

221 Sunset Facility – Status Update

May 8, 2018 CITCAT Meeting



CH2M/Jacobs Introduction

Who are we and what do we do?

Agenda

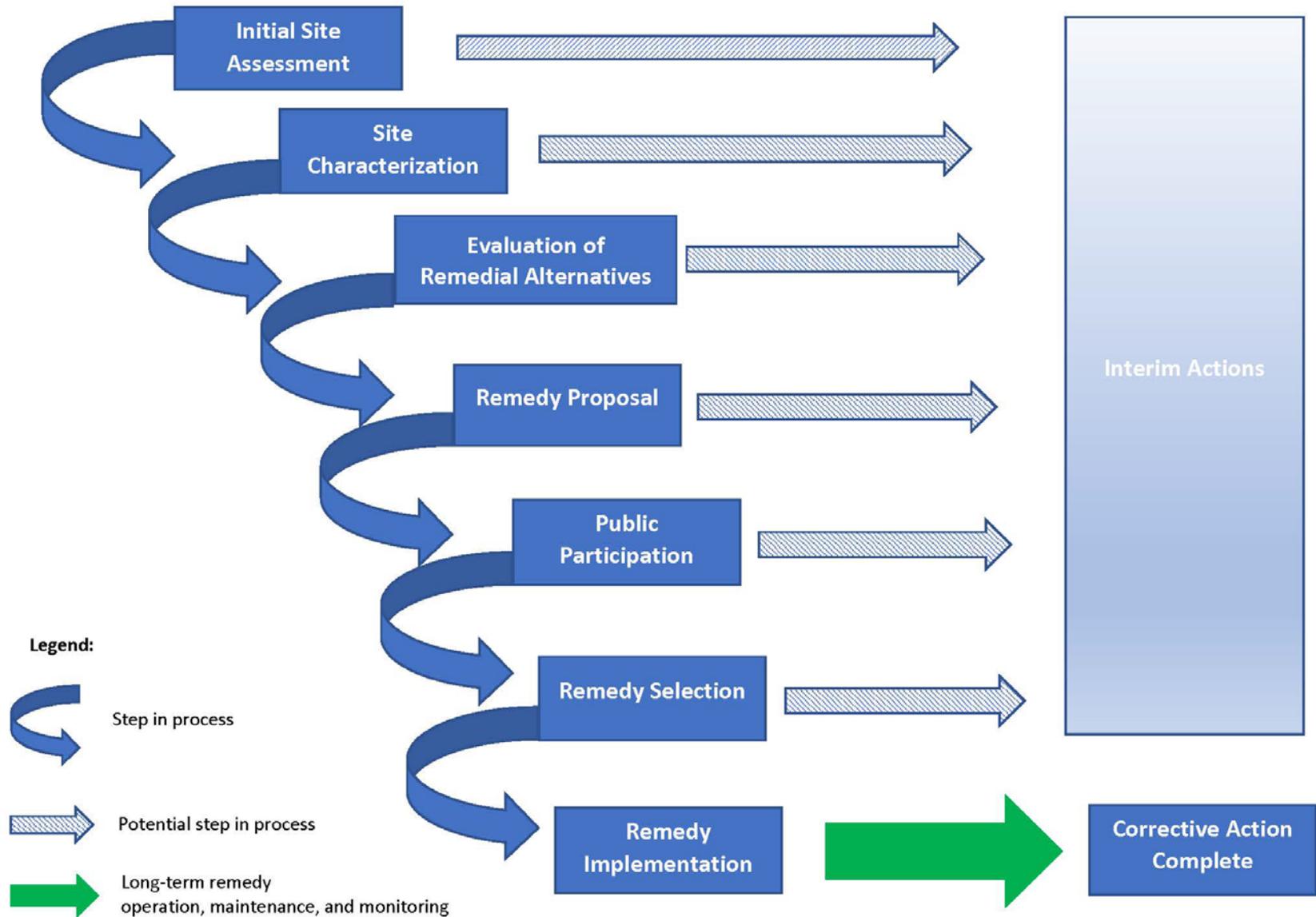
- CH2M/Jacobs team introduction
- Overview of the site characterization/remediation process
- Overview of 2016 and 2017 investigations
- 221 Sunset Facility – next steps of the investigation
- Types of remediation alternatives evaluated for similar sites across the U.S.
- Questions/discussion

Overview of the Site Characterization/Remediation Process

Site Characterization and Remediation Projects Require Multi-disciplinary Teams

- Civil/Environmental Engineers
- Geotechnical Engineers
- Hydrogeologists
- Chemists/Geochemists
- Risk Assessors, Toxicologists, other scientists
- Data managers
- Regulatory specialists
- Field Technicians
- Subcontractors
 - Drillers, Laboratories, Surveyors

Corrective Action Process



Overview of 2016 and 2017 Investigations and Next Steps

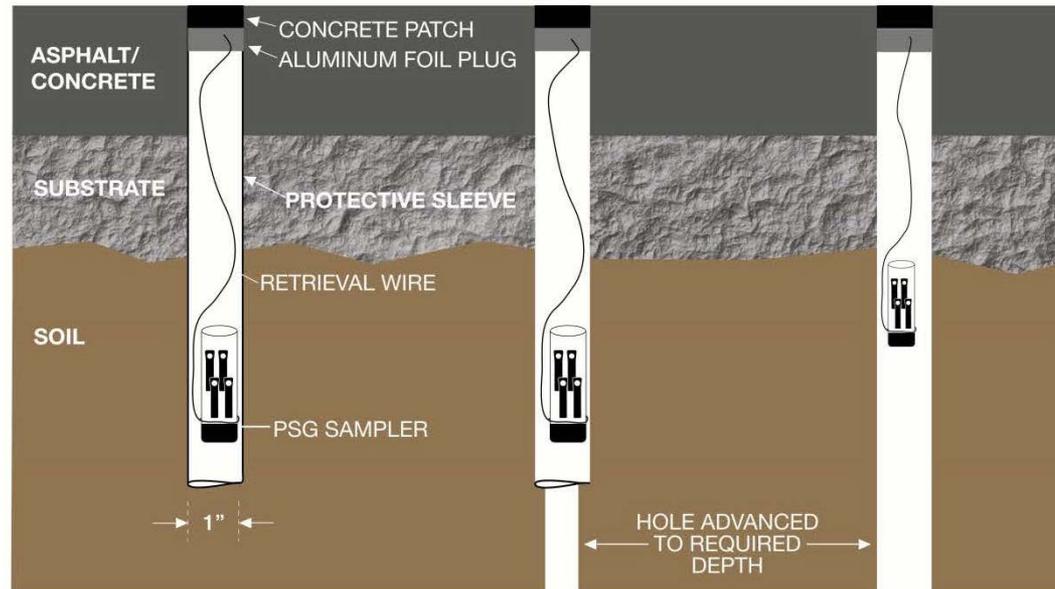
2016 – 2017 Investigation Findings

- No exposure risk to residents identified in onsite or offsite surface soil
- No current exposure risk to residents from vapor intrusion
 - Mitigation in place where potential exposures were identified
- MDNR reports the public wells serving the City of Camden meet safe drinking water standards

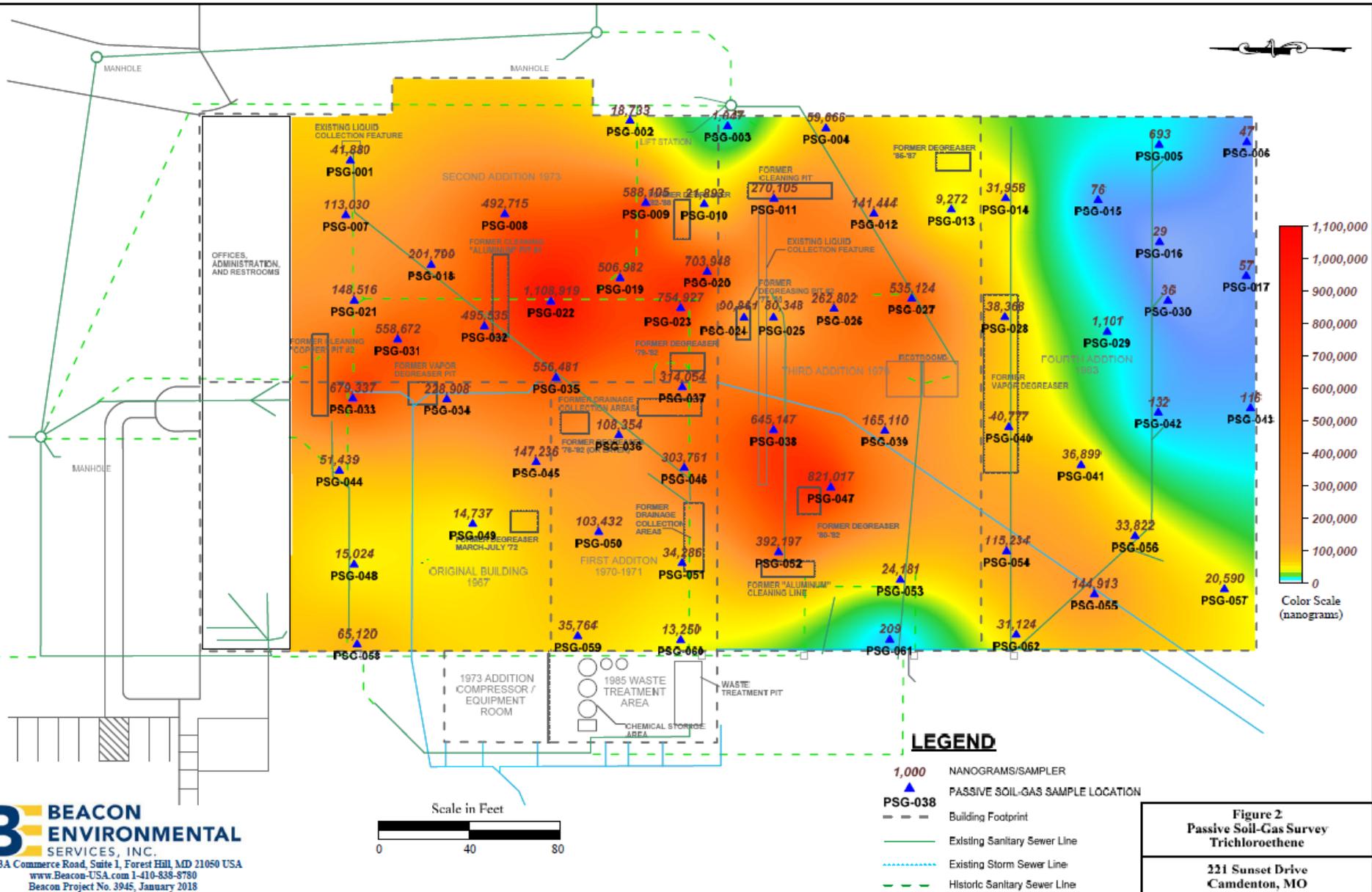
December 2017 Investigation Technique – Passive Soil Gas (PSG) Sampling



62 PSG samplers
installed, left for 1
week, retrieved and
analyzed



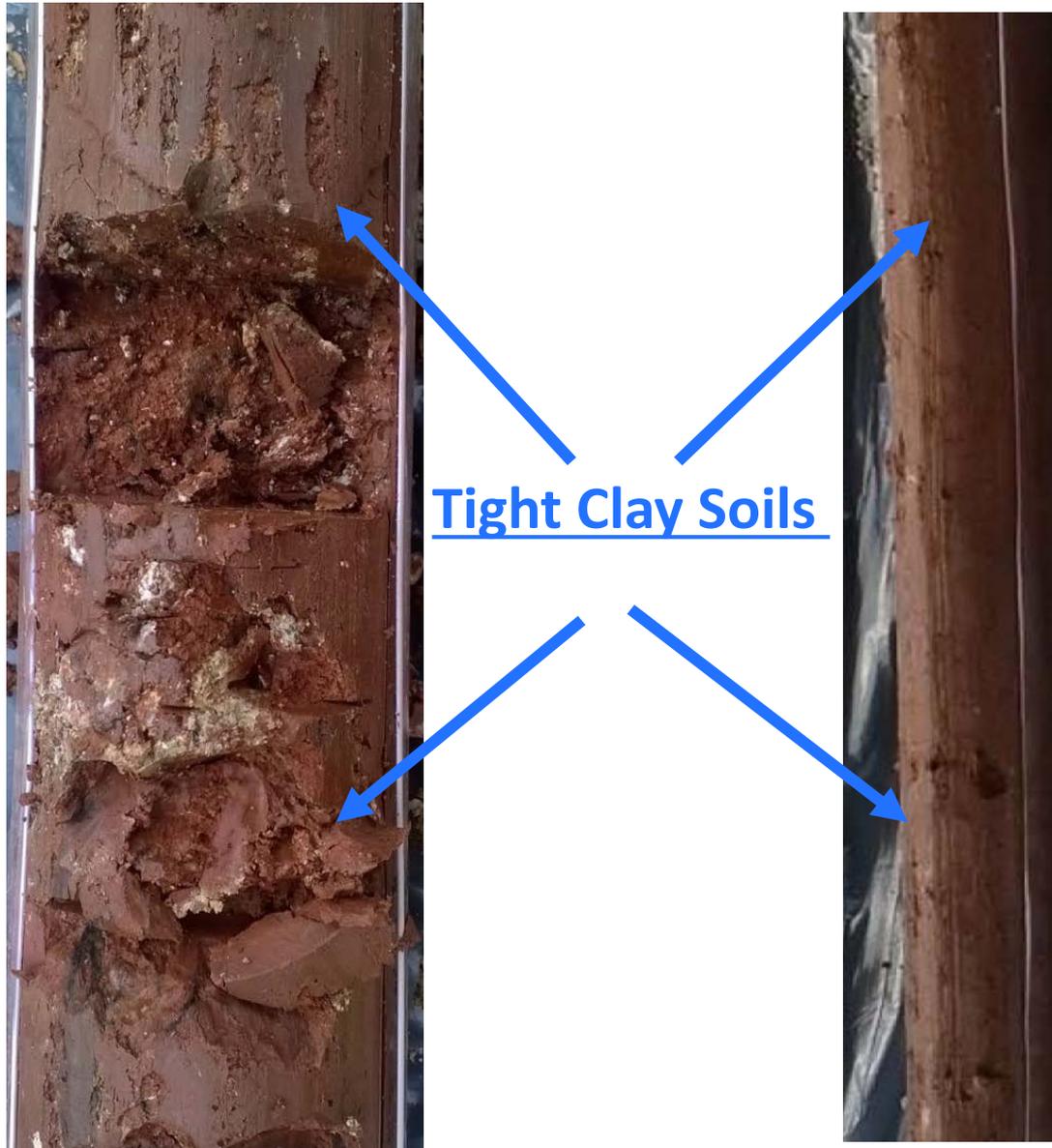
Dec 2017 Investigation Findings



Investigation Techniques – Drilling



Investigation Techniques – Typical Site Soil Cores



Types of Remediation Alternatives Evaluated for Similar Sites Across the U.S.

Overview of Remedy Selection

A Corrective Measure Study report is prepared and includes:

- Remedial Action Objectives and Cleanup Standards
- Evaluation of a broad range of potential remedial technologies
 - Treatment and containment technologies
- Remedial alternatives for feasible technologies
- Comparison of alternatives against key criteria, for example
 - Toxicity reduction
 - Effectiveness
 - Implementability
 - Community and state acceptance

Examples of Remedial Alternatives that may be Evaluated

- Excavation
- In-situ Thermal Treatment
- Soil Vapor Extraction
- Soil Mixing
- Containment Barrier
- Other Alternatives

Thank You!

JACOBS[®] **ch2m**[®]