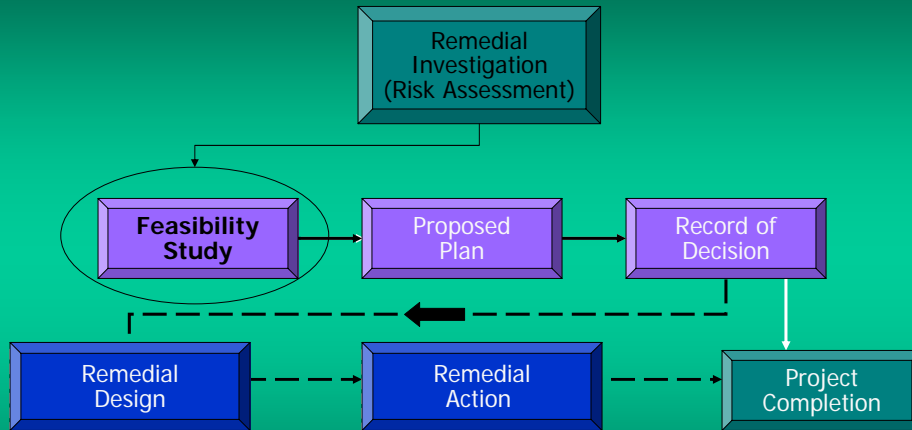


## DuPont Chambers Works FUSRAP Site Feasibility Study Draft Proposed Remedial Action Alternatives



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## Current Step in CERCLA Process: Feasibility Study (FS)



*FS identifies and evaluates various remedial alternatives to address unacceptable risks posed by soil or groundwater contamination.*



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## Contaminants of Concern

- Radionuclides of Concern
  - Natural Uranium Isotopes  
[U-234, U-235 and U-238]
  - Radium-226
  - Thorium-230

*The USACE working group identified no chemical constituents as FUSRAP eligible contaminants.*



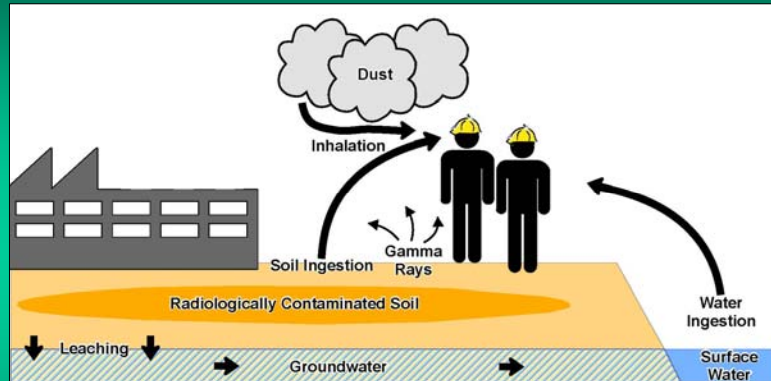
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## Recommended Cleanup Locations



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## Remediation Goal



*Proposed Remediation Goal for total uranium: 65 pCi/g  
[construction worker]*



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## General Response Actions

- No Action
- Land Use Controls
- Monitoring
- Containment
- Removal
- Treatment



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## Soil Alternatives

Alternative	Description of Alternatives
S1	No Action
S2	Land Use Controls and Site Maintenance
S3	Capping
S4	Excavation Followed by Off-site Disposal
S5	Excavation Followed by Treatment and Off-site Disposal



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## Groundwater Alternatives

Alternative	Description of Alternatives
GW1	No Action
GW2	Land Use Controls and Site Maintenance
GW3	Ex-Situ Treatment
GW4	Monitored Natural Attenuation



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## **DRAFT Proposed Alternatives**

### **SOIL**

S4 - Excavate soils above soil cleanup level and dispose offsite

### **GROUNDWATER**

GW4 – Monitored Natural Attenuation



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## **DRAFT Proposed Soil Alternative**

- Excavate soils contaminated above the cleanup level;
- Transfer excavated soils to a staging area by dump trucks; and
- Haul to permitted offsite disposal facility by rail car.



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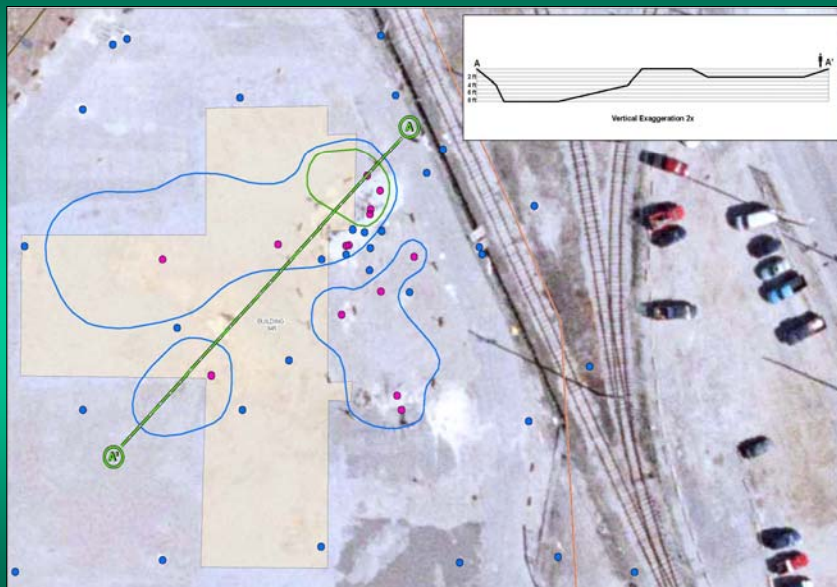
## DRAFT Proposed Groundwater Alternative

- Soil excavation will reduce contaminated source soils and groundwater
- Groundwater will be monitored to demonstrate radionuclide concentrations are being reduced over time



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## AOC 1 – Soil Results above 65 pCi/g




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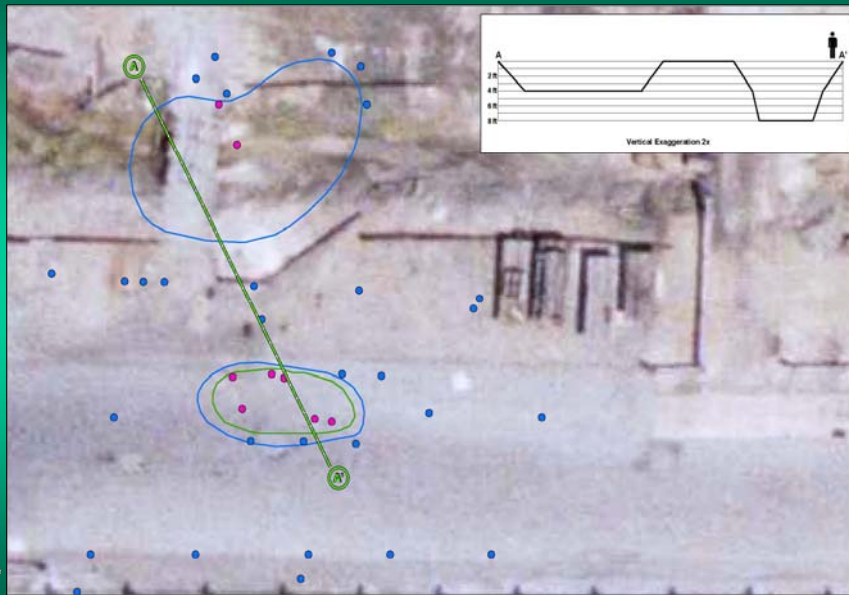


## AOC 2 – Soil Results above 65 pCi/g



  
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## AOC 6 – Soil Results above 65 pCi/g



  
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## Evaluation of Groundwater

Groundwater is an incomplete exposure pathway.  
However, U in Groundwater exceeds New Jersey  
Groundwater Quality Standards in OU 1 and AOC 6.

*OU 1*



*AOC 6*



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## Questions?



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