

Petersburg Generating Station Corrective Measures Assessment



Public meeting
January 14, 2026

Agenda and Introductions

Stewart Ramsay

Managing Executive, Vanry and Associates

Agenda

| Topic | Presenter |
|---------------------------------------|---|
| AESI Overview | Evaristo Leonardi, AESI COO, AES Indiana |
| AESI Petersburg Generating Station | Steve Barnoski, AESI Plant Manager |
| Environmental Regulations | Pilar Cuadra, AESI Environmental Manager |
| Petersburg CMA Report | Steve Putrich, Haley & Aldrich Professional Engineer |
| Summary and Next Steps | Pilar Cuadra, AESI Environmental Manager |
| Comments and Discussion | |

Welcome and Overview

Evaristo Leonardi

Chief Operating Officer, AES US Utilities

Accelerating the future of energy, together.

Reliable

Resilient

Stable

Cost-Effective

Sustainable



AES Indiana Petersburg Generating Station

Steve Barnoski

Plant Manager, AES Indiana Petersburg

Petersburg Generating Station

- AES has had a presence in Pike County and Petersburg since the 1960s.
 - Investments supporting long-term operations roles, sustained tax base contributions, and community involvement.
- August 2024, AES Indiana announced \$1.1 billion in investments in Pike County from 2024 to 2026.
 - Pike County Battery Storage Project
 - Petersburg Energy Center - Solar
 - Repowering Unit 3 and Unit 4 from coal to natural gas.
- AES Indiana is proud to partner with Petersburg and Pike County for decades to come.



Petersburg Generating Station

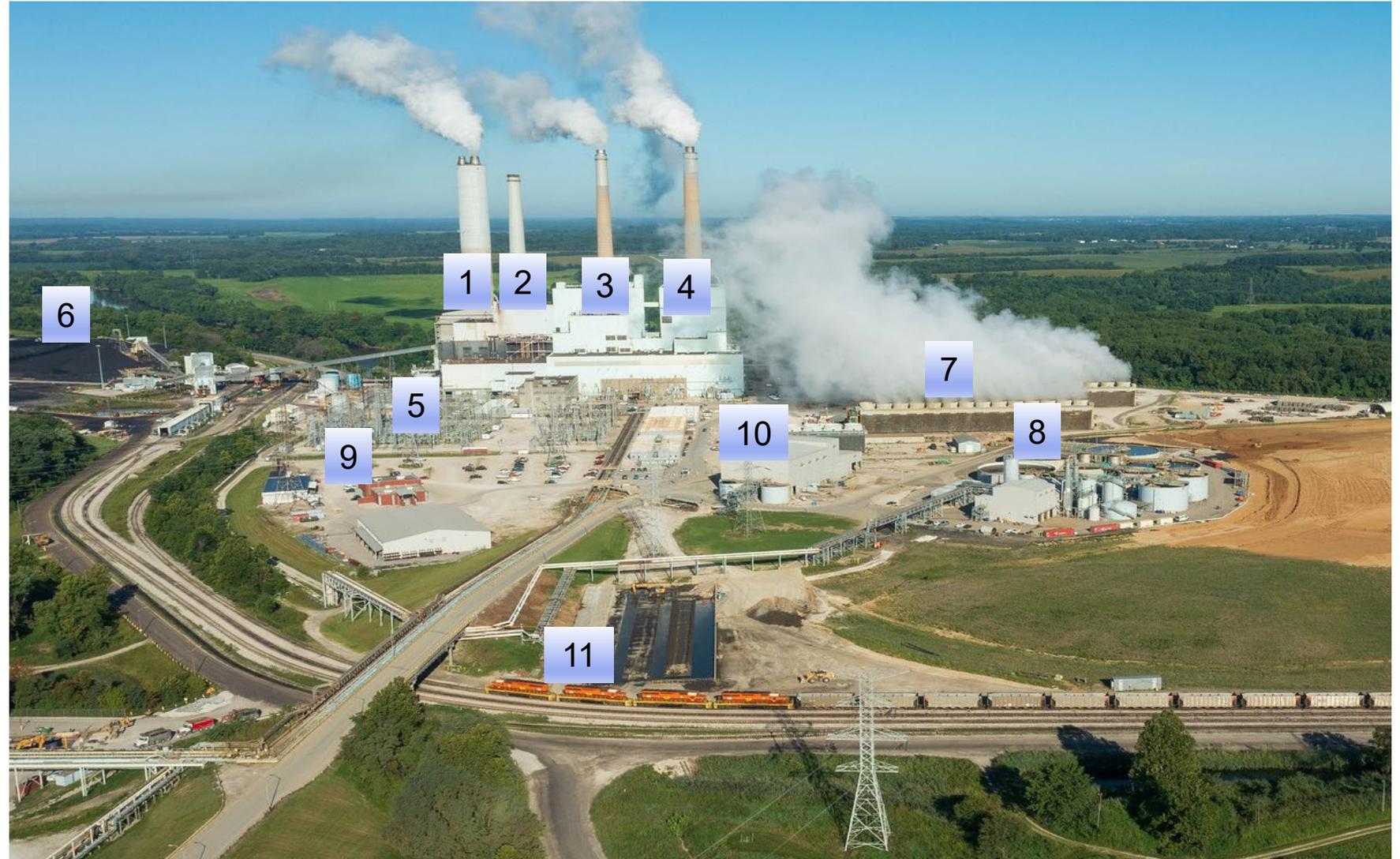
- Site construction started in 1965
- Unit 1 and Unit 2 were built in 1967 and 1969 and are now retired.
- Units 3 and 4 will be convert to natural gas in 2026:
 - This will be end of burning coal at the Plant
 - Together, they can power 1.2 million homes
- The Plant employes 260 full-time employees and around 150 contractors.



AES Petersburg Electric Generating Station

Plant Layout

- 1 = Unit 1 (retired)
- 2 = Unit 2 (retired)
- 3 = Unit 3
- 4 = Unit 4
- 5 = Switchyard
- 6 = Coal Pile
- 7 = Cooling Towers
- 8 = Wastewater Treatment
- 9 = Communications Bldg
- 10 = Byproduct processing
- 11 = Train delivery



Environmental regulations

Pilar Cuadra

Environmental Manager, AES Indiana

What are coal combustion residuals (CCR)?

- Coal Combustion Residuals (CCR) are byproducts generated from the combustion of coal from coal-fired power plants
- CCR contains trace metal elements, generally called CCR constituents

2015 CCR Federal Rule

Rule overview – General requirements

Establish groundwater monitoring systems to determine if there are impacts to the groundwater above groundwater protection standards.

If impacts are above groundwater protection standards, initiate evaluation of corrective measures.

Initiate and complete closure of CCR units within a specific timeframe.

Depending on operating status of units.

Publish compliance data and information to a public website.

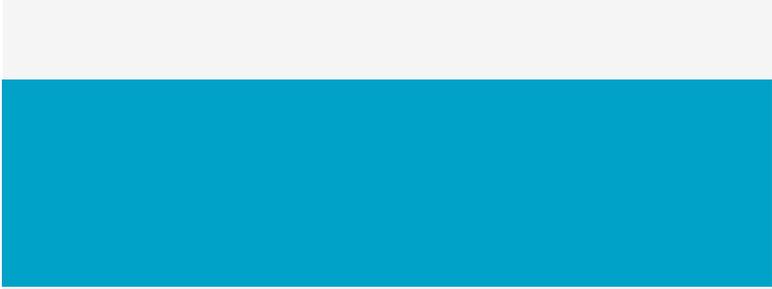
2015 CCR Federal Rule

Rule overview – Implementation



Detection

- 8 Initial Events
- Twice per Year



Assessment

- Twice per Year



Corrective Measures

- Assessment
- Nature & Extent
- Selection of Remedy
- Implementation

Petersburg CMA report

Steve Putrich

Professional Engineer, Haley and Aldrich

Technical Agenda

1

CCR Groundwater Program, Monitoring Results,
and Groundwater Risk Evaluation Outcomes

2

Corrective Measures Assessment (CMA):
Background & Process

3

CMA Analysis and Results

4

Conclusion & Next Steps

CCR Groundwater Program, Monitoring Results, and Groundwater Risk Evaluation Outcomes

Overview of the CCR Groundwater Monitoring Program

Groundwater Monitoring

Background
Monitoring

Detection
Monitoring

Assessment
Monitoring

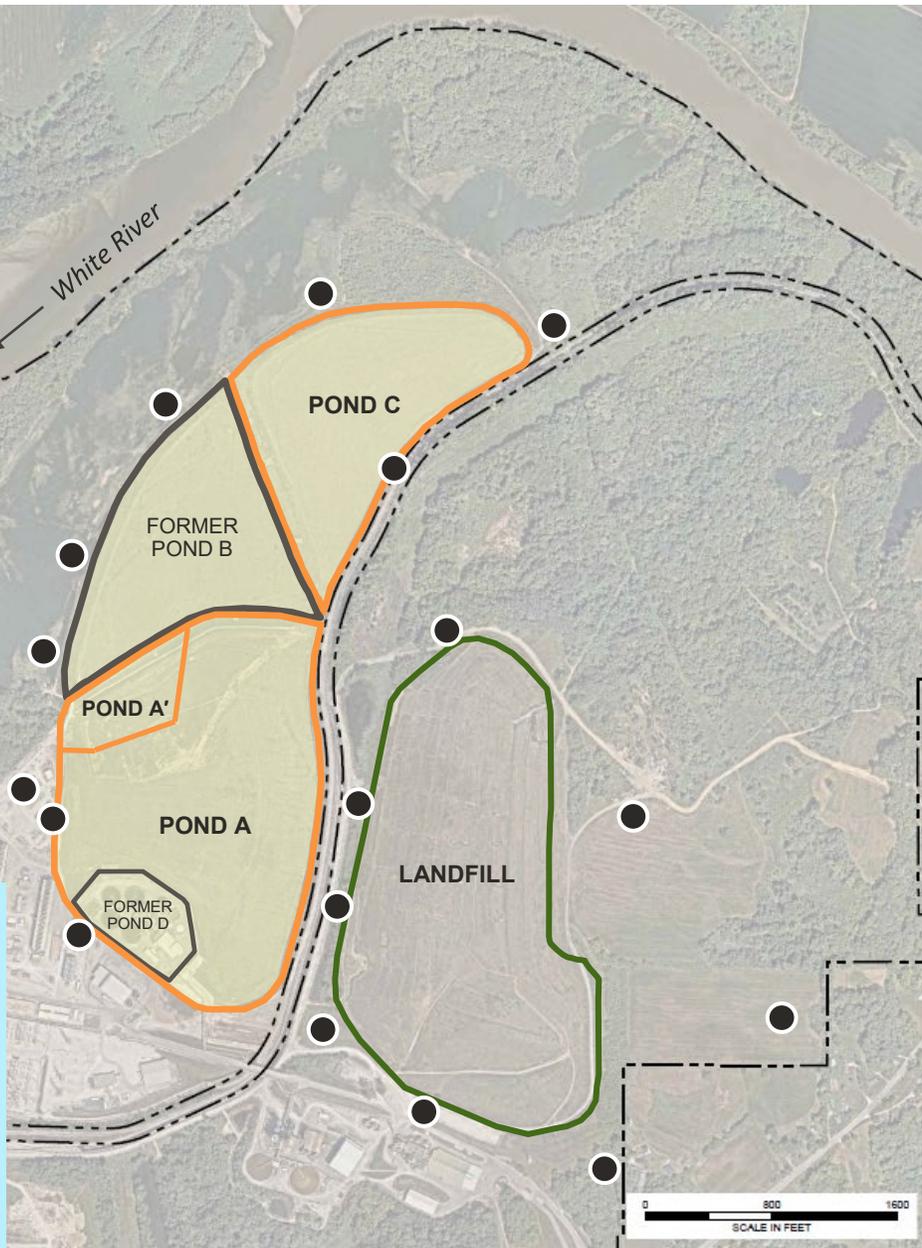


CCR Compliance Groundwater Monitoring Wells

- AESI has been monitoring groundwater at the Site in compliance with the CCR Rule since 2016.
- CCR monitoring wells at the Ash Pond System include a total of 9 well locations.
- CCR monitoring wells at the Landfill include a total of 8 well locations.
- Well locations are installed immediately upgradient and at the downgradient edge of the CCR units.
- Groundwater monitoring results for the Site identified 3 CCR constituents [**arsenic, lithium, and molybdenum**] at levels above the Groundwater Protection Standards (which are the drinking water standards) set by the USEPA in the CCR Rule.

What is a CCR “constituent”?

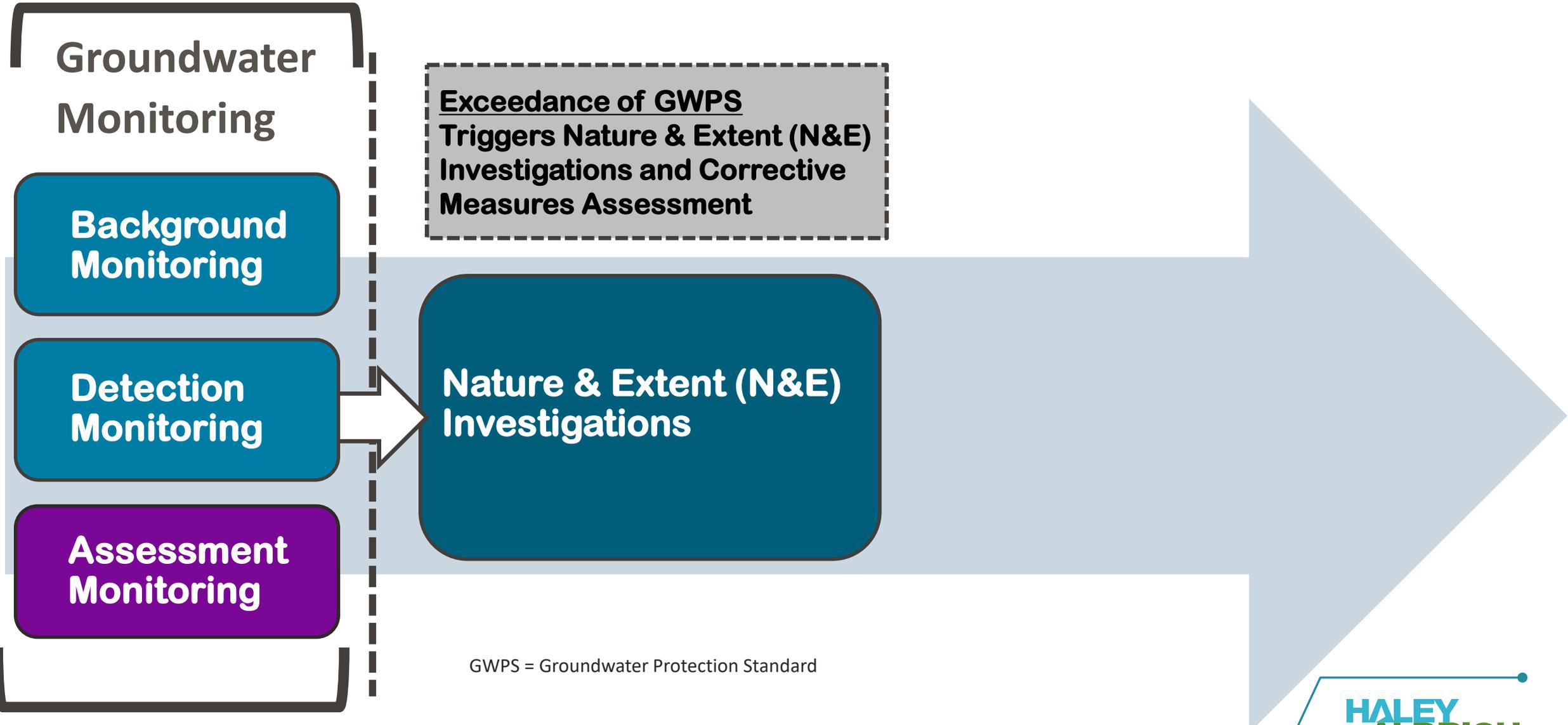
The burning of coal for electricity generation produces coal combustion residuals (CCR), also referred to as coal ash, which contains trace metal elements. These trace elements are called CCR constituents.



LEGEND

- CCR COMPLIANCE MONITORING WELL
- . . - APPROX. LIMITS OF PROPERTY LINE

CCR Rule Groundwater Monitoring Program & CMA Development (40 CFR 257)



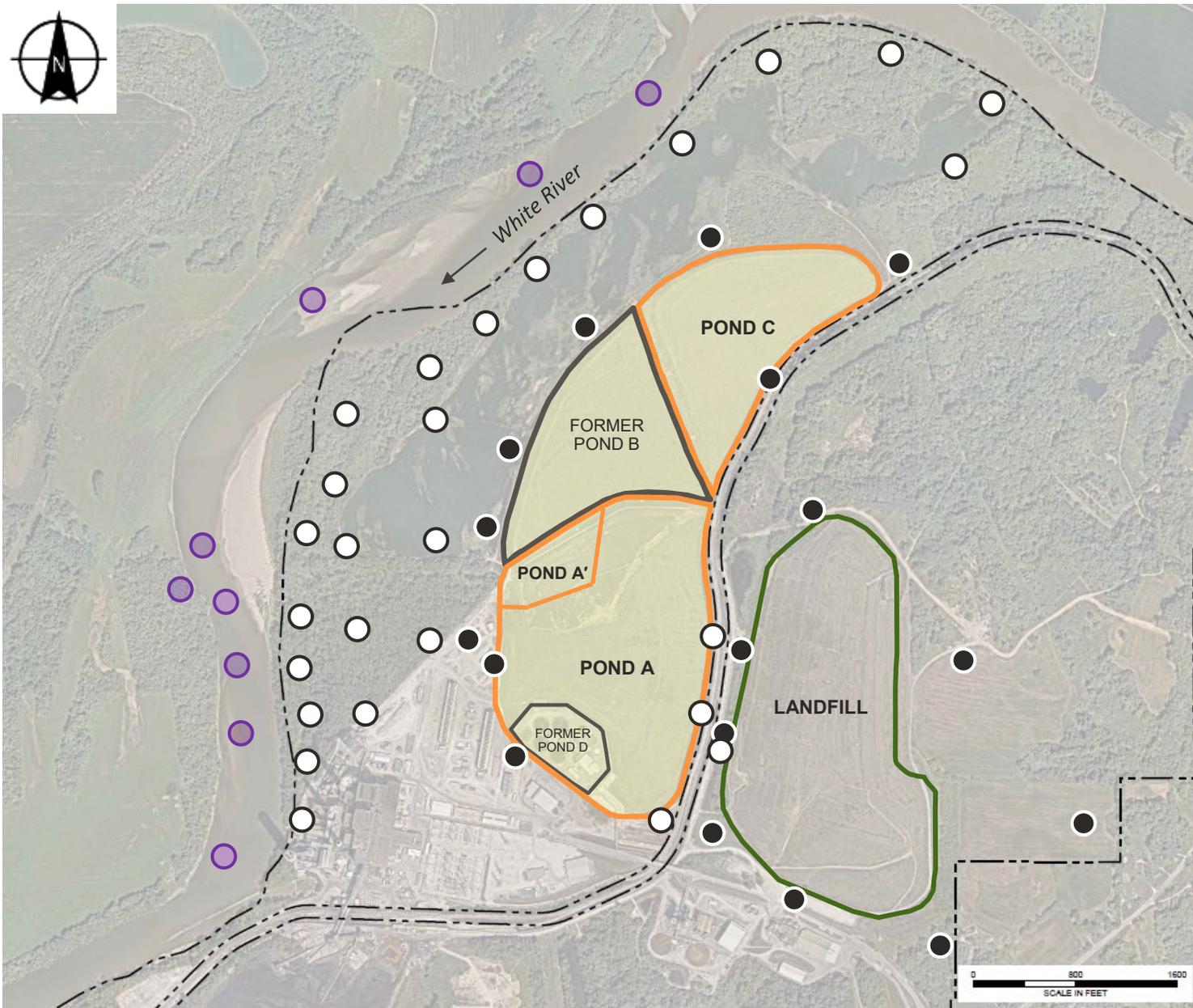


Nature & Extent (N&E) Groundwater Monitoring Wells

- Nature & Extent (N&E) monitoring wells include a total of 23 well locations installed north and west of the Ash Pond System and 4 well locations installed west of the Landfill.
- Groundwater samples were collected from 9 offsite temporary well locations.
- The N&E wells are used to determine the nature (i.e., to measure the CCR constituents present and the groundwater chemistry below the site) and the lateral and vertical extent of CCR-related groundwater impacts.

LEGEND

- NATURE & EXTENT MONITORING WELL
- TEMPORARY WELL
- CCR COMPLIANCE MONITORING WELL
- APPROX. LIMITS OF PROPERTY LINE





Generalized Groundwater Flow

- General groundwater flow direction is toward the White River to the west and north of the Site.
- Groundwater levels are generally higher in the spring and lower in the fall.
- Groundwater is hydraulically connected to the White River and rises and falls with the stage of the river.
- During flood events, elevated river levels cause localized temporary reversal in groundwater flow toward the Ash Pond System.

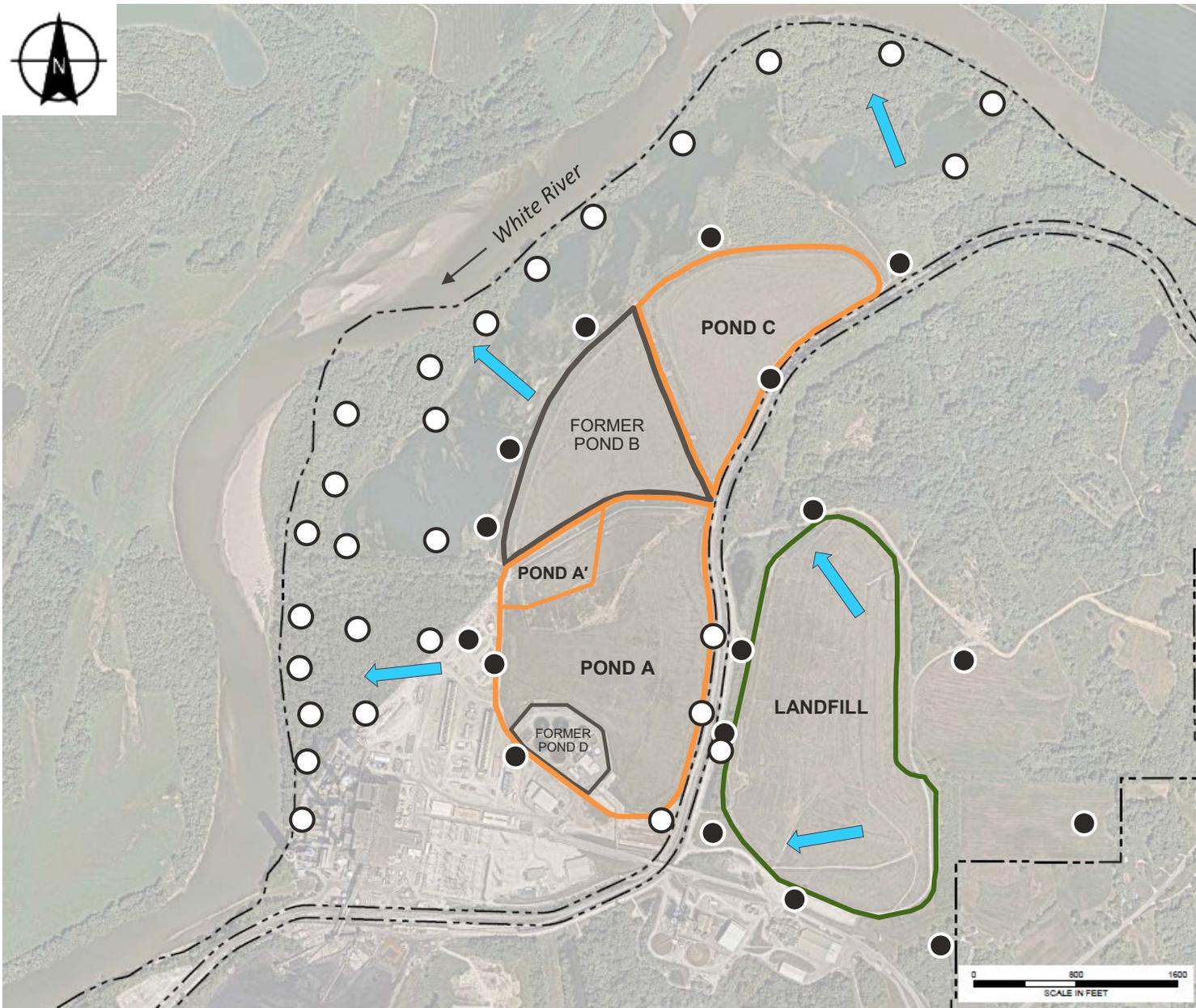
LEGEND

○ NATURE & EXTENT MONITORING WELL

● CCR COMPLIANCE MONITORING WELL

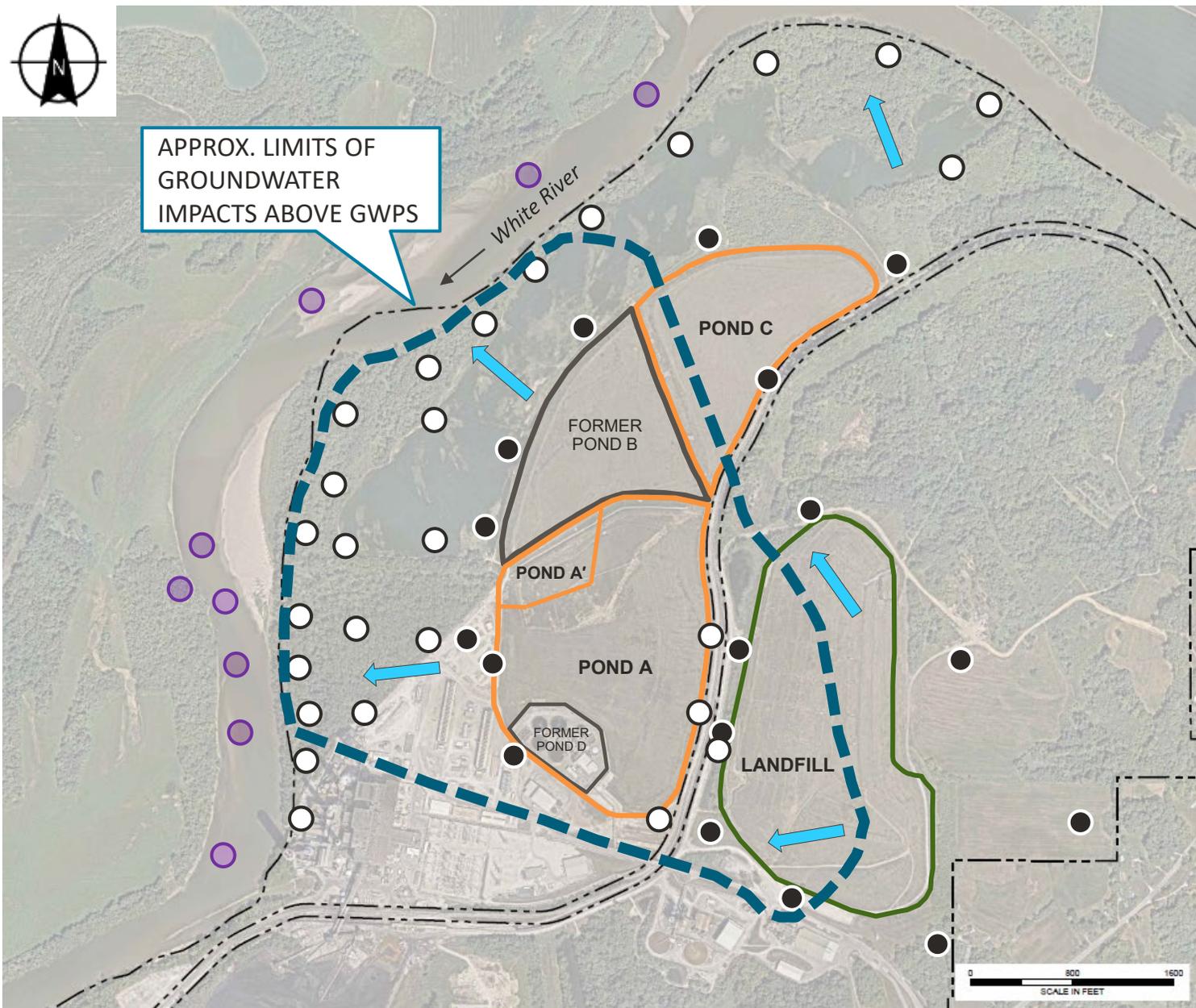
← APPROXIMATE GROUNDWATER FLOW DIRECTION

- - - APPROX. LIMITS OF PROPERTY LINE





APPROX. LIMITS OF GROUNDWATER IMPACTS ABOVE GWPS



Findings from the N&E Investigation

- The horizontal extent of impacted groundwater covers approx. 370 acres which encompasses parts of the Ash Pond System and Landfill and extends west toward the White River.
- The vertical extent of affected groundwater limited by low permeability shale bedrock, on average 65 ft. below ground surface.
- Constituent SSLs indicating groundwater impacts are limited to within the Site property boundaries.
- The trends of CCR-related groundwater concentrations within the impacted area have been generally stable or decreasing over time.

LEGEND

- NATURE & EXTENT MONITORING WELL
- TEMPORARY WELL
- CCR COMPLIANCE MONITORING WELL

← APPROXIMATE GROUNDWATER FLOW DIRECTION

GWPS = Groundwater Protection Standard SSLs = Statistically Significant Levels
N&E = Nature and Extent



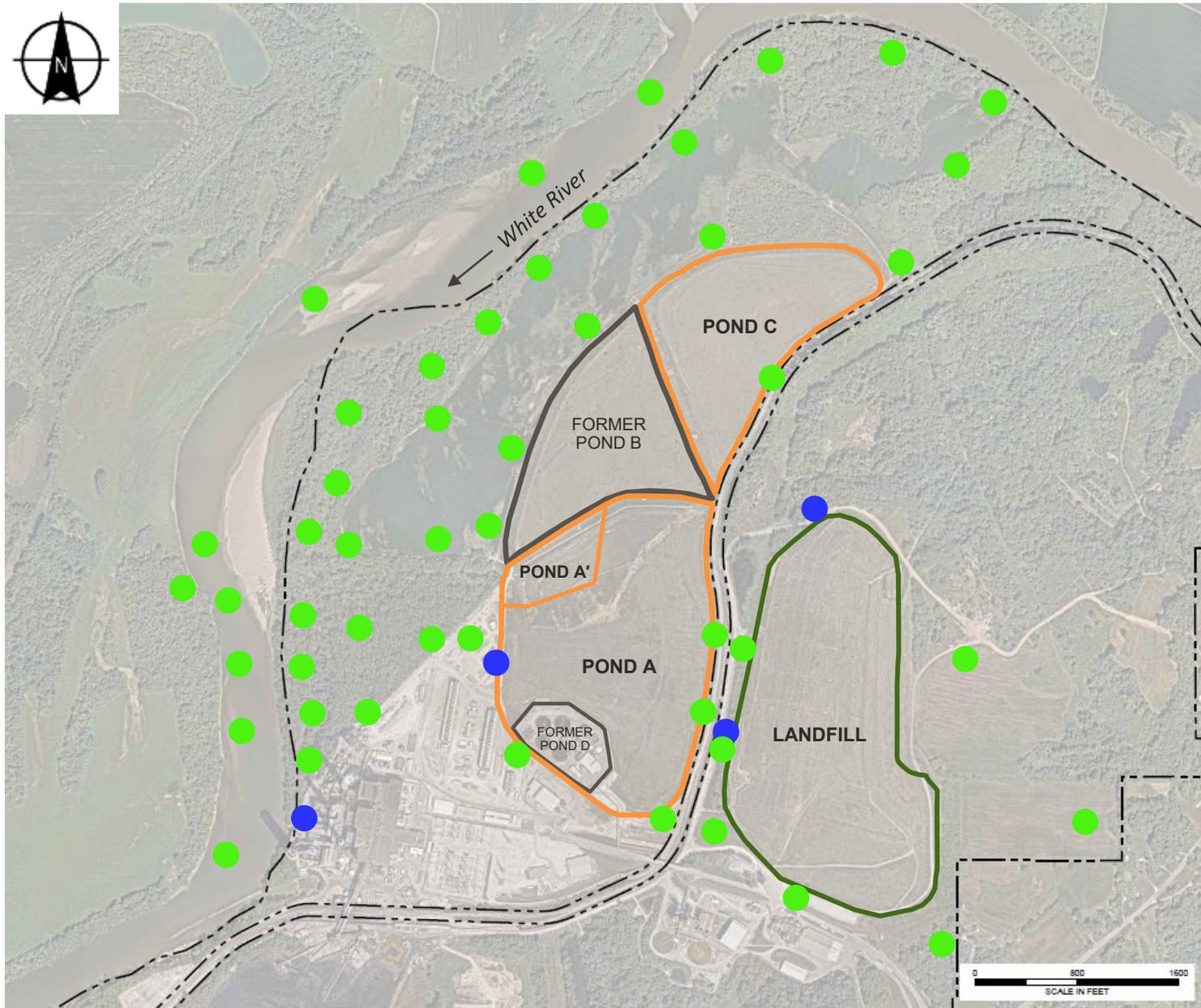
CCR Constituent: Arsenic

Arsenic N&E Summary

- Arsenic is one of 3 constituents above the GWPS.
- Arsenic is the least mobile of the 3 constituents identified in this group.
- For that reason, the extent of arsenic above GWPS is limited to four locations, and concentrations decrease rapidly over a short distance.

LEGEND

-  Concentration < GWPS
-  Concentration > GWPS



GWPS = Groundwater Protection Standard
N&E = Nature and Extent



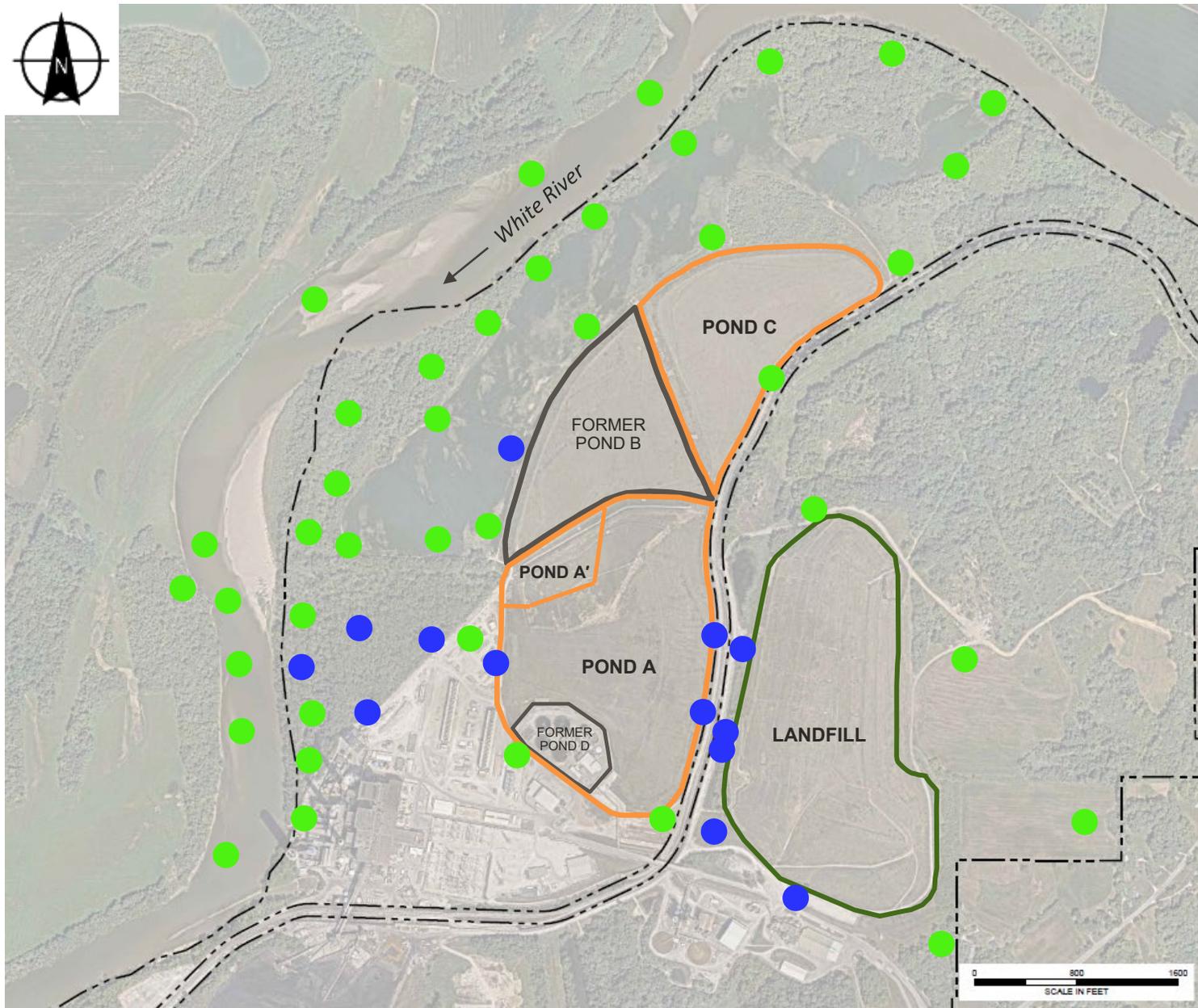
CCR Constituent: Lithium

Lithium N&E Summary

- Lithium is relatively mobile in the environment and has been detected at concentrations above the GWPS in each of the three flow zones, primarily sourced from Landfill.

LEGEND

-  Concentration < GWPS
-  Concentration > GWPS



GWPS = Groundwater Protection Standard
N&E = Nature and Extent



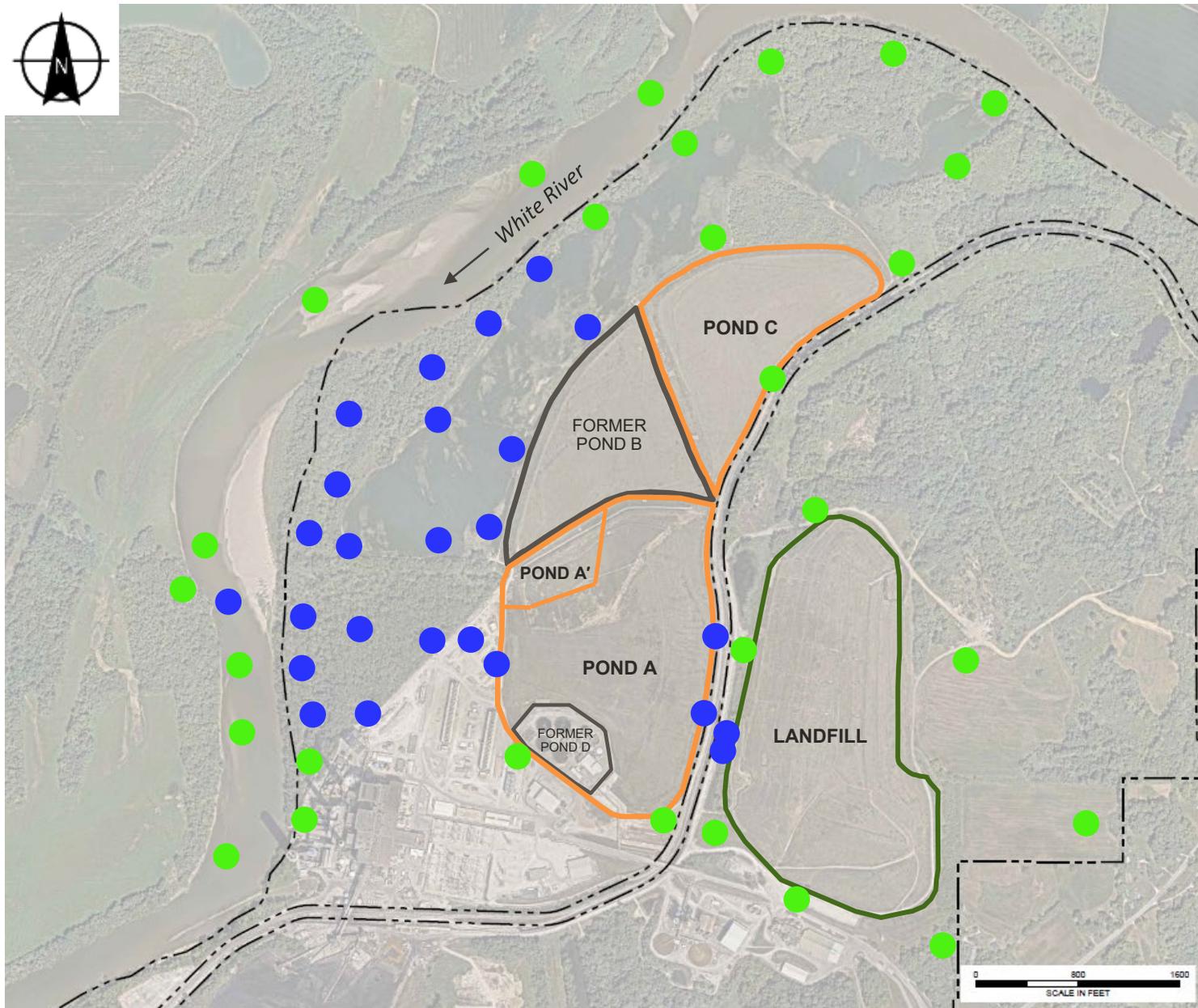
CCR Constituent: Molybdenum

Molybdenum N&E Summary

- Like lithium, molybdenum is relatively mobile in the environment and has been detected at concentrations above the GWPS in each of the three flow zones, primarily west of the Ash Pond System.

LEGEND

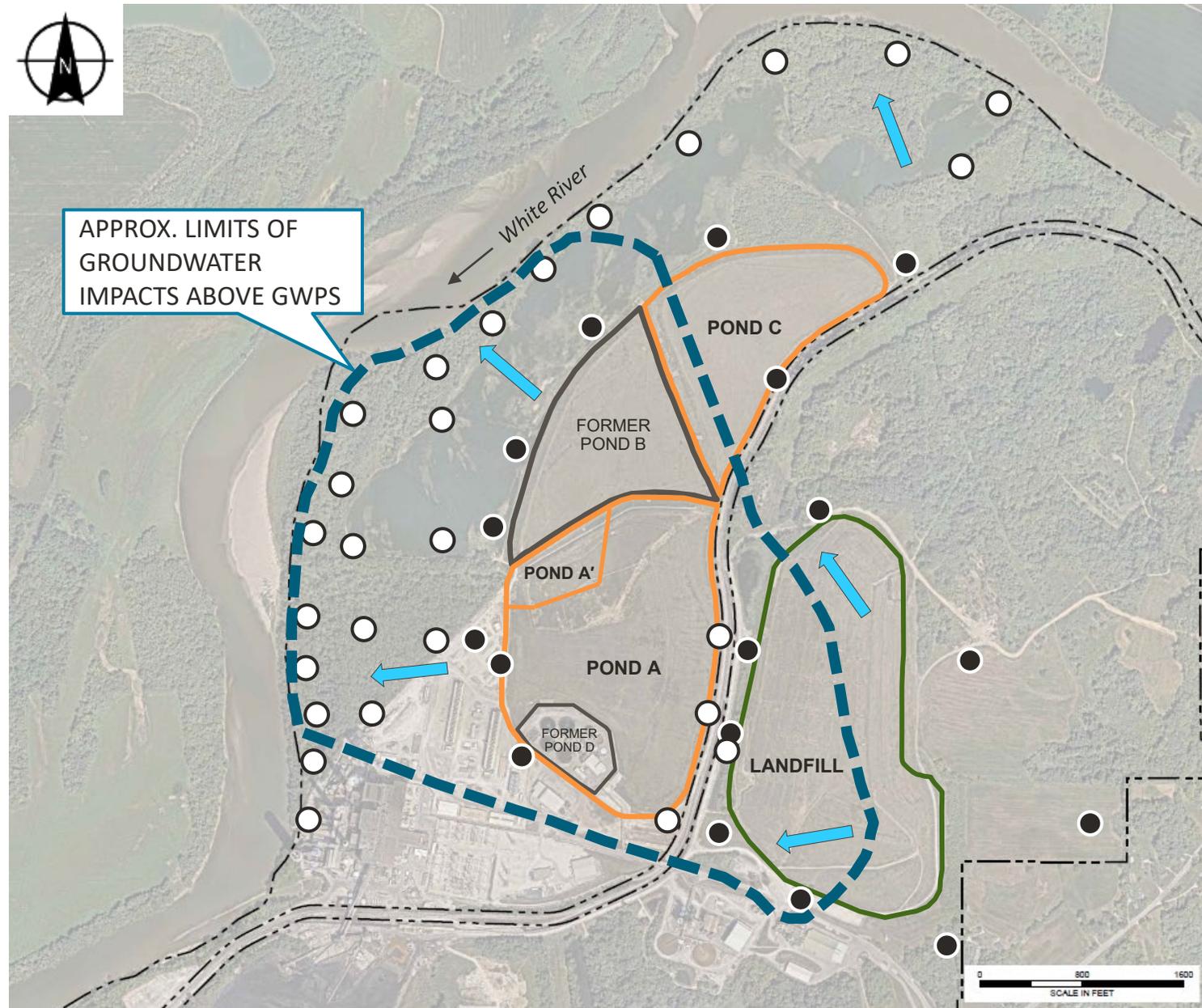
-  Concentration < GWPS
-  Concentration > GWPS



GWPS = Groundwater Protection Standard
N&E = Nature and Extent



Implications of N&E Findings



APPROX. LIMITS OF GROUNDWATER IMPACTS ABOVE GWPS

- Although groundwater results indicate levels above drinking water standards for arsenic, lithium, and molybdenum, **there is no use of groundwater for drinking water on or downgradient of the Site.**
- Furthermore, site-specific risk evaluations conducted in accordance with EPA standards conclude **there are no adverse impacts to people or the environment from the presence of these CCR constituents in groundwater at the site.**

LEGEND

○ NATURE & EXTENT MONITORING WELL

● CCR COMPLIANCE MONITORING WELL

← APPROXIMATE GROUNDWATER FLOW DIRECTION

GWPS = Groundwater Protection Standard
N&E = Nature and Extent

Risk Evaluation Summary

- **What work was performed?**

- Reviewed the analytical data at the Site and Site vicinity using EPA tools;
- Identified the pathways by which people and the environment could potentially come in contact with groundwater;
- Evaluated if the pathways could cause an adverse impact to people or the environment.

- **What was determined?**

- There is no direct contact between people or environmental receptors and groundwater impacted by the Ash Pond System or Landfill.
- Detected concentrations of CCR constituents in groundwater:
 - Are below screening levels;
 - Do not pose an adverse impact to the White River;
 - Do not pose a risk to human health or ecological receptors.

- **What does this mean?**

- There are no adverse impacts on human health or the environment from groundwater affected by the Ash Pond System or Landfill.

End of Part 1

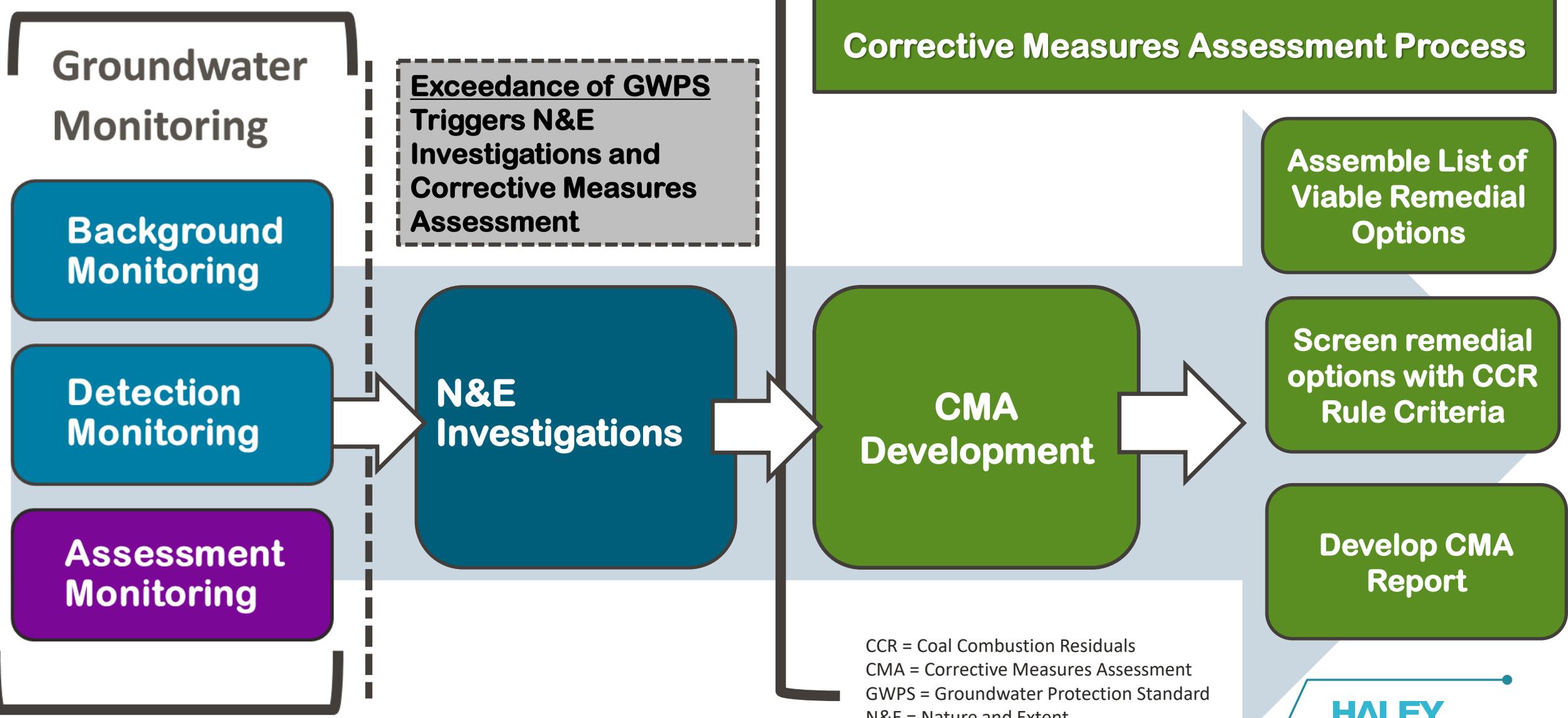


Corrective Measures Assessment (CMA): Background & Process

What is a Corrective Measures Assessment (CMA)?

- When levels of constituents in groundwater are found to be above the groundwater protection standards, the CCR Rule calls for corrective measures to be evaluated regardless of risk.
- The Corrective Measures Assessment evaluates potential corrective measures that can be pursued to remediate groundwater for the constituents that are above the groundwater protection standards.

CCR Rule Groundwater Monitoring Program & CMA Development (40 CFR 257)



CCR = Coal Combustion Residuals
CMA = Corrective Measures Assessment
GWPS = Groundwater Protection Standard
N&E = Nature and Extent

Background - Why was the CMA updated?

- The CMA and associated report were updated to account for the supplemental information collected since 2019. That supplemental information is sourced from:
 - additional monitoring data and groundwater N&E investigations,
 - conceptual site model development and groundwater modeling updates,
 - supplemental site-specific investigations, and
 - potential corrective measures evaluations.
- The updated CMA includes 6 remedial alternatives that consider additional information gathered since the 2019 CMA report and a refined understanding of site conditions.
- Following review of information and feedback from this public meeting, AESI will make the remedy selection for the Ash Pond System and Landfill in accordance with the CCR Rule.

Groundwater Corrective Measures/Remedy Diagram

Source Control Measures

Source Control will minimize infiltration into the CCR material and restrict potential for leaching



Groundwater (GW) Treatment Measures

Groundwater Treatment will address areas of impacted groundwater to reduce concentration to below GWPS.



Remedial Alternatives

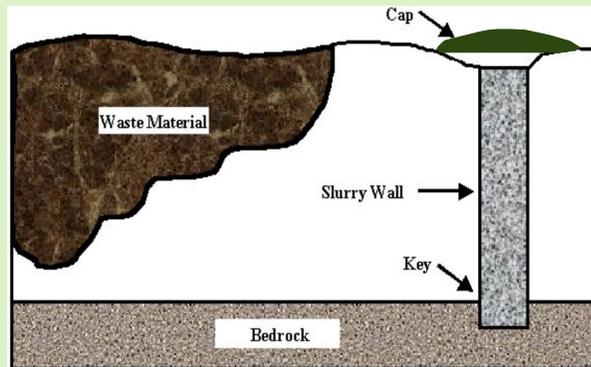
Source Control (Closure) Measures – Ash Pond System and Landfill

Source Control will minimize infiltration into the CCR material and restrict potential for leaching

Ash Pond System

Closure in Place (CIP) with Slurry Wall

- Closure of the Ash Pond System has already been completed by CIP in accordance with an IDEM approved Closure Plan
- Install a low-permeability cement-bentonite slurry wall around the perimeters of Ponds A, A', C, and Former Pond B



Source: Indiana Department of Environmental Management (IDEM) Technical Guidance Document

Closure by Removal

- Excavate CCR and place into dump trucks
- Transport CCR material offsite for disposal or beneficial use
- Regrade area (focus on eliminating steep and/or unsafe slopes) and promoting drainage of stormwater runoff



Landfill

Closure in Place

- The landfill is in the process of being capped in accordance with the facility's IDEM-approved Solid Waste Permit
- A low-permeability synthetic turf and structured membrane cover system will be installed





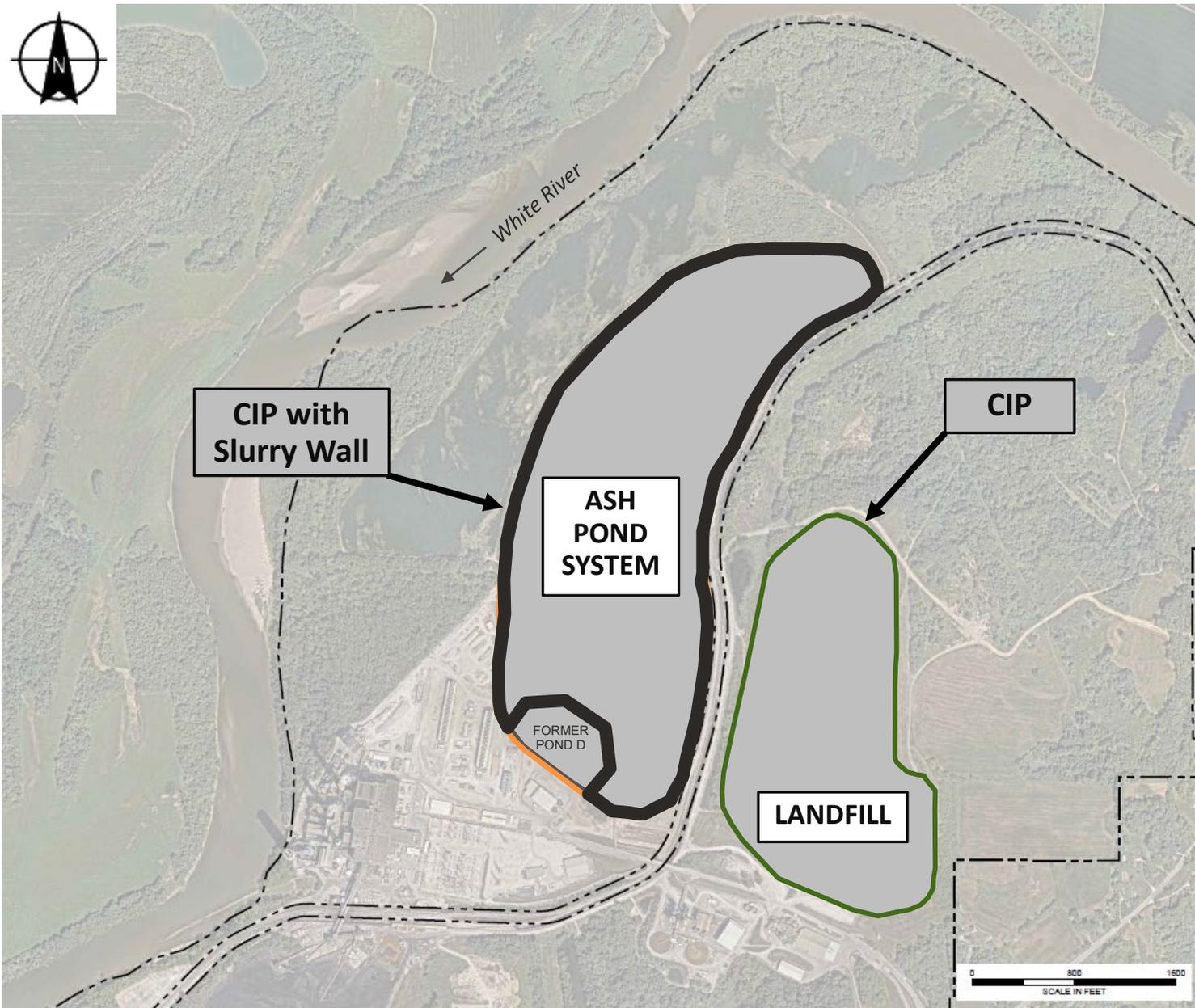
Source Control Measure for Ash Pond System/Landfill Closure in Place (CIP)

Ash Pond System:

- Closure of the Ash Pond System has already been completed by CIP
- Additionally involves installation of a Slurry Wall around the perimeter of Ponds A, A', C and Former Pond B

Landfill:

- Closure in place is currently underway and involves installation of a low-permeability capping system





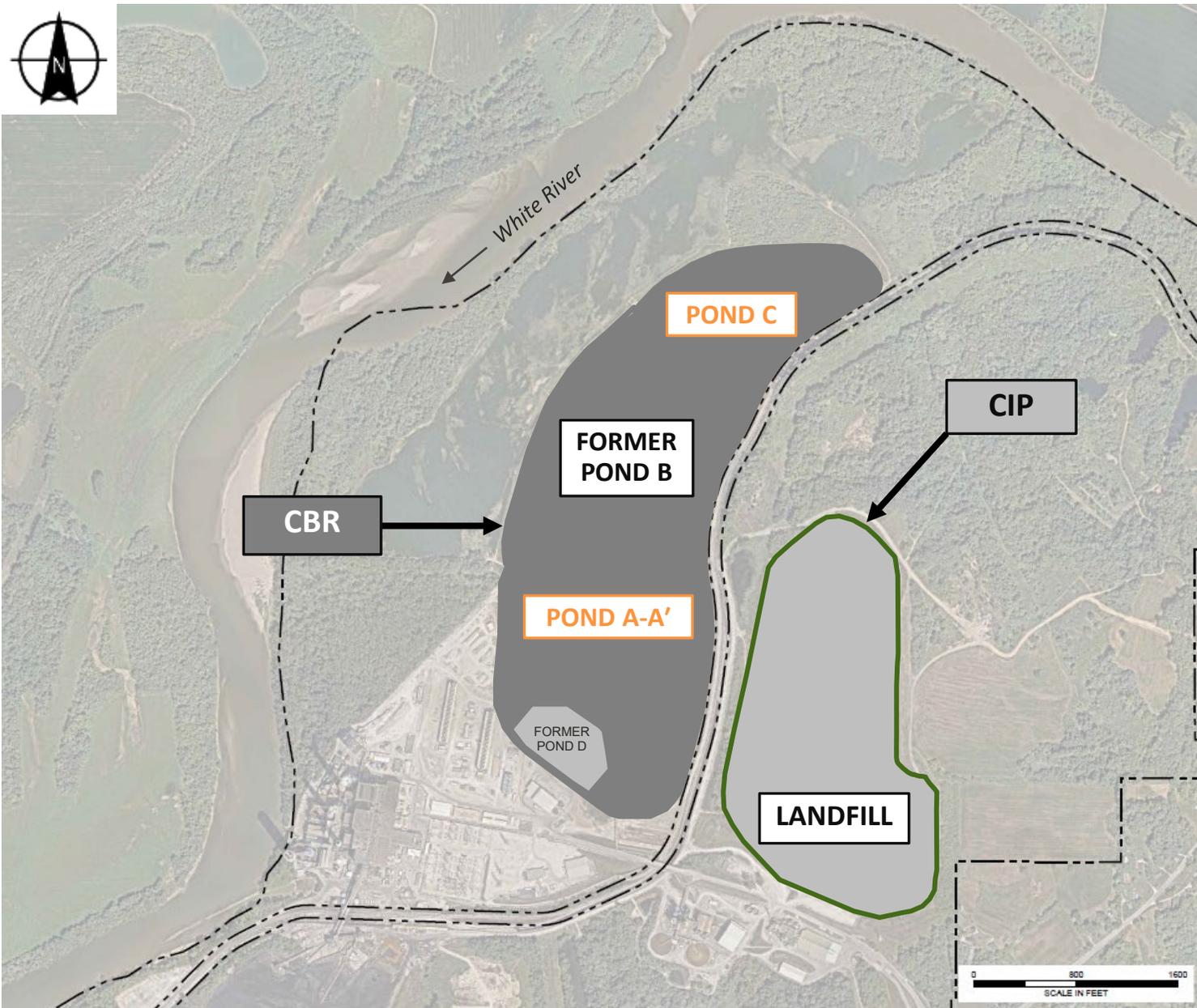
Source Control Measure for Ash Pond System Closure by Removal (CBR)

Ash Pond System:

- CBR is under consideration for Ponds A, A', C and Former Pond B

Landfill:

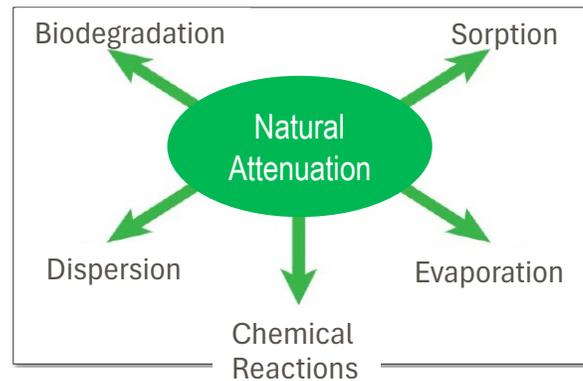
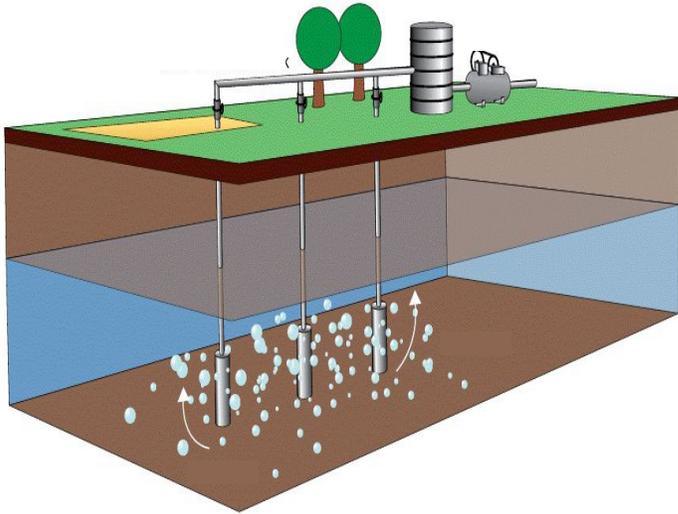
- Closure in place is currently underway and involves installation of a low-permeability capping system



Groundwater Treatment Measures

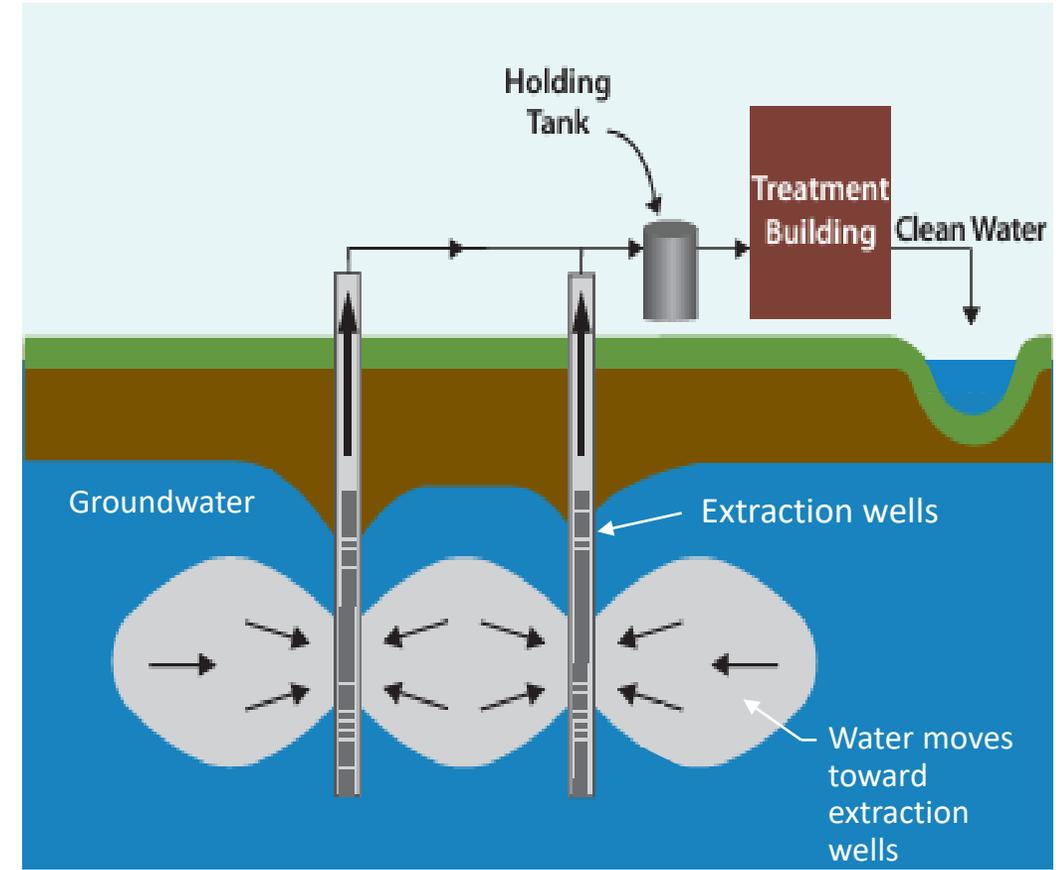
In-situ (treatment in the ground)

- Redox Manipulation (e.g., reagent injection, air sparging)
- Water Infiltration (e.g., injection wells)



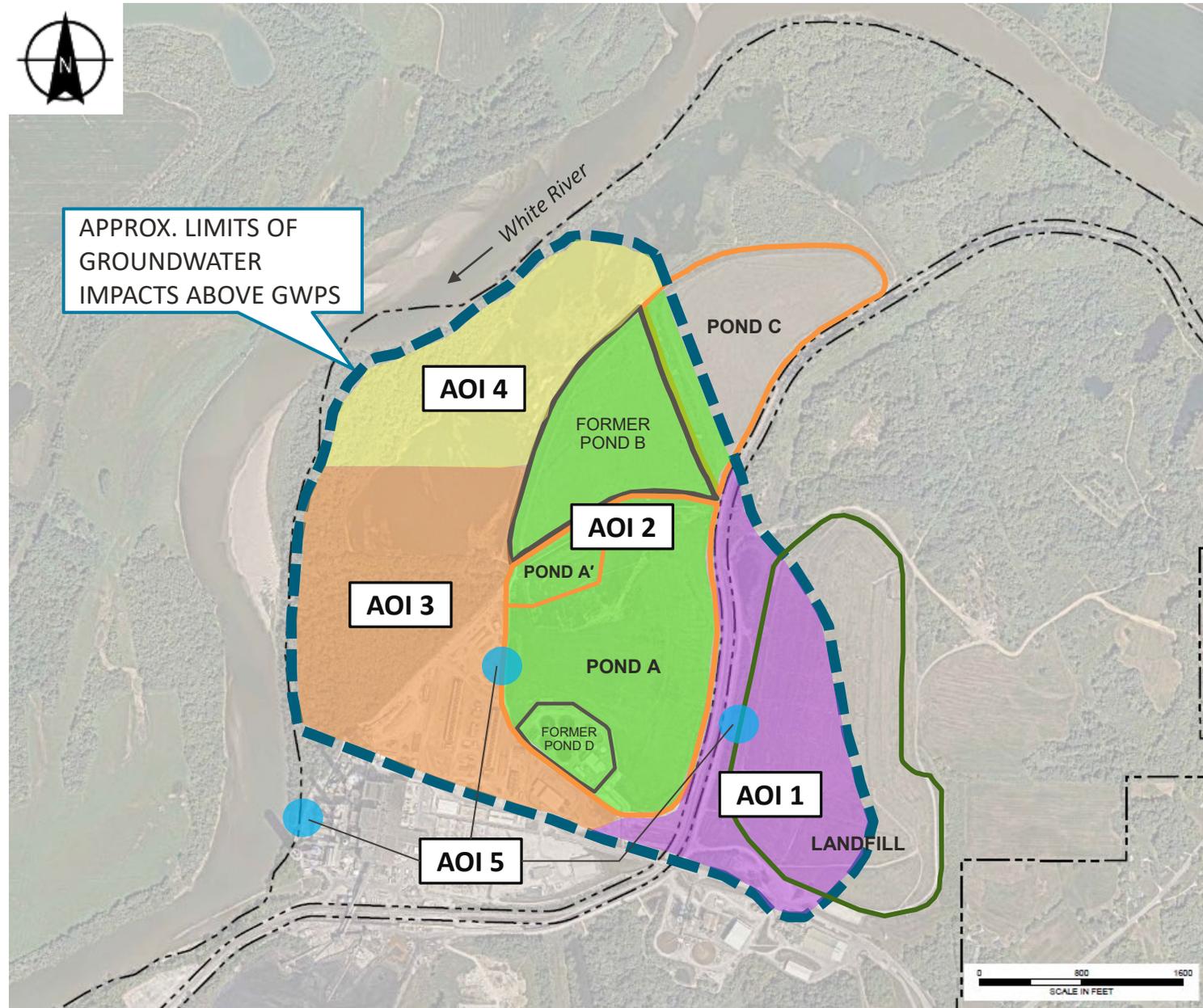
Ex-situ (above ground) Hydraulic Controls

- Pump
- Pump & Treat (e.g., reverse osmosis)





Impacted Groundwater Areas of Interest (AOIs)



APPROX. LIMITS OF GROUNDWATER IMPACTS ABOVE GWPS

AOIs are used to designate portions of the impacted groundwater based on the CCR constituents above the GWPS [Arsenic, Lithium, Molybdenum] and the location on the site.

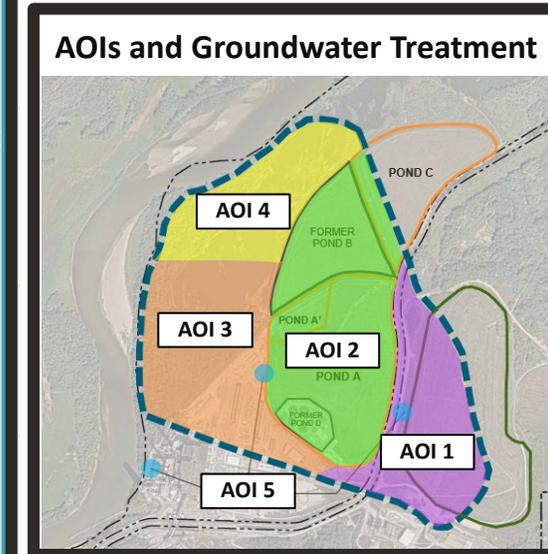
- AOI 1** BENEATH AND DOWNGRADIENT OF LANDFILL
 - LITHIUM, MOLYBDENUM
- AOI 2** BENEATH THE ASH POND SYSTEM
 - LITHIUM, MOLYBDENUM
- AOI 3** DOWNGRADIENT OF ASH POND SYSTEM
 - LITHIUM, MOLYBDENUM
- AOI 4** DOWNGRADIENT OF ASH POND SYSTEM
 - LITHIUM, MOLYBDENUM
- AOI 5** ISOLATED AREAS NEAR MONITORING WELLS AP-2A, MW-3, MW-27B
 - ARSENIC

GWPS = Groundwater Protection Standard
N&E = Nature and Extent

Summary of Remedial Alternatives

| Alternative Number | Remedial Alternative | Source Control | | Groundwater Treatment | | | | |
|--------------------|---|----------------------|--------------|--|-------------|--|--|---------------------|
| | | Ash Pond System | Landfill | AOI 1 | AOI 2 | AOI 3 | AOI 4 | AOI 5 |
| 1A | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping, in-ground Treatment | CIP with Slurry Wall | CIP with Cap | Groundwater Pumping | Slurry Wall | Groundwater Pumping | In-ground Treatment | In-ground Treatment |
| 1B | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping with Ex-situ Treatment, in-ground Treatment | | | Groundwater Pumping with Ex-situ Treatment | | Groundwater Pumping with Ex-situ Treatment | | |
| 1C | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping with Ex-situ Treatment and Injection Wells | | | Groundwater Pumping | | Groundwater Pumping with Ex-situ Treatment and Injection Wells | Groundwater Pumping | |
| 1D | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping with Ex-situ Treatment and Injection Wells | | | Groundwater Pumping with Ex-situ Treatment | | Groundwater Pumping with Ex-situ Treatment | | |
| 2A | CBR, CIP with Cap and Groundwater Pumping | CBR | CIP with Cap | Groundwater Pumping | N/A | Groundwater Pumping | Groundwater Pumping | In-ground Treatment |
| 2B | CBR, CIP with Cap, Groundwater Pumping with Ex-situ Treatment, in-ground Treatment | | | Groundwater Pumping with Ex-situ Treatment | | Groundwater Pumping with Ex-situ Treatment | Groundwater Pumping with Ex-situ Treatment | |

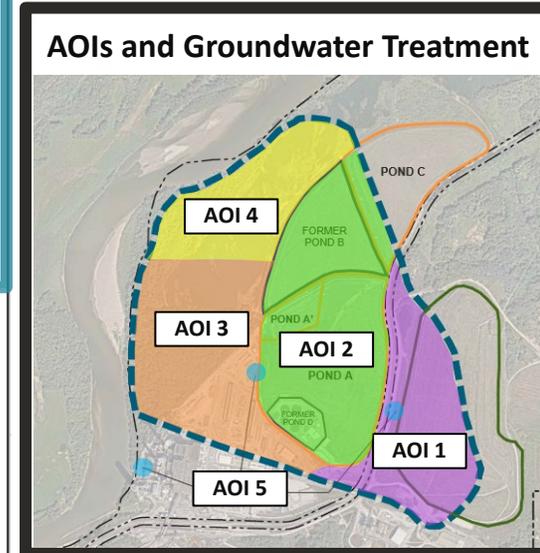
AOI = Area of interest
 CIP = Closure in Place
 CBR = Closure by Removal



Summary of Remedial Alternatives 1A through 1D

| Alternative Number | Remedial Alternative | Source Control | | Groundwater Treatment | | | | |
|--------------------|---|----------------------|--------------|--|-------------|--|---------------------|---------------------|
| | | Ash Pond System | Landfill | AOI 1 | AOI 2 | AOI 3 | AOI 4 | AOI 5 |
| 1A | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping, in-ground Treatment | CIP with Slurry Wall | CIP with Cap | Groundwater Pumping | Slurry Wall | Groundwater Pumping | In-ground Treatment | In-ground Treatment |
| 1B | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping with Ex-situ Treatment, in-ground Treatment | | | Groundwater Pumping with Ex-situ Treatment | | Groundwater Pumping with Ex-situ Treatment | | |
| 1C | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping with Ex-situ Treatment and Injection Wells | | | Groundwater Pumping | | Groundwater Pumping with Ex-situ Treatment and Injection Wells | Groundwater Pumping | |
| 1D | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping with Ex-situ Treatment and Injection Wells | | | Groundwater Pumping with Ex-situ Treatment | | Groundwater Pumping with Ex-situ Treatment | | |
| | | | | | | | | |
| | | | | | | | | |

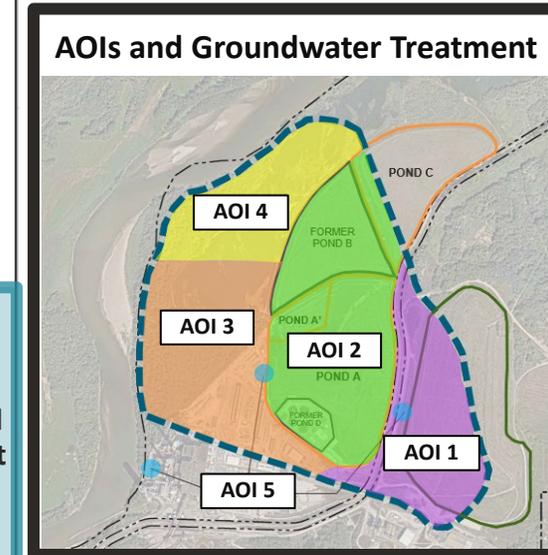
AOI = Area of interest
 CIP = Closure in Place
 CBR = Closure by Removal



Summary of Remedial Alternatives 2A and 2B

| Alternative Number | Remedial Alternative | Source Control | | Groundwater Treatment | | | | |
|--------------------|---|----------------------|--------------|--|-------------|--|--|---------------------|
| | | Ash Pond System | Landfill | AOI 1 | AOI 2 | AOI 3 | AOI 4 | AOI 5 |
| 1A | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping, in-ground Treatment | CIP with Slurry Wall | CIP with Cap | Groundwater Pumping | Slurry Wall | Groundwater Pumping | In-ground Treatment | In-ground Treatment |
| 1B | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping with Ex-situ Treatment, in-ground Treatment | | | Groundwater Pumping with Ex-situ Treatment | | Groundwater Pumping with Ex-situ Treatment | | |
| 1C | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping with Ex-situ Treatment and Injection Wells | | | Groundwater Pumping | | Groundwater Pumping with Ex-situ Treatment and Injection Wells | Groundwater Pumping | |
| 1D | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping with Ex-situ Treatment and Injection Wells | | | Groundwater Pumping with Ex-situ Treatment | | Groundwater Pumping with Ex-situ Treatment | | |
| 2A | CBR, CIP with Cap and Groundwater Pumping | CBR | CIP with Cap | Groundwater Pumping | N/A | Groundwater Pumping | Groundwater Pumping | In-ground Treatment |
| 2B | CBR, CIP with Cap, Groundwater Pumping with Ex-situ Treatment, in-ground Treatment | | | Groundwater Pumping with Ex-situ Treatment | | Groundwater Pumping with Ex-situ Treatment | Groundwater Pumping with Ex-situ Treatment | |

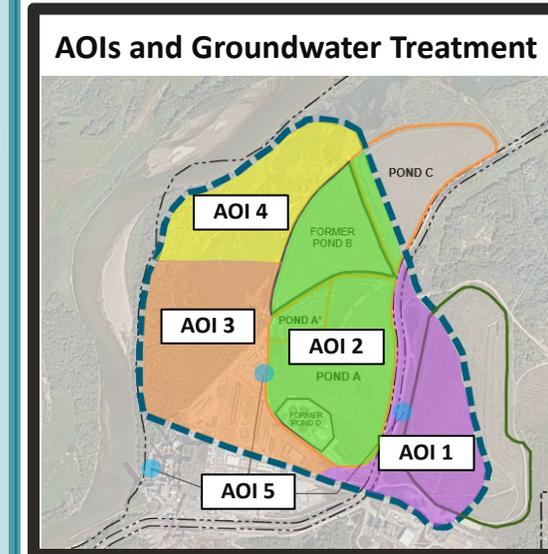
AOI = Area of interest
 CIP = Closure in Place
 CBR = Closure by Removal



Summary of Remedial Alternatives

| Alternative Number | Remedial Alternative | Source Control | | Groundwater Treatment | | | | |
|--------------------|---|----------------------|--------------|--|-------------|--|--|---------------------|
| | | Ash Pond System | Landfill | AOI 1 | AOI 2 | AOI 3 | AOI 4 | AOI 5 |
| 1A | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping, in-ground Treatment | CIP with Slurry Wall | CIP with Cap | Groundwater Pumping | Slurry Wall | Groundwater Pumping | In-ground Treatment | In-ground Treatment |
| 1B | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping with Ex-situ Treatment, in-ground Treatment | | | Groundwater Pumping with Ex-situ Treatment | | Groundwater Pumping with Ex-situ Treatment | | |
| 1C | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping with Ex-situ Treatment and Injection Wells | | | Groundwater Pumping | | Groundwater Pumping with Ex-situ Treatment and Injection Wells | | |
| 1D | CIP with Slurry Wall, CIP with Cap, Groundwater Pumping with Ex-situ Treatment and Injection Wells | | | Groundwater Pumping with Ex-situ Treatment | | Groundwater Pumping with Ex-situ Treatment | | |
| 2A | CBR, CIP with Cap and Groundwater Pumping | CBR | CIP with Cap | Groundwater Pumping | N/A | Groundwater Pumping | Groundwater Pumping | |
| 2B | CBR, CIP with Cap, Groundwater Pumping with Ex-situ Treatment, in-ground Treatment | | | Groundwater Pumping with Ex-situ Treatment | | Groundwater Pumping with Ex-situ Treatment | Groundwater Pumping with Ex-situ Treatment | |

AOI = Area of interest
 CIP = Closure in Place
 CBR = Closure by Removal



Corrective Measures Assessment (CMA): Analysis and Results

How are the Remedial Alternatives Evaluated? Threshold Criteria (Minimum Requirements)

STEP 1: Potential remedial alternatives are then screened against **Threshold Criteria [257.97(b)]**

Remedies must:

- (1) Be protective of human health and the environment;
- (2) Attain the groundwater protection standard for each appendix IV constituent;
- (3) Control the source(s) of releases to reduce or eliminate, to the maximum extent feasible, further releases of appendix IV constituents into the environment;
- (4) Remove from the environment as much of the contaminated material that was released from the CCR unit as is feasible, taking into account factors such as avoiding inappropriate disturbance of sensitive ecosystems; and
- (5) Comply with standards for management of wastes as specified in §257.98(d).

How are the Remedial Alternatives Evaluated? Threshold Criteria (Minimum Requirements)

All 5 of the Threshold Criteria are satisfied for the six Remedial Alternatives considered in the Corrective Measures Assessment

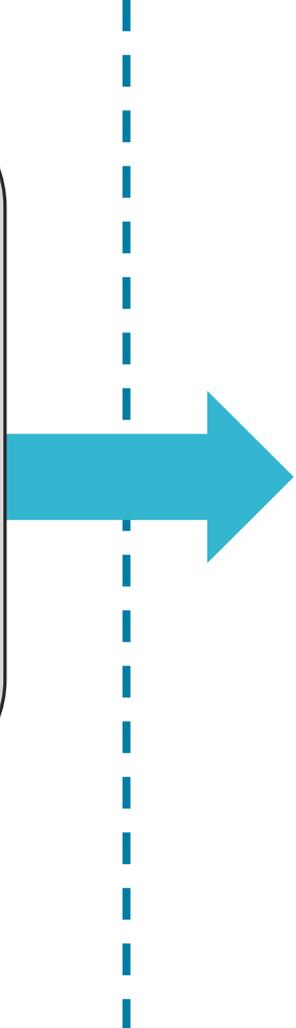
Remedies must:

- (1) Be protective of human health and the environment;**
- (2) Attain the groundwater protection standard as specified pursuant to §257.95(h);**
- (3) Control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of constituents in appendix IV to this part into the environment;**
- (4) Remove from the environment as much of the contaminated material that was released from the CCR unit as is feasible, taking into account factors such as avoiding inappropriate disturbance of sensitive ecosystems; and**
- (5) Comply with standards for management of wastes as specified in §257.98(d).**

How are Remedial Alternatives Evaluated?

Balancing Criteria (Effectiveness and Performance)

STEP 2: Once these remedial alternatives are demonstrated to meet the Threshold Criteria, they are then further evaluated with respect to the **Balancing Criteria [257.97(c)]**

- 
- (1) The long- and short-term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful;
 - (2) The effectiveness of the remedy in controlling the source to reduce further releases;
 - (3) The ease or difficulty of implementing a potential remedy(s); and
 - (4) The degree to which community concerns are addressed by a potential remedy(s).

How are Remedial Alternatives Evaluated?

Balancing Criteria (Effectiveness and Performance)

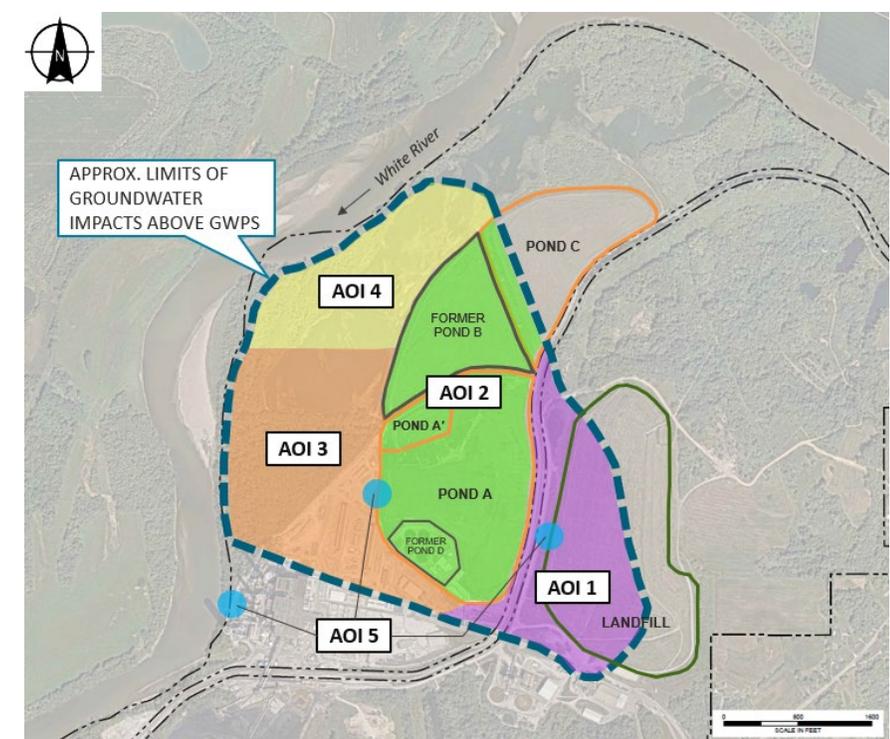
The six Remedial Alternatives were evaluated against the first three Balancing Criteria in CMA

- (1) The long- and short-term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful;**
- (2) The effectiveness of the remedy in controlling the source to reduce further releases;**
- (3) The ease or difficulty of implementing a potential remedy(s); and**
- (4) The degree to which community concerns are addressed by a potential remedy(s).**

Summary of CMA Balancing Criteria Analysis

Balancing Criteria #1 - The long- and short-term effectiveness and protectiveness of the remedy(s), along with the degree of certainty that the remedy will prove successful.

- All alternatives are effective and protective of human health and the environment.
- All alternatives use groundwater pumping, which is expected to remain effective over time. If pumped water requires above-ground treatment, it may generate a waste stream that must be appropriately managed and disposed of.
- Each alternative includes in-situ (in-ground), treatment for AOI 5 to address arsenic, with pilot testing needed to confirm the best methods.
- Alternatives 1C and 1D include targeted water infiltration via injection wells, which would enhance constituent attenuation.
- Alternatives 2A and 2B with Closure by Removal would be protective long-term but involve short-term risks during excavation and offsite transport.



| | |
|-------|---|
| AOI 1 | BENEATH AND DOWNGRADIENT OF LANDFILL • LITHIUM, MOLYBDENUM |
| AOI 2 | BENEATH THE ASH POND SYSTEM • LITHIUM, MOLYBDENUM |
| AOI 3 | DOWNGRADIENT OF ASH POND SYSTEM • LITHIUM, MOLYBDENUM |
| AOI 4 | DOWNGRADIENT OF ASH POND SYSTEM • LITHIUM, MOLYBDENUM |
| AOI 5 | ISOLATED AREAS NEAR MONITORING WELLS AP-2A, MW-3, MW-27B • ARSENIC |

Summary of CMA Balancing Criteria Analysis

Balancing Criteria #2 - The effectiveness of the remedy in controlling the source to reduce further releases.

- Source control measures under each alternative effectively minimize the risk of further releases from the Ash Pond System either by constructing a low-permeability cement-bentonite slurry wall, or by excavating CCR material within Ponds A, A', C, and Former Pond B and transferring it to an offsite lined landfill or facility for beneficial use. Capping CCR material in the Landfill also effectively minimizes the risk of further releases from the Landfill.

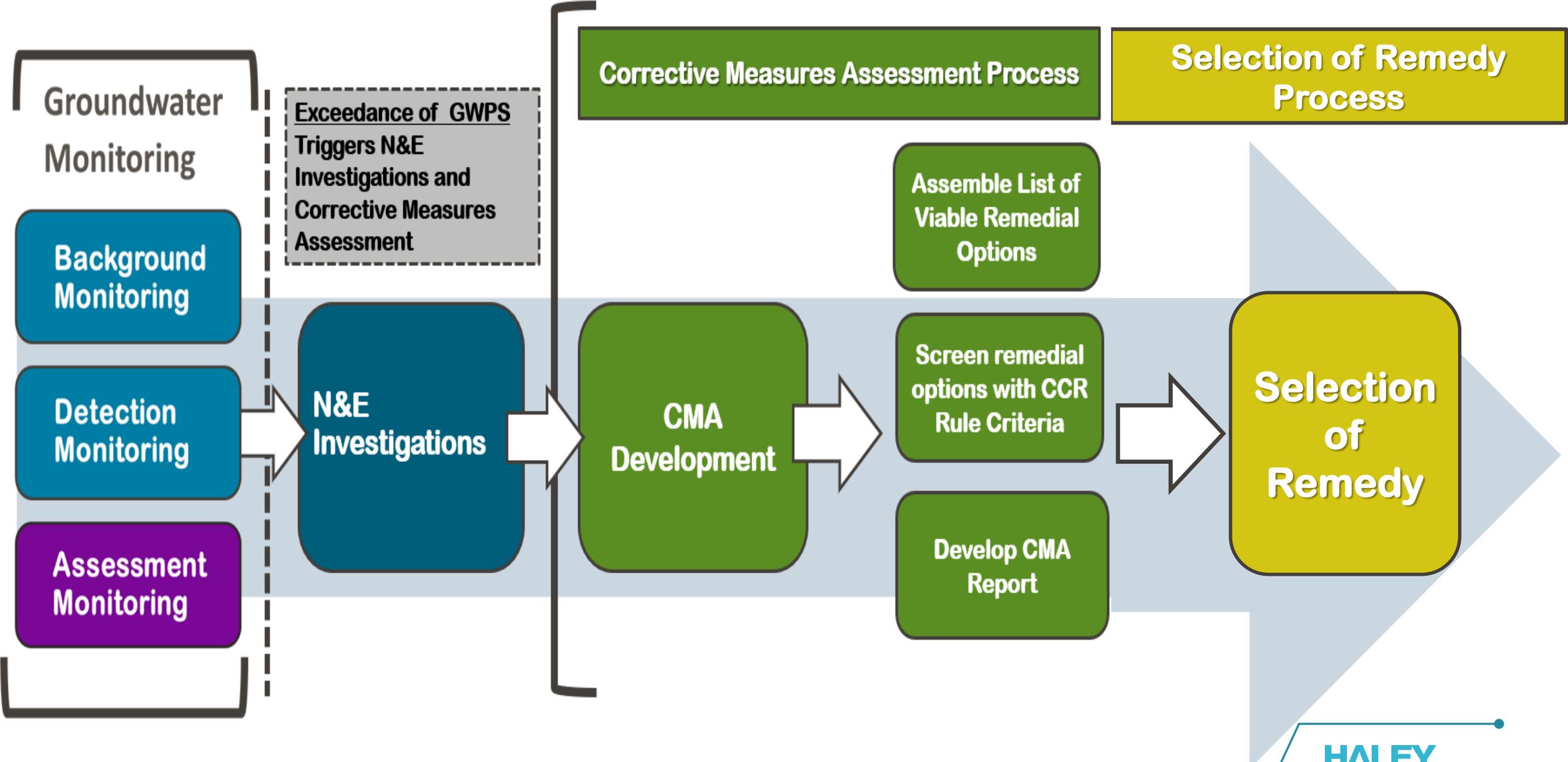
Balancing Criteria #3 - The ease or difficulty of implementing a potential remedy(s).

- For Alternatives 1A through 1D that include Closure in Place with a slurry wall for the Ash Pond System, ongoing maintenance is required for the final cover and pumping systems, but closure equipment is readily available. For those alternatives, the CCR material stays onsite without further treatment or disposal requirements.
- Each of the alternatives involves a combination of groundwater pumping and in-situ treatment. Alternatives 1B, 1C, 1D, and 2B include ex-situ treatment of extracted groundwater, and Alternatives 1C and 1D additionally including upgradient injection wells to supplement groundwater pumping.
- Closure by Removal entails significant construction and the need for permits and approvals for complete CCR excavation, transport, and offsite disposal or beneficial use.

Balancing Criteria #4 - The degree to which community concerns are addressed by a potential remedy(s).

Conclusion & Next Steps

What is the process to move from completion of the CMA to Selection of Remedy?



Next steps

The comment period for the CMA will be open for 30 days.

Comments can be submitted via the public meeting website.

<https://www.aesindiana.com/petersburg-cma-meeting>

Public comments will be considered, per the CCR Rule, in the Selection of Remedy process.

Comments and Discussion

<https://www.aesindiana.com/petersburg-cma-meeting>



January 14, 2026