

**PART 1: PUBLIC MEETING FOR
PROPOSED PLANS, AREAS OF
CONCERN 12, 20, 24A AND 24B**

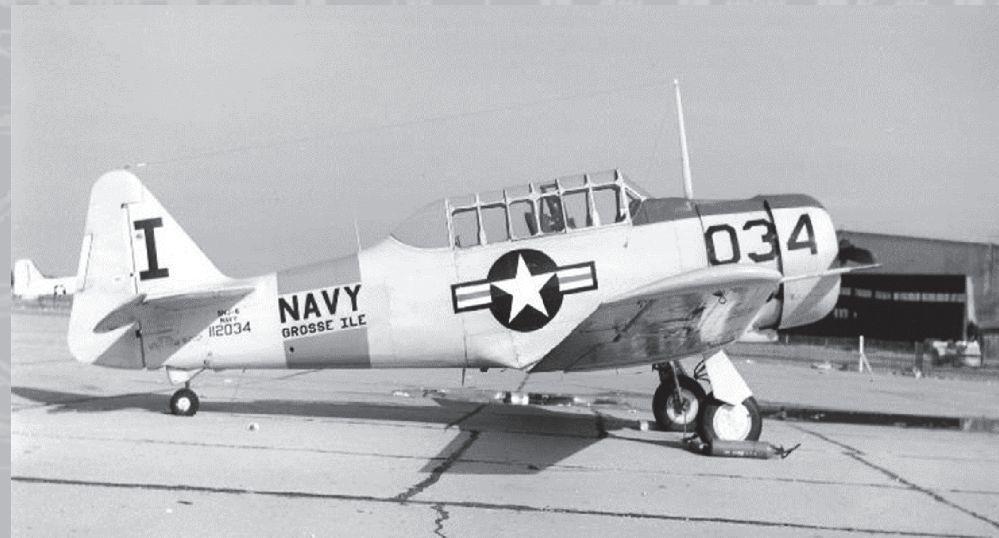
**PART 2: 2021 INFORMATIONAL
PUBLIC MEETING**

**FORMER NAVAL AIR STATION
GROSSE ILE, MICHIGAN**

USACE

Louisville District

Date: November 30, 2021



**US Army Corps
of Engineers®**



WELCOME



Introductions

- **U.S. Army Corps of Engineers (USACE)—Louisville District Office**
 - Clayton Hayes—Project Manager
 - Robin Sternberg, PhD—Technical Manager
 - Angela Schmidt—Project Risk Assessor
 - Charles Delano—Public Affairs Specialist
 - Jennifer Guffey—Tribal liaison
 - Mette Bahde—Legal Counsel



WELCOME



Introductions (Continued)

- **Contractor — Jacobs Engineering**
 - Kimberly Amley—Project Manager
 - Tom Hutchinson —Senior Scientist
 - Megan Ruiz —Meeting Facilitator
- **Michigan Department of Environment, Great Lakes, and Energy (EGLE)**
 - William Harmon—Project Manager
- **Grosse Ile Township**
 - Derek Thiel—Grosse Ile Township Manager

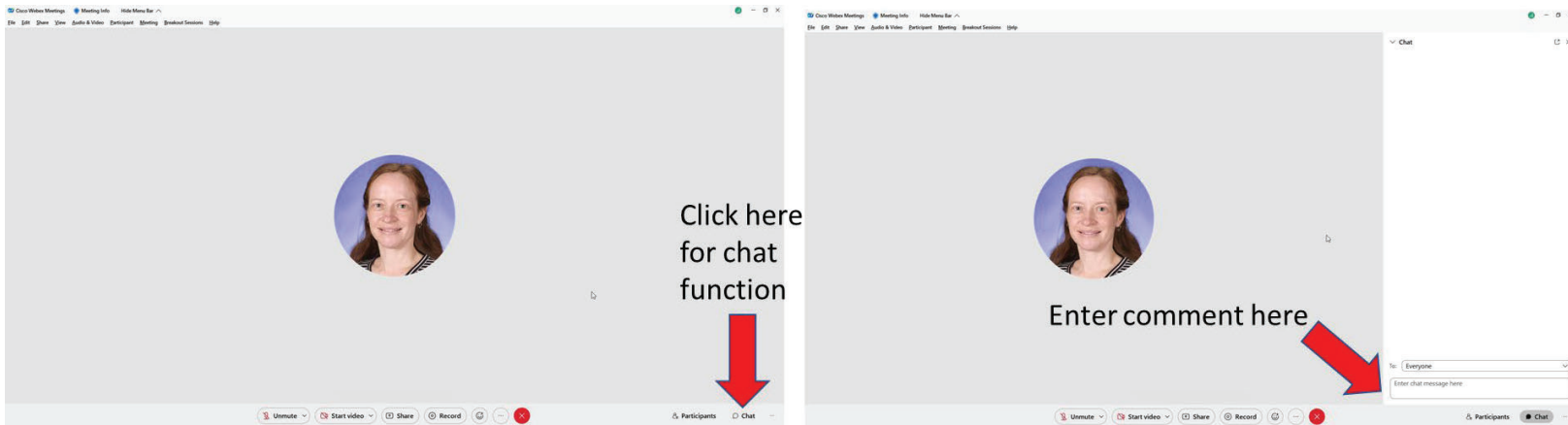


PARTICIPATION INSTRUCTIONS



- **Instructions**

- USACE will share the first presentation which will discuss the investigation findings and proposed plans for areas of concern (AOCs) 12, 20, 24A, and 24B at former Naval Air Station Grosse Ile (NASGI)
- Participants will be able to ask questions and provide comments on the proposed plans using the chat function or at the end of the presentation
- USACE will respond to questions and comments





PARTICIPATION INSTRUCTIONS



- **Instructions (Continued)**

- There will be a 10-minute break
- USACE will share the second presentation which will provide an update on ongoing environmental investigation activities at other AOCs across former NASGI
- Participants will be able to ask questions at the end of the second presentation
- When providing a comment or question, please state and spell your name



MEETING DOCUMENTATION



- **Documentation**

- The meeting will be recorded
- A transcript of the meeting will be provided in the Administrative Record at <http://www.lrl.usace.army.mil/GrosselleNavalAirStation/> and the public repository located at the Bacon Memorial District Library in Wyandotte, MI

PART 1: PUBLIC MEETING FOR PROPOSED PLANS, AREAS OF CONCERN 12, 20, 24A AND 24B FORMER NAVAL AIR STATION GROSSE ILE, MICHIGAN

USACE

Louisville District

Date: November 30, 2021

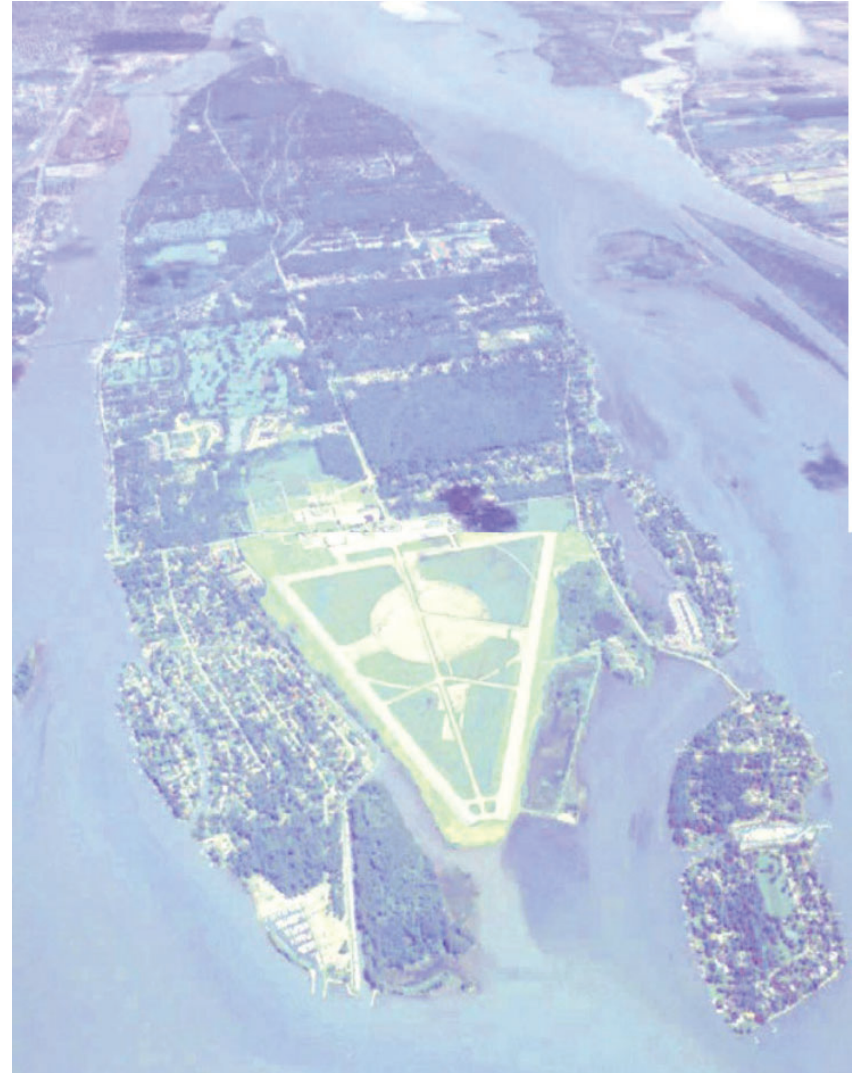


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AGENDA

- Purpose
- Regulatory Overview
- History of Former NASGI
- AOCs 12, 20, 24A and 24B
 - AOC Features and History
 - Environmental Investigations
 - Evaluation of Risk
 - No Further Action Recommendation
- Community Participation
- Questions and Answers





PURPOSE OF THIS MEETING



The purpose of this meeting is to provide:

- a summary of environmental investigations for AOCs 12, 20, 24A, and 24B;
- the rationale for the No Further Action recommendation for each of the four AOCs; and
- the public with an opportunity to comment on the proposed plans and recommendations.





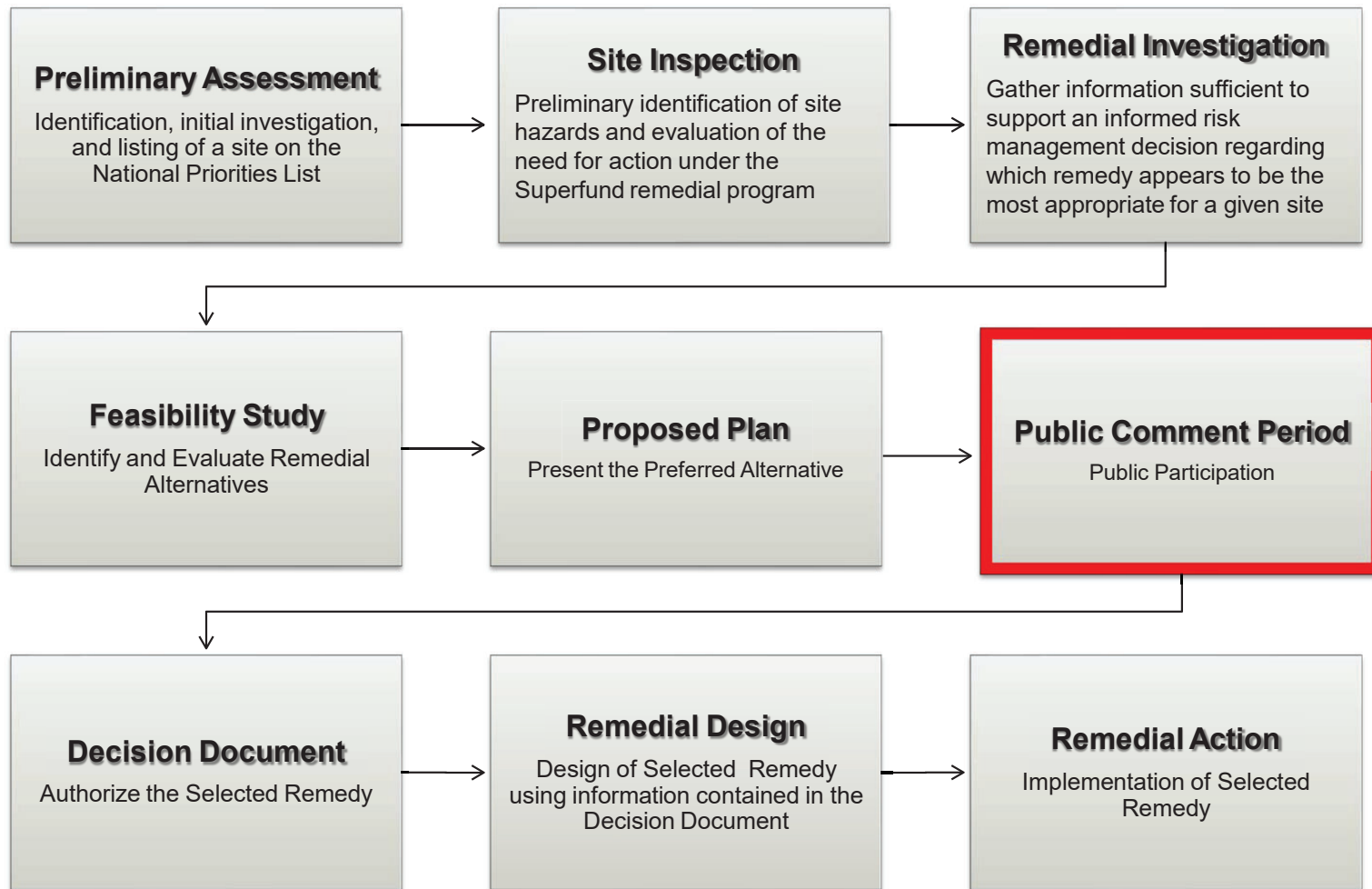
FORMERLY USED DEFENSE SITES PROGRAM



- A Formerly Used Defense Site (FUDS) is defined as a facility or site that was under the jurisdiction of the Secretary of Defense and owned by, leased to, or otherwise possessed by the United States at the time of actions leading to contamination by hazardous substances. By the Department of Defense (DoD) Environmental Restoration Program (DERP) policy, the FUDS program is limited to those real properties that were transferred from DoD control prior to 17 October 1986. FUDS properties can be located within the 50 states, District of Columbia, territories, commonwealths, and possessions of the United States.
- The Army is the DoD executive agent for FUDS, and the USACE is responsible for carrying out the program.
- The Louisville District of USACE implements the FUDS program in Michigan for the DoD and works in coordination with EGLE.



STAGES OF THE CERCLA PROCESS AND NCP





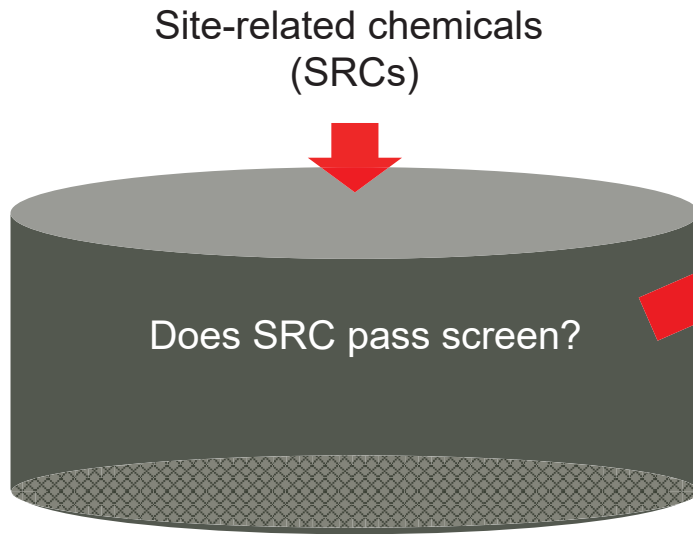
HOW ARE RISKS EVALUATED?



Screening levels

(screen size)

- background (metals only)
- Federally-established EPA Regional Screening Levels (RSLs)
- State of Michigan Part 201 Cleanup Criteria and Screening Levels



Site-related chemicals (SRCs)

Does SRC pass screen?

No, SRC becomes Chemical of Potential Concern (COPC)

Further evaluation: Does COPC pose unacceptable risk as defined by CERCLA/NCP?



Yes, SRC poses no unacceptable risk as defined by CERCLA/NCP



No

Yes, COPC becomes Chemical of Concern (COC)



No Further Action Recommendation



HISTORY OF FORMER NASGI



- Originally established in 1929 from surrounding farmland and known as Naval Reserve Aviation Base Grosse Ile.
- Increased to 607 acres by World War II.
- Between 1954 and 1957, Army acquired 52.53 acres for use as the Nike Site D-51.
- U.S. Naval Air Station transferred property to U.S. General Services Administration in 1969, with subsequent transfer of 549 acres to Grosse Ile Township to use as public airport in December 1970.
- Current uses include:
 - Grosse Ile Commerce Park and Municipal Airport
 - Gibraltar Bay Unit of the Detroit River International Wildlife Refuge
 - EPA Large Lakes Research Center



SITE LOCATION MAP



- AOC 12—Former Building 28
- AOC 20—Quonset Hut
- AOC 24A—Debris Disposal Area
- AOC 24B—Tar/Sludge Disposal Area



AOC 12 HISTORY AND FEATURES



- AOC 12 (Former Building 28 Battery Storage Building) consists of Building 28, which was used for battery storage during Navy operations, and the adjacent grassy area, which formerly contained underground storage tank (USTs).
- Two nonregulated USTs containing Bunker C fuel oil were removed in 1993.
- AOC 13 is located within the boundary of AOC 12
- One regulated UST containing gasoline was removed from AOC 13 in 1993 and administratively closed in 2021.



AOC 12 CHARACTERISTICS



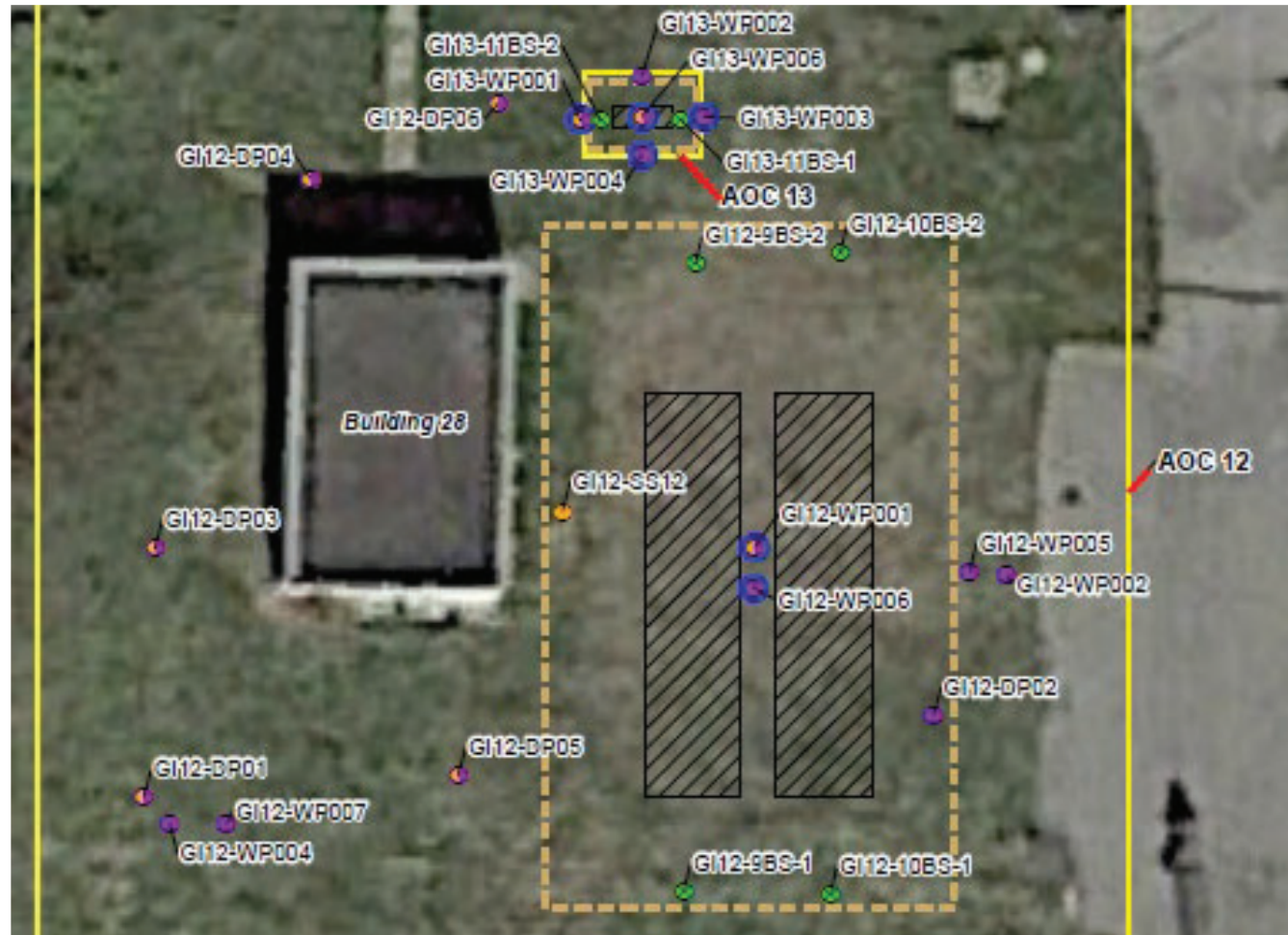
- Potential SRCs associated with former DoD use of AOC 12:
 - Fuel oil, battery acid, and gasoline-related compounds.
 - As defined by EGLE, SRCs associated with the fuel oil tank include benzene, toluene, ethylbenzene, xylenes, trimethylbenzene isomers, polynuclear aromatics, and the metals lead, antimony, cadmium, chromium, and selenium, which are commonly associated with lead batteries.
- Soil Characterization
 - Clay lake (lacustrine) deposits with varying amounts of silt and fine- to coarse-grained sand are present to 12 feet below ground surface (bgs).
 - The anticipated depth to bedrock is approximately 30 feet bgs.
- Groundwater
 - Groundwater was encountered at approximately 10 to 12 feet bgs in joints in the clay.
 - These disconnected lenses of sand and fine gravel within the clay do not produce enough yield for a potable drinking water source.



AOC 12 ENVIRONMENTAL INVESTIGATIONS

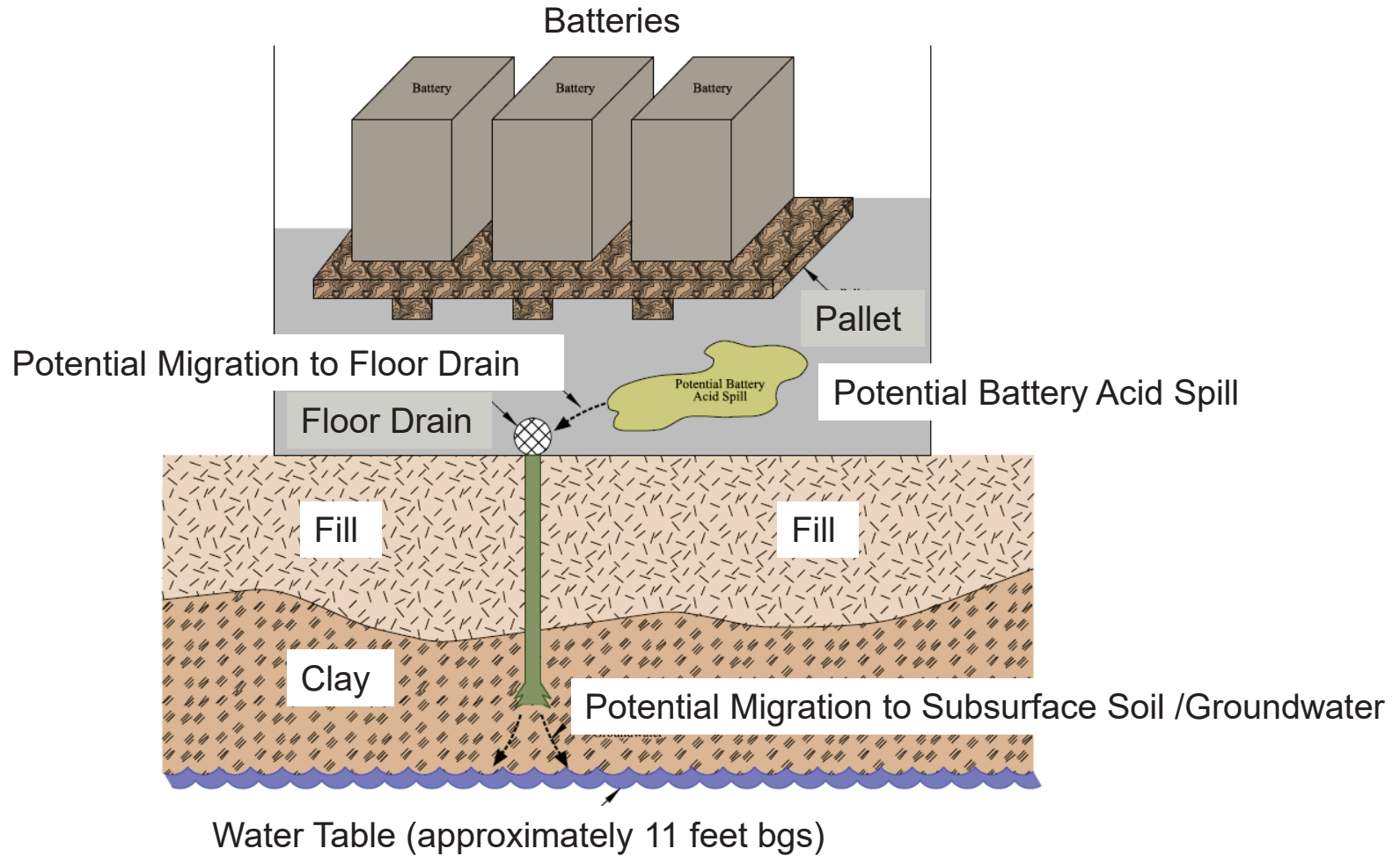


- 1990 Initial contamination evaluation
- 1993 UST removals
- 1996 Site Inspection
- 2002-2006 Phased remedial investigation (RI)
 - 12 surface soil samples
 - 38 subsurface soil samples
 - 7 groundwater samples
- 2019 Utility Survey and RI Addendum





AOC 12 ENVIRONMENTAL INVESTIGATIONS (CONTINUED)





AOC 12 EVALUATION OF RISKS



- Evaluation process
 - 1) Concentrations of SRCs in soil and groundwater are compared to applicable screening levels.
 - Background levels (metals only/soil only)
 - Federally-established EPA Residential Soil RSLs
 - State of Michigan Part 201 Cleanup Criteria and Screening Levels
 - 2) SRCs with concentrations that exceed applicable screening levels are considered COPCs.
 - 3) If COPCs are identified, they are further evaluated to determine if unacceptable risks (as defined by CERCLA/NCP) are present.
- Results
 - No COPCs were identified in surface soil, subsurface soil, or groundwater.



AOC 12 NO FURTHER ACTION RECOMMENDATION

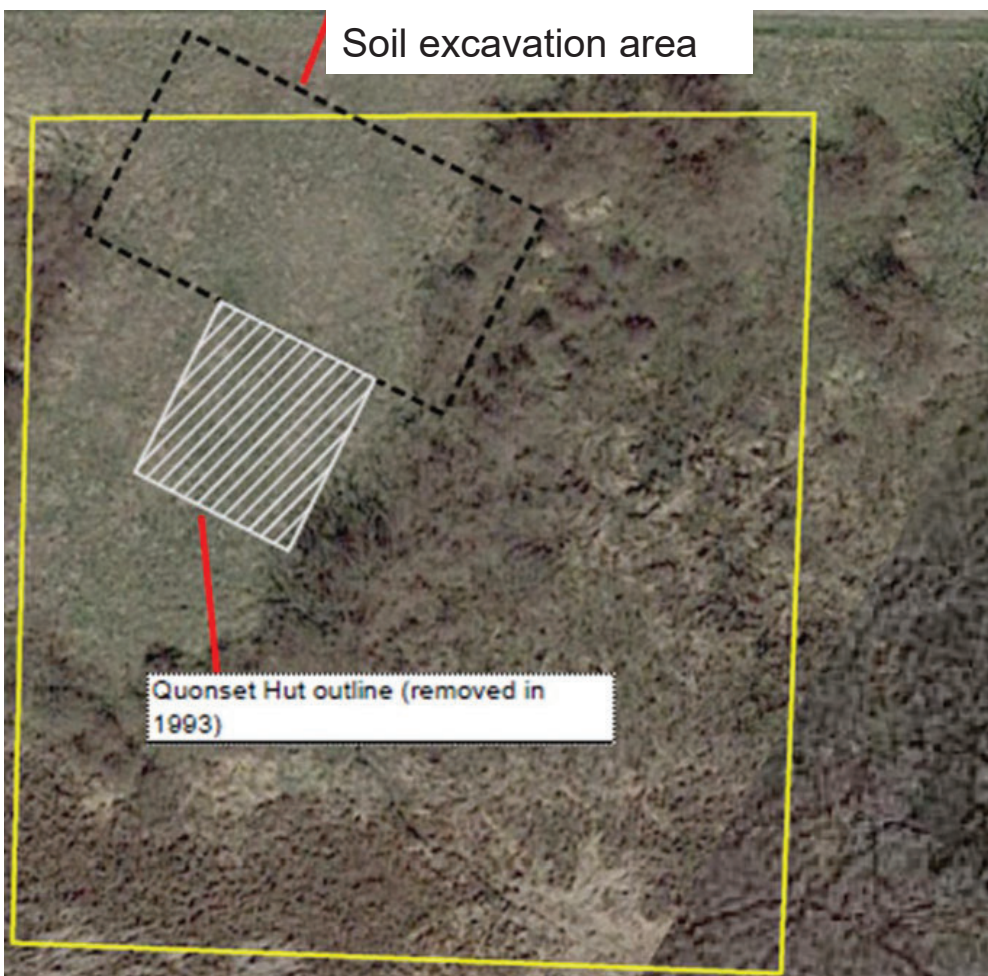


- No COPCs (no unacceptable risks) for the Residential Receptor were identified in the Final RI Addendum Report.
- Therefore, no further action is needed to protect human health or the environment at AOC 12.





AOC 20 HISTORY AND FEATURES



- AOC 20 was part of a 20-acre missile magazines/ordnance storage area used by the Navy primarily for explosives storage.
- Although munitions were formerly stored in ordnance areas, the presence of ordnance and explosives (OE) or historical evidence of OE presence was not identified at AOC 20.
- Approximately 72 drums containing various types of materials were found staged near the Quonset Hut building.



AOC 20 CHARACTERISTICS



- Potential SRCs associated with former DoD use of AOC 20:
 - Volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and metals.
- Soil Characterization
 - Clay with varying amounts of silt was encountered to approximately 10 feet bgs. A silty, low-plasticity clay layer is present at approximately 8 feet bgs.
- Bedrock
 - Limestone bedrock was present at approximately 10 feet bgs.
- Groundwater
 - Groundwater was encountered at approximately 8 feet bgs. Groundwater depth varies from ground surface to 14 feet in the area east of AOC 20 and up to 28 feet in areas north of the southeast runway.
 - Shallow groundwater is encountered within thin, disconnected lenses of sand and fine gravel within the clay lake (lacustrine) deposits. These thin lenses do not produce enough yield for a potable drinking water source.



AOC 20 ENVIRONMENTAL INVESTIGATIONS



Numerous activities were conducted at AOC 20 between 1993 and 2019:

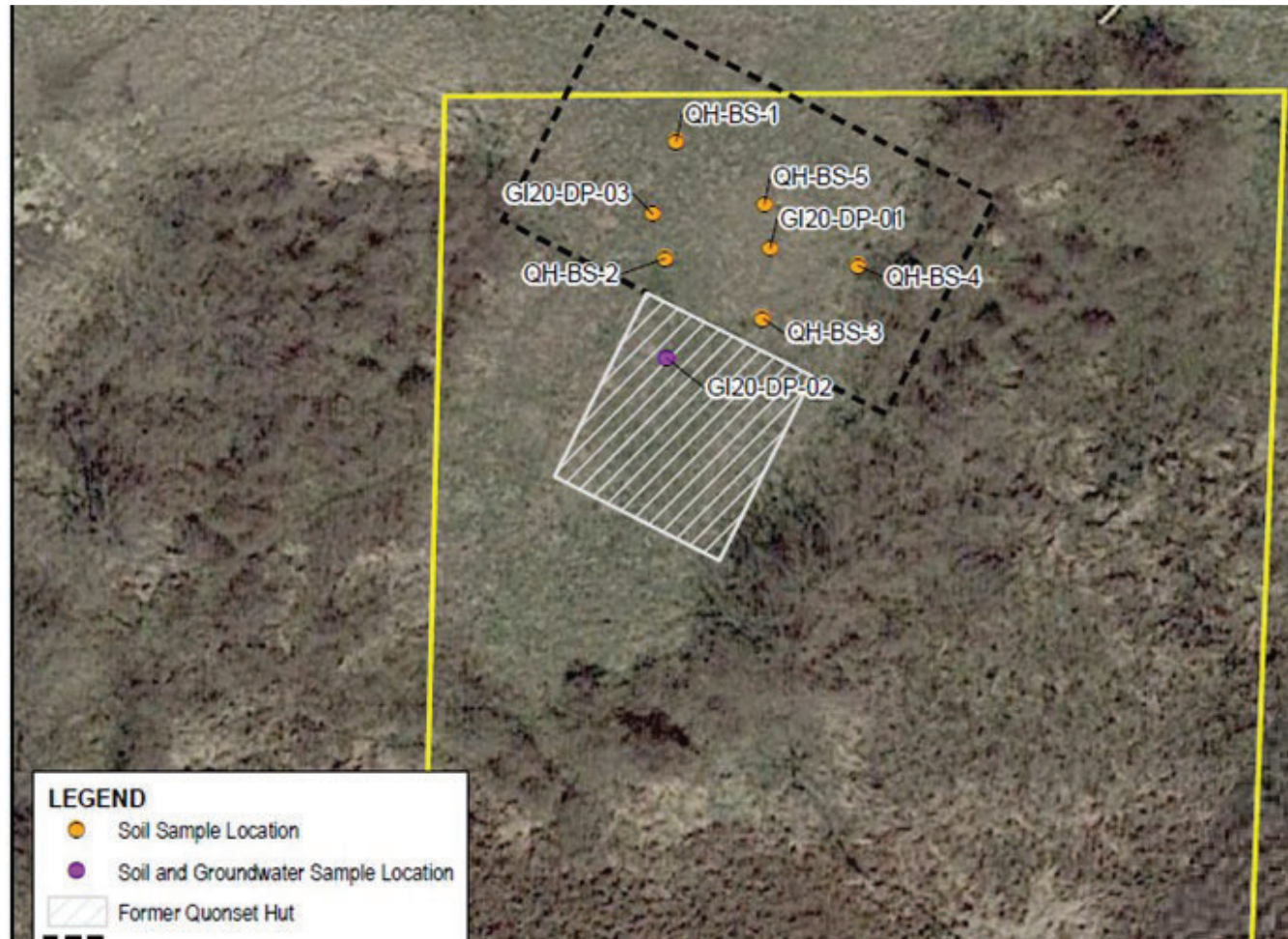
- The Quonset Hut Explosives Igloo was demolished in 1993 and the drums staged in this area were removed from the AOC.
- Surface soil was removed in 1993 from an approximate area of 35 feet by 45 feet to a depth of approximately 2 feet bgs.
- In 1998 an historical ordnance records review was completed.
- A phased RI was completed between 2002 and 2006 to characterize the nature and extent of SRCs related to known or documented DoD activities.
- An RI Addendum was completed in 2019 that included a human health risk assessment on previously collected data.
- A Final RI Addendum Report was issued in 2020.



AOC 20 ENVIRONMENTAL INVESTIGATIONS (CONTINUED)



- Investigation samples were analyzed for SRCs.
 - Surface soil samples were not collected (removed in 1993 to a depth of 2 feet)
 - 16 subsurface soil samples between 1993 and 1996
 - 2 groundwater samples





AOC 20 EVALUATION OF RISKS



- Evaluation process
 - 1) Concentrations of SRCs in soil and groundwater are compared to applicable screening levels.
 - background levels (metals only/soil only)
 - Federally-established EPA Residential Soil RSLs
 - State of Michigan Part 201 Cleanup Criteria and Screening Levels
 - 2) SRCs with concentrations that exceed applicable screening levels are COPCs.
 - 3) If COPCs are identified, they are further evaluated to determine if unacceptable risks (as defined by CERCLA/NCP) are present.
- Results
 - No COPCs were identified in subsurface soil or groundwater.



AOC 20 NO FURTHER ACTION RECOMMENDATION

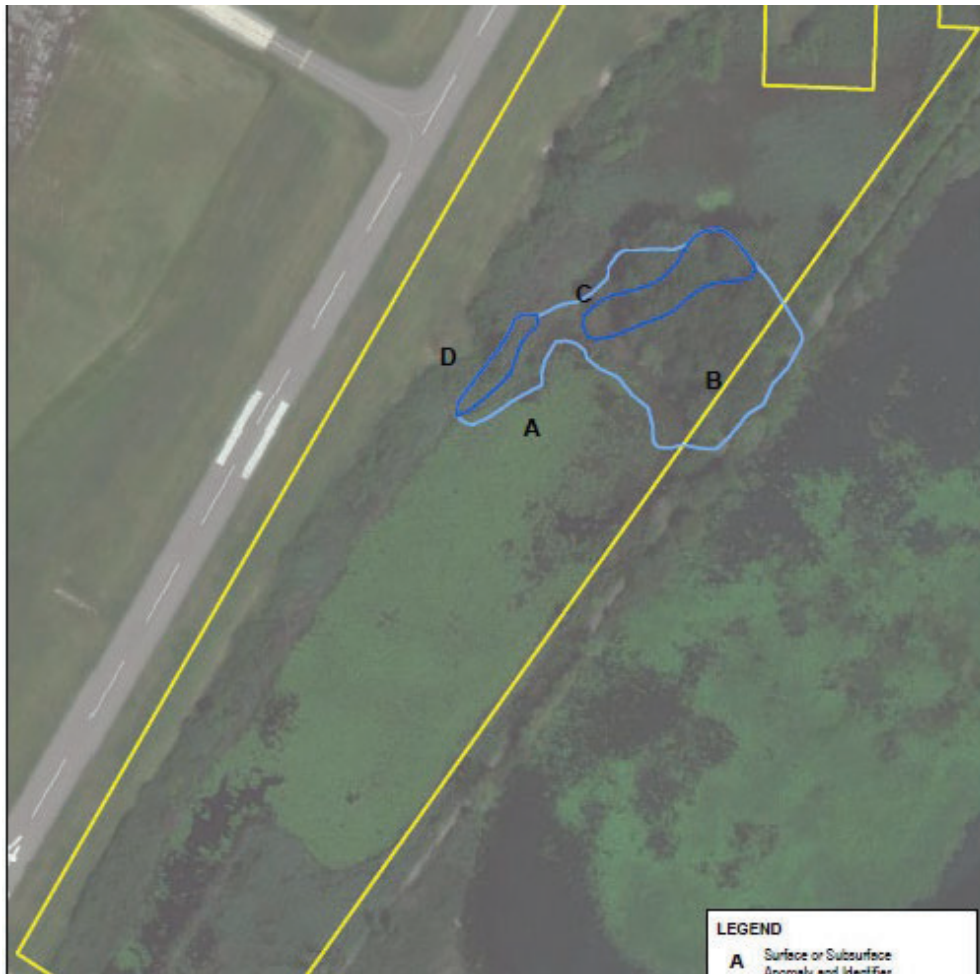


- No COPCs (no unacceptable risks) for the Residential Receptor were identified in the Final RI Addendum Report.
- Therefore, no further action is needed to protect human health or the environment at AOC 20.





AOC 24A HISTORY AND FEATURES



- AOC 24A was formerly used to park watercraft and seaplanes.
- The seaplane hangar and associated road were constructed in 1927 with demolition debris used as riprap to help stabilize road foundations.
- Possible debris disposal into the embayment may have been conducted as early as 1951.
- Shoreline disposal is evident in historical photos at several locations along the shoreline and roadway.
- Materials observed include solid waste (old appliances, airplane parts, building debris, rusted empty drums).



AOC 24A CHARACTERISTICS



- Potential SRCs associated with former DoD use of AOC 24A:
 - VOCs, SVOCs, PCBs, and metals.
- Soil Characterization
 - Clay with varying amounts of silt to approximately 20 feet bgs.
- Bedrock
 - Limestone bedrock was present at approximately 20 feet bgs.
- Surface Sediments
 - Surface sediments within the embayment area and other low-lying areas with standing water were predominantly sand and silt with pockets of clay.
- Groundwater
 - Groundwater was encountered between 3 and 5 feet bgs in AOC 24A.
 - Shallow groundwater is encountered within thin, disconnected lenses of sand and fine gravel within the clay lake (lacustrine) deposits. These thin lenses do not produce enough yield for a potable drinking water source.



AOC 24A ENVIRONMENTAL INVESTIGATIONS



- Numerous activities were conducted at AOC 24A between 1990 and 2019:
 - An initial contamination evaluation was completed in 1990.
 - A Phased RI was completed between 2002 and 2006.
 - A geophysical survey was conducted in February 2006 as part of the Phased RI to establish the extent of buried debris.
 - Debris removal was conducted on September 6, 2008, by an independent scrap metal recycler with permission from the Grosse Ile Municipal Airport.
 - Although EGLE and USACE determined in 2008 that the debris present at AOC 24A was a solid waste issue and that the items of debris and any release of chemicals resulting from breakdown of the debris would not be regulated by CERCLA, additional evaluation was completed in 2019 to ensure chemicals detected in environmental samples collected during the RI do not pose risk to human health and environment.
 - A Final RI Addendum Report was issued in 2020.

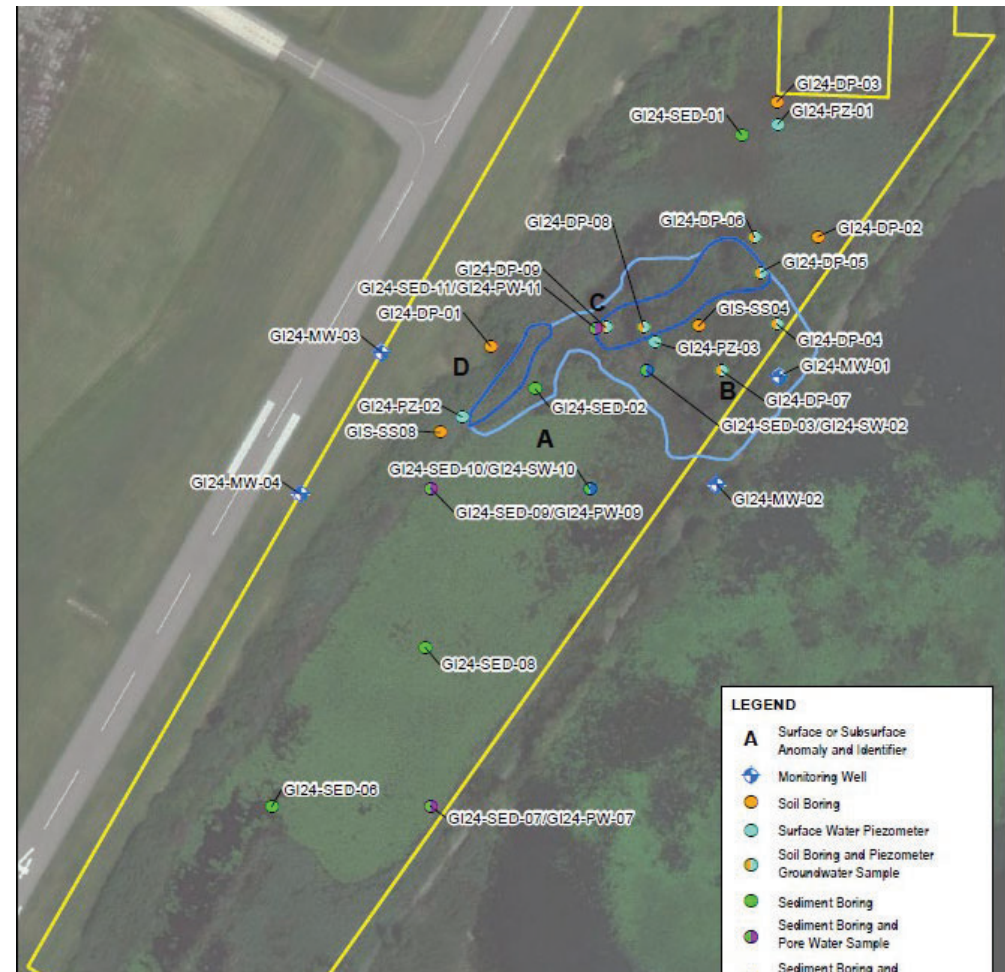


AOC 24A ENVIRONMENTAL INVESTIGATIONS (CONTINUED)

30



- Investigation samples were analyzed for potential SRCs.
 - 12 surface soil samples
 - 3 subsurface soil (depths >3 feet bgs) samples
 - 13 sediment samples
 - 2 surface water samples
 - 14 groundwater samples
 - 5 pore water samples
- The 2006 geophysical survey identified 4 areas with subsurface “anomalies” comprised of solid waste debris not regulated under CERCLA.





AOC 24A EVALUATION OF RISKS



- Evaluation process
 - 1) Concentrations of SRCs in groundwater, soil, surface water, pore water, and sediment were compared to applicable screening levels.
 - background levels (metals only/soil only)
 - Federally-established EPA Residential RSLs
 - EPA Region 5 Ecological Screening Values
 - Region 5 Resource Conservation and Recovery Act (RCRA) Corrective Action Sediment Screening Values (sediment only)
 - State of Michigan Part 201 Cleanup Criteria and Screening Levels
 - State of Michigan Rule 57 Surface Water Quality (surface water/groundwater/pore water)



AOC 24A EVALUATION OF RISKS (CONTINUED)



- Evaluation process
 - 2) SRCs with concentrations that exceed applicable screening levels are considered COPCs.
 - 3) If COPCs are identified, they are further evaluated to determine if unacceptable risks (as defined by CERCLA/NCP) are present.



AOC 24A EVALUATION OF RISKS (CONTINUED)



- Results
 - Soil and sediment
 - COPCs were identified. However, further evaluation indicated that the maximum detected concentrations of the COPCs in soil and sediment samples are within acceptable risk levels defined by CERCLA and the NCP.
 - Surface Water and Pore Water
 - Mercury was identified as a COPC. Although further evaluation indicated that the maximum detected concentration of mercury in surface water is greater than the State of Michigan Rule 57 Surface Water Quality Value, mercury concentrations in surface water are naturally-occurring and unrelated to former DoD activities; therefore, concentrations are within acceptable risk levels as defined by CERCLA and the NCP.



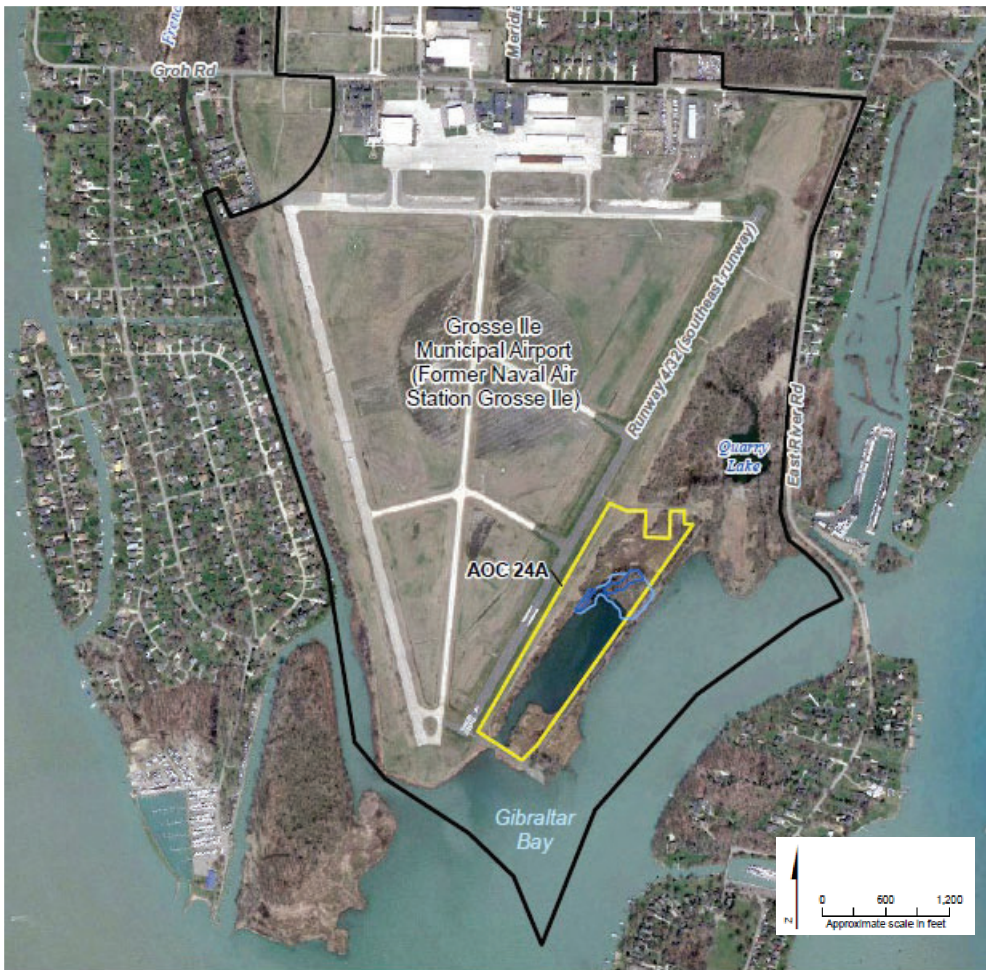
AOC 24A EVALUATION OF RISKS (CONTINUED)



- Results
 - Groundwater
 - Metals and one SVOC (bis[2-ethylhexyl]phthalate) were identified as COPCs. They were detected in groundwater at concentrations greater than the State of Michigan Part 201 Groundwater-Surface Water Interface criteria or the Rule 57 Surface Water Quality Values but were not detected in surface water. This suggests that contaminant migration from groundwater to surface water does not appear to be occurring.
 - The frequency of groundwater sample concentrations exceeding screening values was less than 15 percent. Therefore, concentrations are within acceptable risk levels as defined by CERCLA and the NCP.



AOC 24A NO FURTHER ACTION RECOMMENDATION



- Although COPCs were identified, further evaluation indicated that there were no COPCs that pose an unacceptable risk to human health and the environment as defined by CERCLA and the NCP.
- Therefore, no further action is needed to protect human health or the environment at AOC 24A.



AOC 24B HISTORY AND FEATURES

- An approximate 100-foot-long trench was discovered and designated as AOC 24B during a 2003 evaluation for potential buried waste.
- The trench appears to be evident on aerial photographs circa 1965.
- Tar/sludge estimated to be 20 feet by 10 feet was observed in the northern end of the trench.
- Construction demolition debris (broken concrete with rebar) was observed in the southern end of the trench.
- Approximately 0.5 to 2 feet of water was observed in the trench during the 2003 evaluation.





AOC 24B CHARACTERISTICS



- Potential SRCs associated with former DoD use of AOC 24B:
 - VOCs, SVOCs, PCBs, and metals.
- Soil Characterization
 - Clay with varying amounts of silt to approximately 10 feet bgs.
- Bedrock
 - Limestone bedrock was present at approximately 10 feet bgs.
- Groundwater
 - Groundwater was not encountered at AOC 24B, and no permanent monitoring wells were installed. Depth to groundwater varies between 14 feet bgs east of AOC 24B and up to 28 feet bgs north of the southeast runway.
 - Shallow groundwater is encountered within thin, disconnected lenses of sand and fine gravel within the clay lake (lacustrine) deposits. These thin lenses do not produce enough yield for a potable drinking water source.



AOC 24B ENVIRONMENTAL INVESTIGATIONS



- A phased RI was completed between 2002 and 2006.
- A pre-removal action investigation was completed in 2005 to delineate the approximate footprint of the tar/sludge material.
- Tar/sludge and soil were removed from a zone approximately 23 feet x 30 feet x 5 feet deep on December 3, 2005. A layer of plastic sheet underlaid the bottom of the tar/sludge. Confirmation sampling from excavation sidewalls and floor was conducted post-removal. The excavation was backfilled and graded with clean material and reseeded.
- A screening level risk assessment was completed in 2007 and a Remedial Investigation Report issued to summarize previous activities.
- Additional RI activities were conducted in 2019 to characterize the nature and extent of SRCs related to known or documented DoD activities.
- A Final RI Addendum Report was issued in 2020.

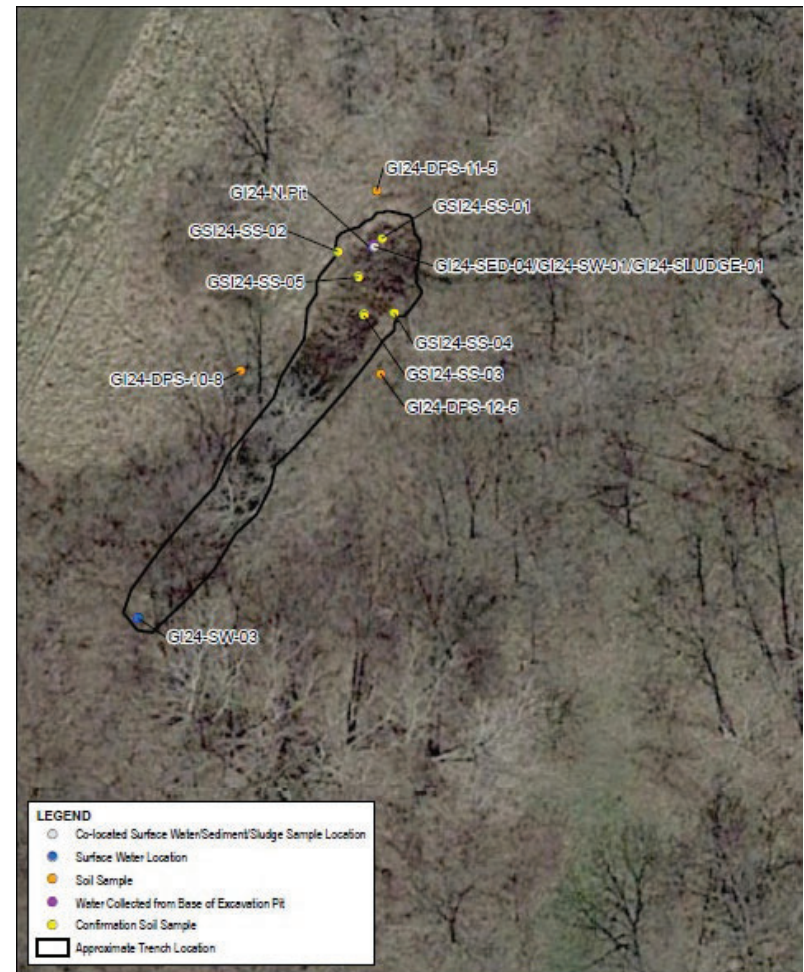


AOC 24B ENVIRONMENTAL INVESTIGATIONS (CONTINUED)

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- No surface soil samples (removed during tar/sludge removal)
- 8 Subsurface soil samples were collected in 2005 :
 - 3 from outside the excavation area (direct push soil borings)
 - 5 from excavation floor and sidewalls after tar/sludge removal
- 3 water samples from the trench:
 - 1 each from north and south ends of the trench in 2003
 - 1 from base of trench after tar/sludge removal in 2005





AOC 24B EVALUATION OF RISKS



- Evaluation process
 - 1) Concentrations of SRCs in soil, surface water, and trench water are compared to applicable screening levels.
 - background levels (soil/metals only)
 - Federally-established EPA Residential Soil RSLs (soil only)
 - State of Michigan Part 201 Cleanup Criteria and Screening Levels (soil, surface water, and trench water)
 - 2) SRCs with concentrations that exceed applicable screening levels are considered COPCs.
 - 3) If COPCs are identified, they are further evaluated to determine if unacceptable risks (as defined by CERCLA and NCP) are present.



AOC 24B EVALUATION OF RISKS



- Results
 - Subsurface soil
 - One COPC, benzo(a)pyrene, was identified. However, further evaluation indicated that the maximum detected concentration of benzo(a)pyrene in subsurface soil samples is within acceptable risk levels as defined by CERCLA and the NCP.
 - Surface water and trench water
 - No COPCs were identified.



AOC 24B NO FURTHER RECOMMENDATION



- Although one COPC was identified, further evaluation indicated that the COPC does not pose an unacceptable risk to human health and the environment as defined by CERCLA and the NCP.
- Therefore, no further action is needed to protect human health or the environment at AOC 24B.



COMMUNITY PARTICIPATION

- Review the Proposed Plan in the Administrative Record at the Bacon Memorial Library
- Access by web link:
<http://www.lrl.usace.army.mil/GrosselleNavalAirStation/>
- Written comments will be accepted until December 14, 2021
- Email comments to:
FUDSLRLLPublicComments@usace.army.mil





COMMUNITY PARTICIPATION (CONTINUED)



- Historical and current information is provided in the public information repository at:

Administrative Record File
Bacon Memorial District Library
45 Vinewood Street
Wyandotte, Michigan 48192



ABBREVIATIONS AND ACRONYMS



AOC	Area of Concern
AST	above ground storage tank
AVGAS	aviation gasoline
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COPCs	constituents of potential concern
DD	decision document
DERP	Department of Defense Environmental Restoration Program
DoD	Department of Defense
EPA	U.S. Environmental Protection Agency
EGLE	Environment, Great Lakes and Energy
FS	feasibility study
FUDS	Formerly Used Defense Site
NASGI	Naval Air Station Grosse Ile



ABBREVIATIONS AND ACRONYMS (CON'T)



PA	preliminary assessment
PCBs	polychlorinated biphenyls
PM	project manager
PP	proposed plan
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RI	remedial investigation
RSL	Regional Screening Level
SI	site inspection
SVOCs	semivolatile organic compounds
TM	technical manager
USACE	U.S. Army Corps of Engineers
UST	underground storage tank
VOCs	volatile organic compounds



QUESTIONS/COMMENTS

Questions and comments related to AOCs are welcome and will be documented by the recorder.