Salford Quarry Superfund Site

Operable Unit 1

Public Availability Session

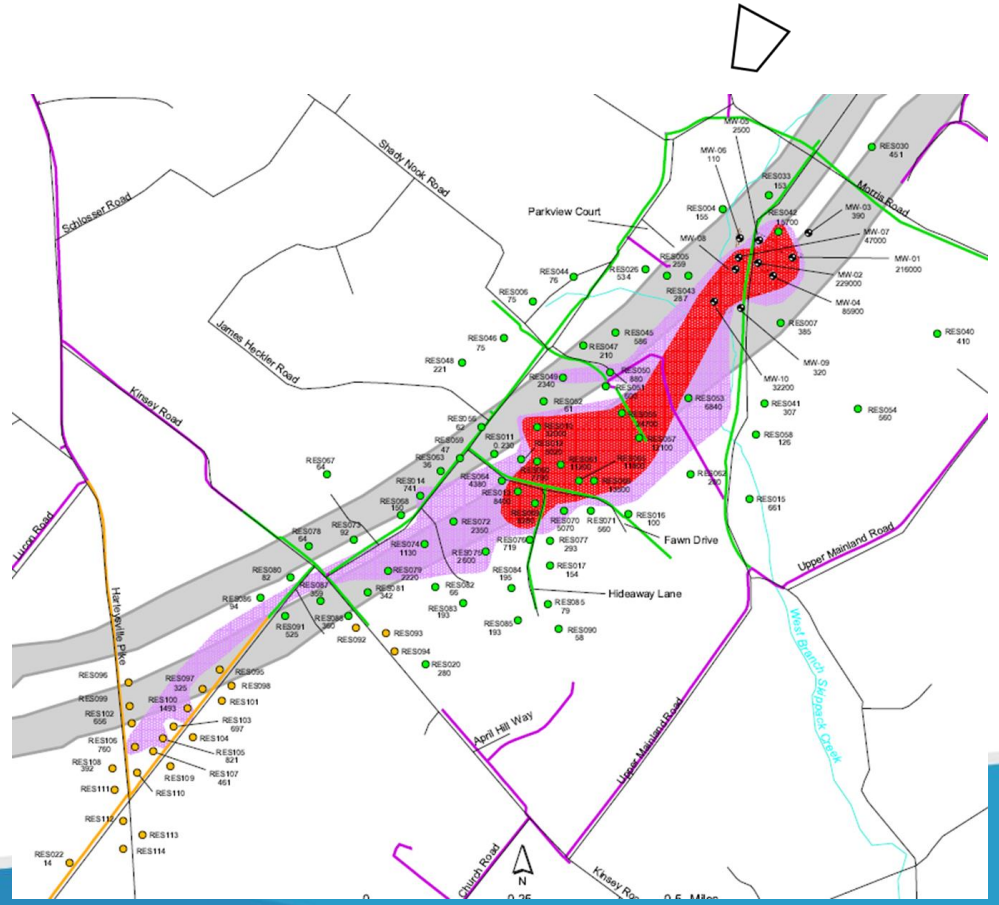
September 16, 2024

Meeting Agenda

- What's being done
- What to expect in construction
- Why the cleanup
- EPA contacts

Definitions

- Record of Decision (ROD) Amendment=
  - EPA selected cleanup in 2021 document
- Operable Unit 1 (OU1) = source control
  - Waste
  - Surface soil surrounding waste
- Operable Unit 2 (OU2)
  - Groundwater
  - Surface water
  - Sediment (moved from OU1)
  - Vapor intrusion, if needed
- “Site” = Location of contamination



EPA Cleanup

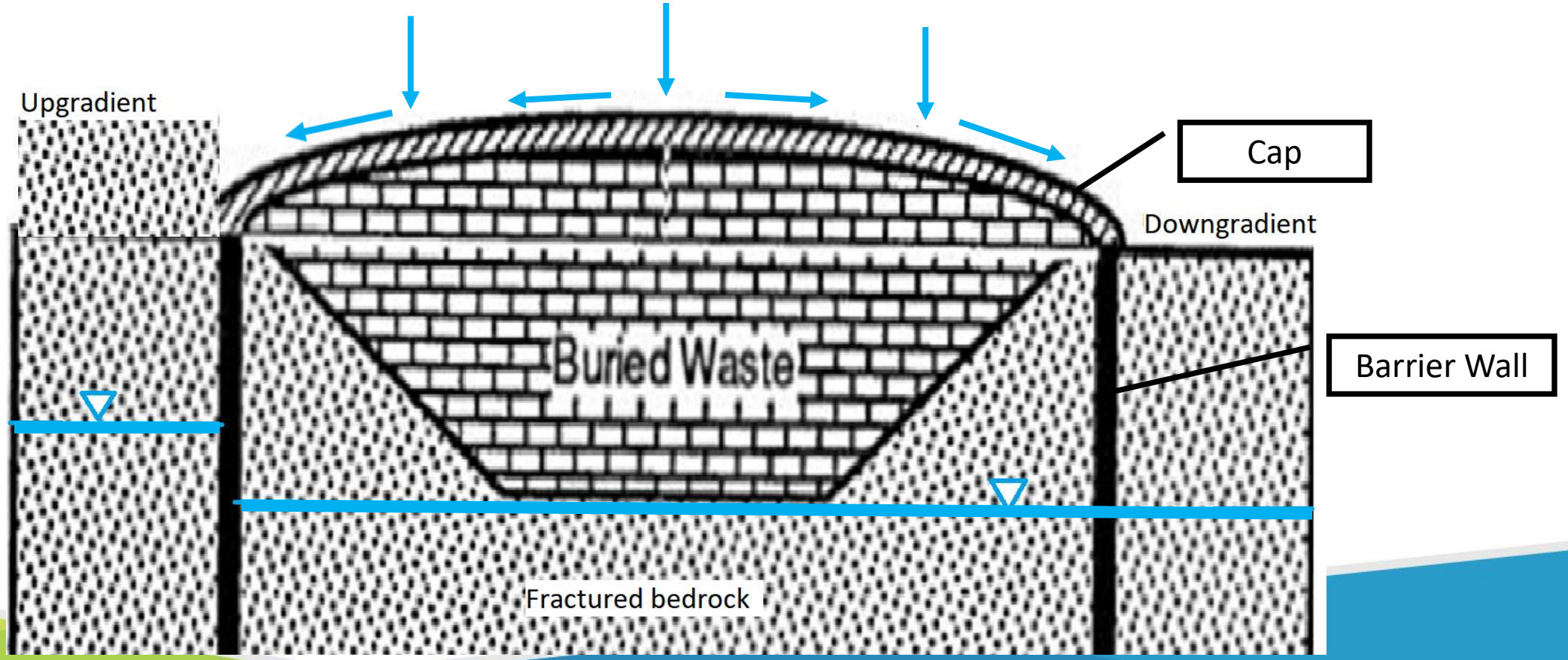
Source control (OU1)

- waste and soil surrounding the waste

Construct a perimeter wall and impermeable cap to contain contaminated material

- Prevent direct contact
- Minimize water from carrying contamination into environment

Subsurface Perimeter Wall & Impermeable Cap



Quarry Road Detour

Closure adjacent to
610 Quarry Road
Lower Salford, PA

Detour via
Morris and Upper Mainland Rds

Passable for emergency vehicles

Signs approx. 2 weeks before work

What to expect during construction

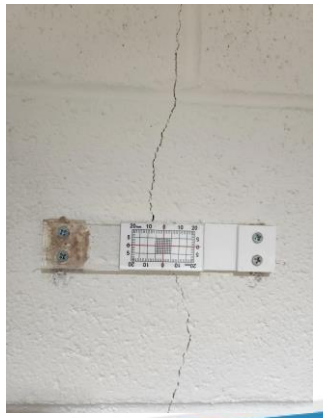
- On-site September 18th
- Approx. 12 months
- Typical work hours 7:00am to 3:30pm, Mon - Fri
  - If Saturday work, EPA will notify immediate neighbors
- Typical personnel onsite
  - 5-10 office staff
  - 5-15 construction crew
  - one security guard, 24/7

Typical Construction Equipment

Pre-construction documentation

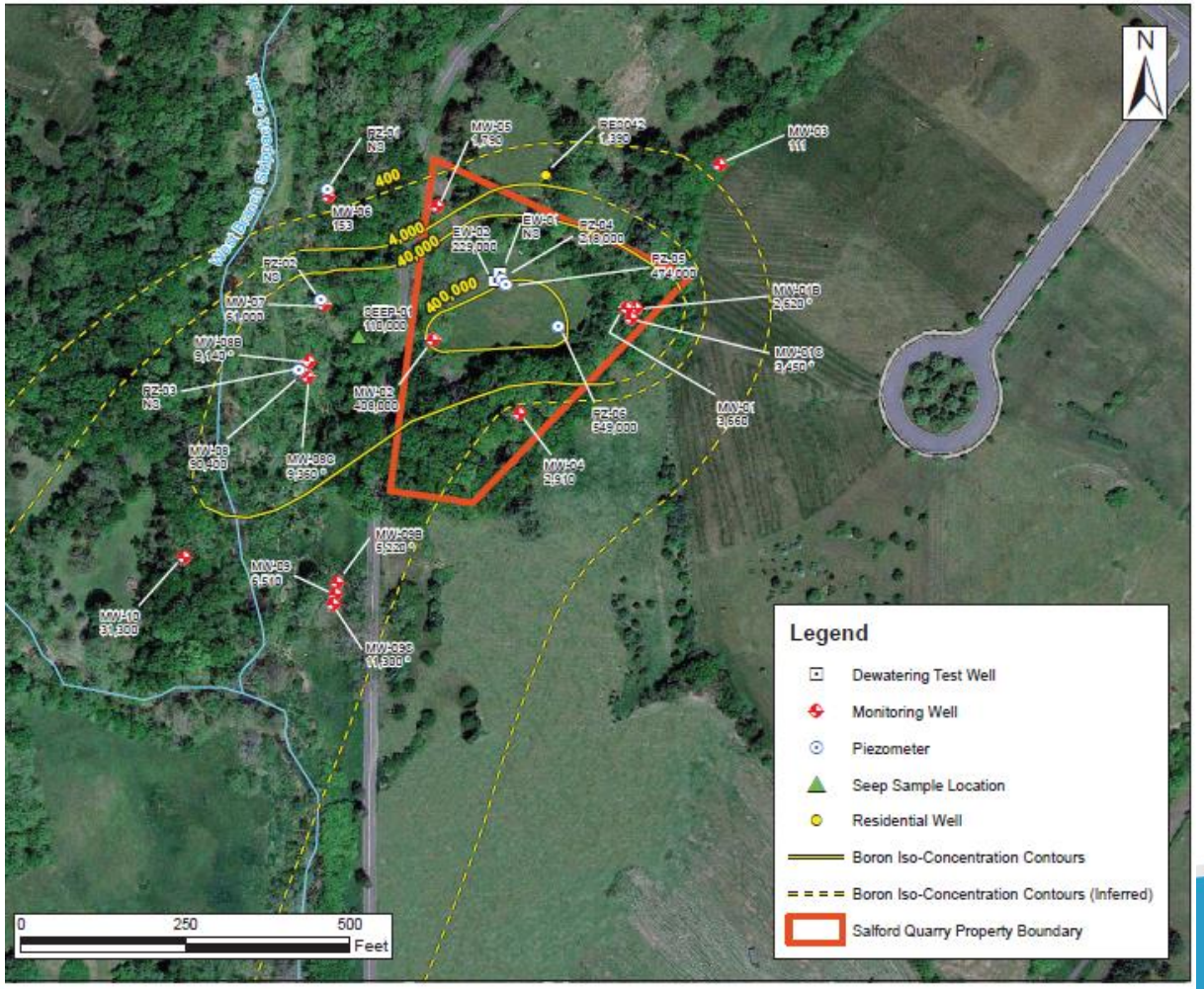
Vibration monitoring

- Bedrock well drilling
- Bedrock breaking and excavation



Foundation monitoring

- Photo documentation
- Crack gauge monitoring if required



Salford Quarry Superfund Site
Lower Salford Township
Montgomery County, Pennsylvania

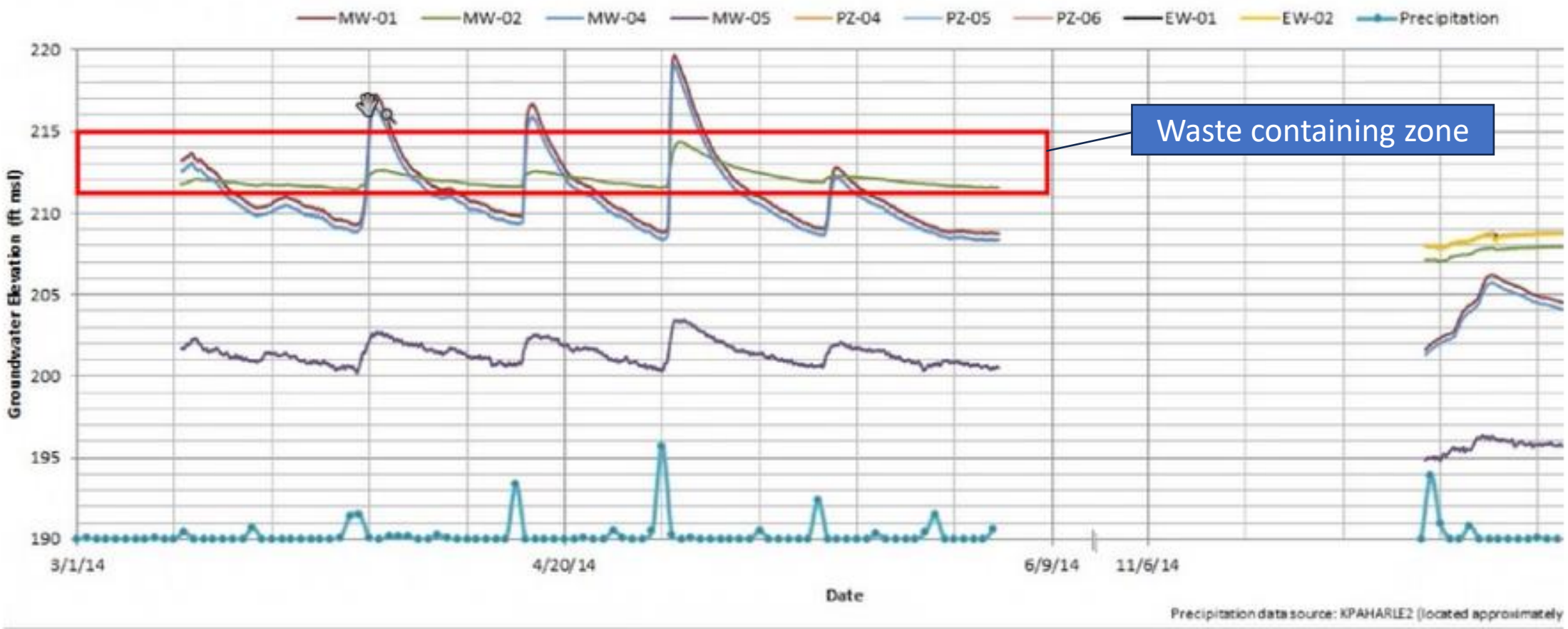
Figure 13
Boron Concentrations in Groundwater and Seep
March 2019

Construction Activities

- Close portion of Quarry Road
- Surface grading & stormwater drainage
- Excavate rock/ limited waste & dispose offsite
- Subsurface perimeter wall
- Multi-layer, impermeable cap
- Operations & maintenance
- Groundwater, surface water, & sediment monitoring
- Fencing & Institutional Controls

Why cleanup needed?

Minimize waste to groundwater migration



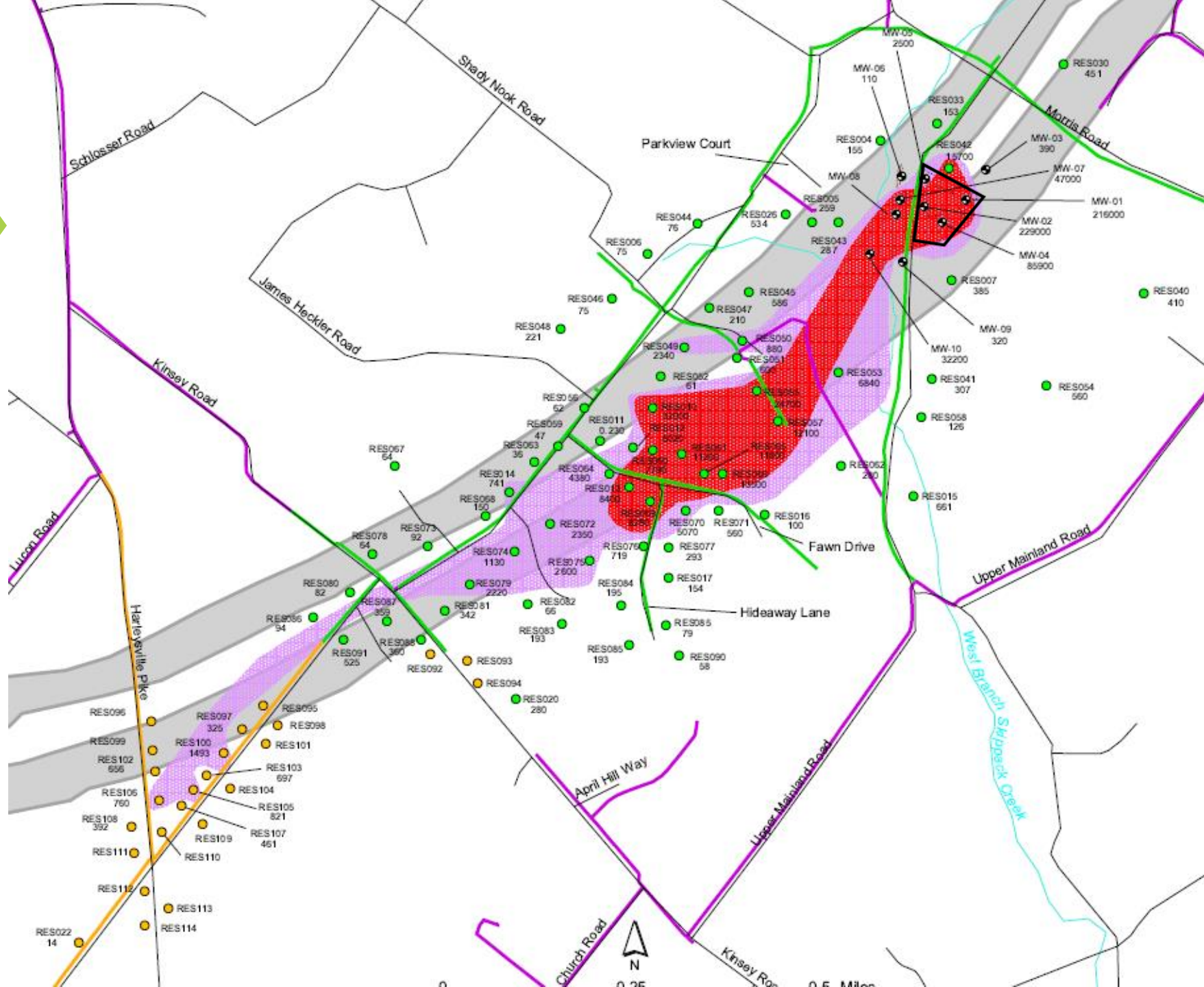
Investigation Results

Landfill waste

- Waste contaminants continue to leach into groundwater
  - Boron, cadmium, zinc, lead, and arsenic
  - TCE and vinyl chloride
  - bis-2-ethylhexyl phthalate

Unacceptable risk to future residents living on the quarry or using GW

Plume Map of Boron
1991-1993



LEGEND

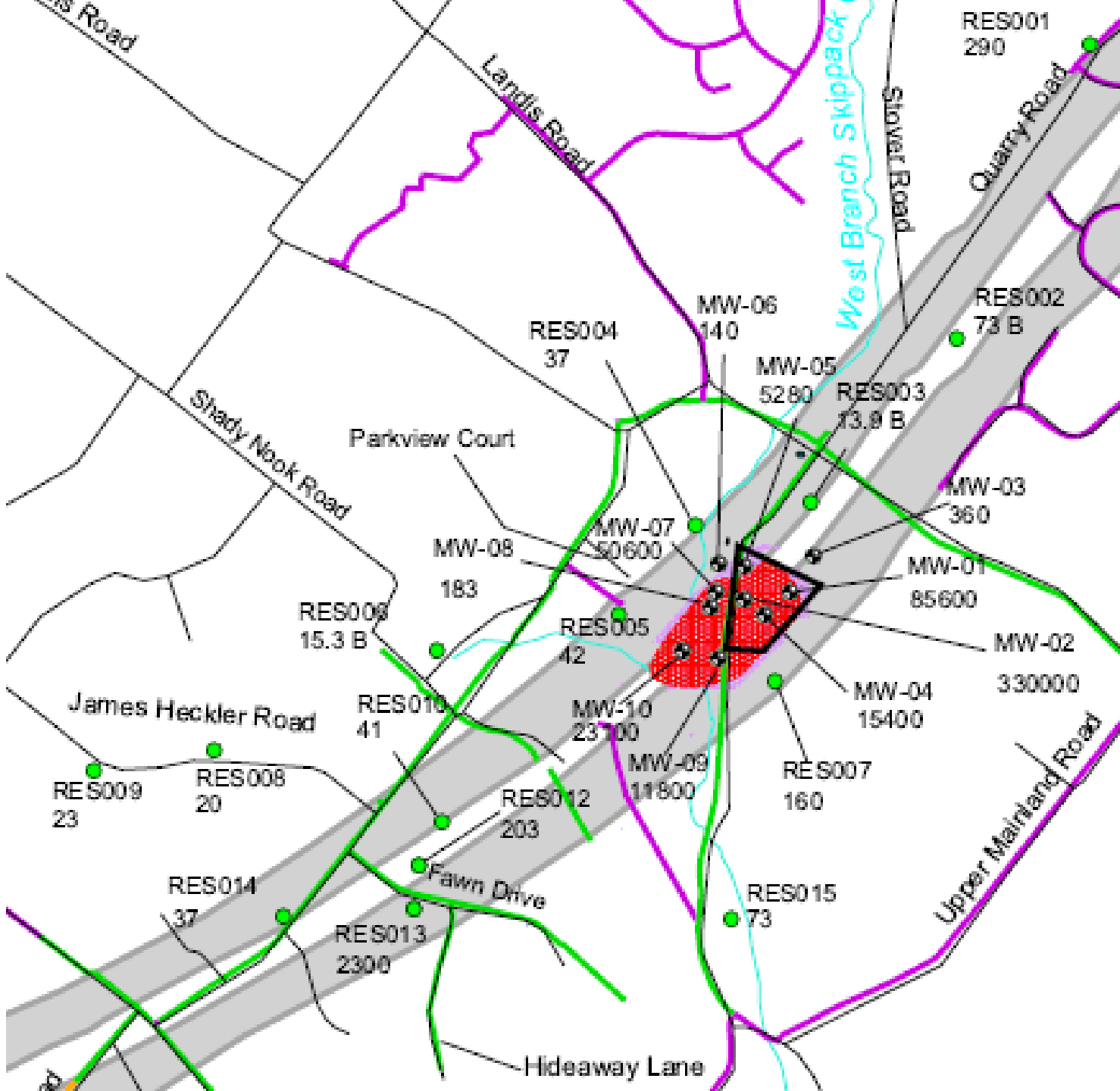
- Monitoring Well
- 1991 Sampling Location
- 1993 Sampling Location
- NPWA Waterline
- NPWA Waterline (EPA Phase 1)
- NPWA Waterline (EPA Phase 2)
- Road Centerline
- Dry Creek Bed
- Stream
- Boron Plume > 7300 ug/L *
- Boron Plume > 730 ug/L **

*** Regional Screening Level (RSL), HI=1.0 at the time of the RI. Current RSL is 3,100 ug/L at HI=1.0**

**** RSL HI=0.1 at the time of the RI; current RSL is 310 ug/L at HI=0.1**

Plume Map of Boron

2004



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Cleanup Objectives for waste & soil

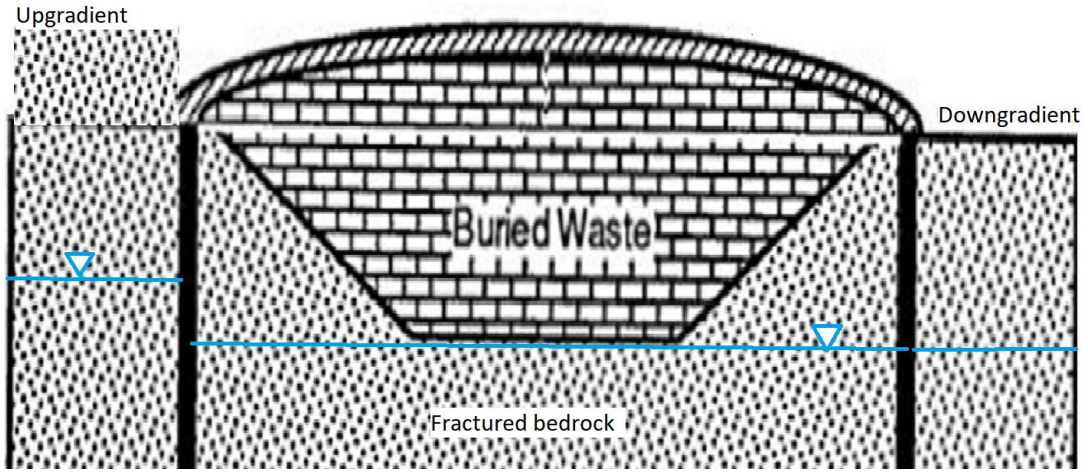
- Prevent human and environmental exposure
  - ingestion, inhalation, and dermal contact
- Prevent/minimize the migration of contaminants
  - waste and soil → groundwater
- Prevent/minimize the impacts to the creek
  - migration of contaminants from the soil

Cap

Wall + Cap

Soil removal

Some milestone dates



- Quarry Road closure – Sep 17, 2024
- Begin soil work – Oct 1, 2024
- Rock headwall work – Oct 8 - Dec 19, 2024
- Barrier wall bedrock drilling/excavation/liner install
  - Dec 06, 2024 – Sep 10, 2025
- Install capping system – Sep 11 – Oct 24, 2025
- Operation, Maintenance & Monitoring – Oct 25, 2025 – Oct 25, 2026

EPA Contacts

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Additional Site Information

https://www.epa.gov/superfund/salfordquarry