonic acid (PFBS)
Perfluorobutanoic acid (PFBA)	Perfluoropentanoic acid (PFPA)
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)
Perfluorodecanoic acid (PFDA)	Perfluorotetradecanoic acid (PFTA)
Perfluorododecanoic acid (PFDoA)	Perfluorohexanoic acid (PFHxA)
Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnA)
6:2 Fluorotelomer sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonate (8:2 FTS)

- Analysis completed by ELAP/NELAP-certified laboratory
- All data will undergo Level III data validation

Stakeholder Involvement

- Use TPPs and open communication to encourage stakeholder involvement
- Key involvement topics
  - Proposed approaches
  - Document review time for IDNR, IAARNG and other stakeholders
- Schedule:
  - UFP-QAPP: Final in May 2020
  - Field Investigation: June 2020

Questions and Open Discussion

- Coordination
  - Data transfer
  - Report distribution (paper, electronic, portable document format)
  - Stakeholder relations
- Schedule
- PA findings
- Utility mark-out and clearance procedures
- IDW handling
  - Same as Camp Dodge
  - Return IDW to within 10 feet of sample location (downgradient)

Sample Location Refinement

- Confirm placement is accessible and will meet DQOs during utility locate
- Confirm any existing monitoring well locations
- Relocate, if needed, with ARNG, IAARNG, and IDNR concurrence

Acronyms

- AASF – Army Aviation Support Facility
- AOI – areas of interest
- ARNG – Army National Guard
- bgs – below ground surface
- CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
- CSM – Conceptual Site Model
- DPT – direct-push technology
- DQO – Data Quality Objective
- EM – Engineering Manual
- IA – Iowa
- IAARNG – Iowa Army National Guard
- IDNR – Iowa Department of Natural Resources
- IDW – investigation derived waste
- IED – Installation and Environment Division
- OWS – oil/water separator
- PA – Preliminary Assessment
- PFAS – Per- and Polyfluorinated Alkyl Substances
- PFOS – Perfluorooctanesulfonic Acid
- PFOA – Perfluorooctanoic Acid
- SI – Site Inspection
- TPP – Technical Project Planning
- UFP-QAPP – Uniform Federal Policy-Quality Assurance Project Plan
- USACE – United States Army Corps of Engineers