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# ***CERCLA Highlights***

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# *Overview*

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## Update

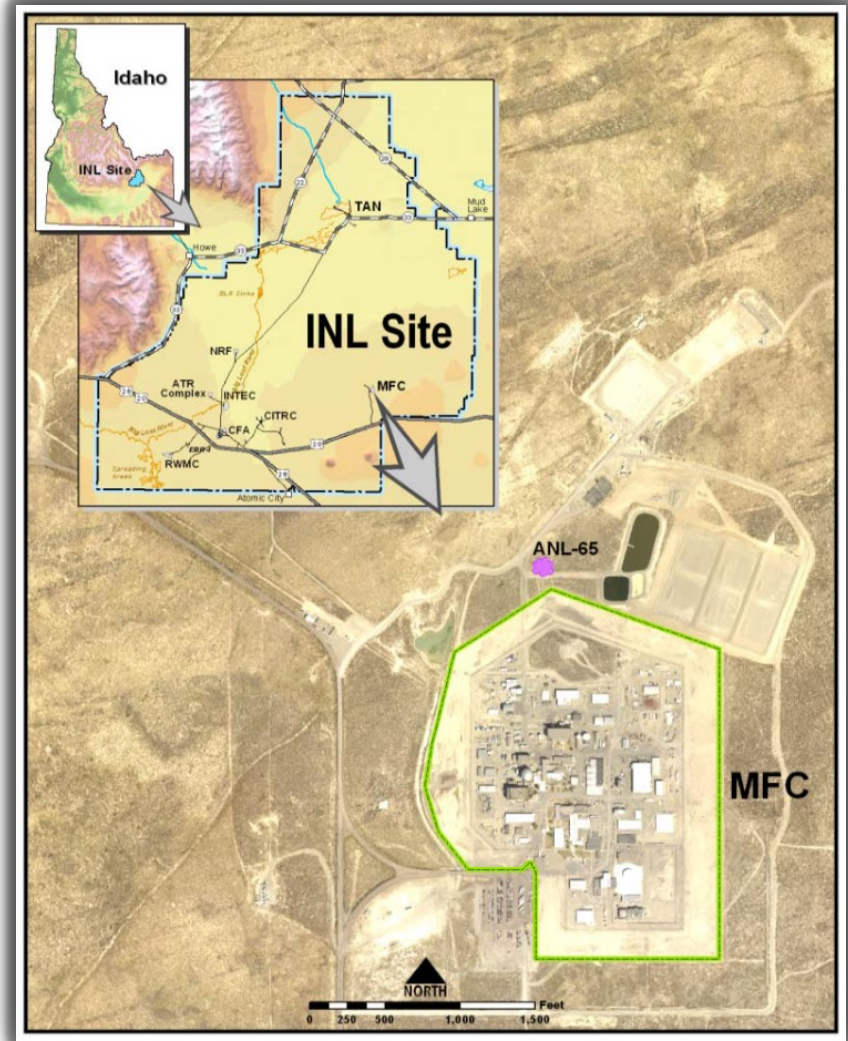
- ANL-65 lead site cleanup
- Munitions and explosives of concern (MEC)
- CERCLA land use



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## ANL-65 Lead Site Description

- Small lead-contaminated soil site
- Lead concentration exceeds clean-up level
- No unacceptable risk to groundwater



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## *ANL-65 Lead Site Clean-up*

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- New Site (discovered after ROD signed)
- First site to use new streamlined process (plug-in remedy)
- Actual site was larger than anticipated
- Hot spots found in  $80 \times 80$  ft area
- Soil will be disposed of in Idaho CERCLA Disposal Facility



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## *ANL-65 Lead Site Clean-up*

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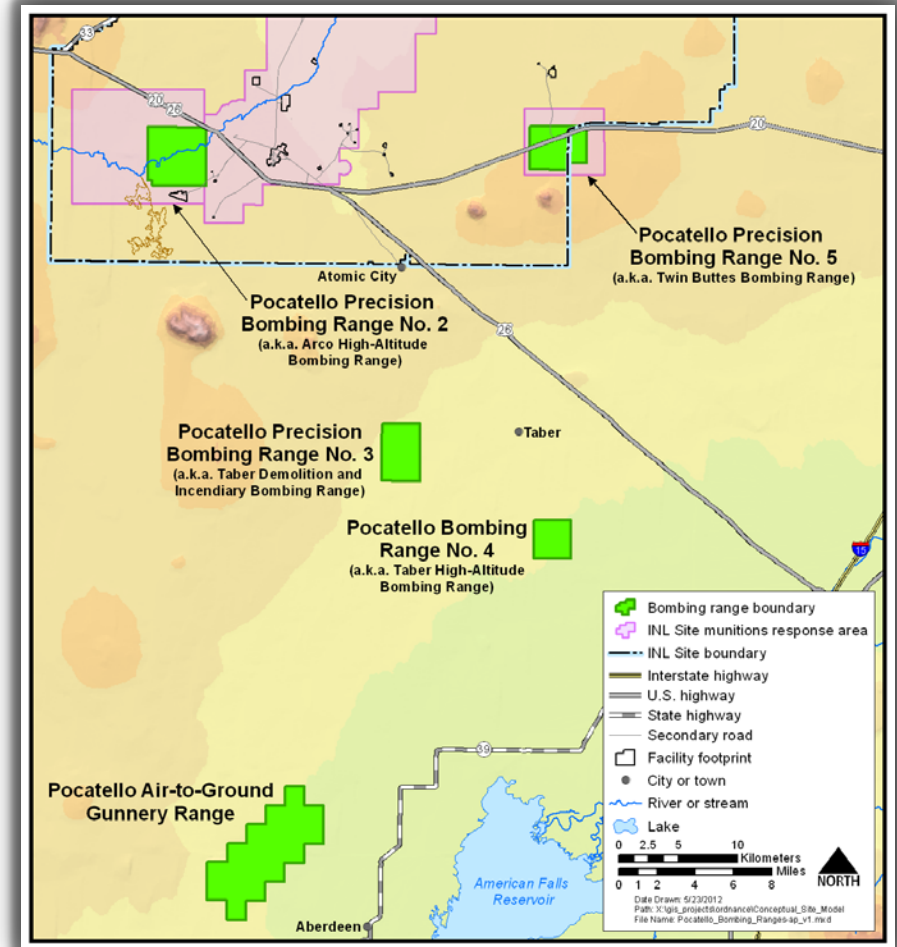
Final backfill



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# World War II Bombing Ranges at INL

- Five ranges in southeast Idaho were used by aircrews stationed at Pocatello Army Air Base
- DOE is responsible for the two ranges associated with the INL Site
  - Arco High-Altitude Bombing Range
  - Twin Buttes Bombing Range





# *Types of MEC*

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- Practice Bomb
  - Sand filled devices @100 lbs. designed to simulate a general high explosive bomb
- Spotting Charge
  - Located in the tail section of the practice bomb
  - Designed to produce a flash of flame and white smoke upon impact for observation in training
- Incendiary Device
  - Deployed to burn “battlefields”



Practice bomb



Spotting charge

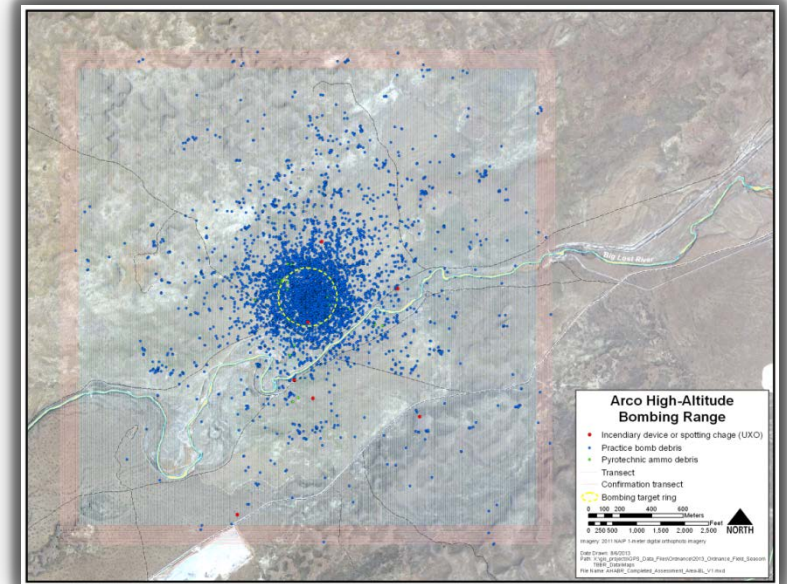
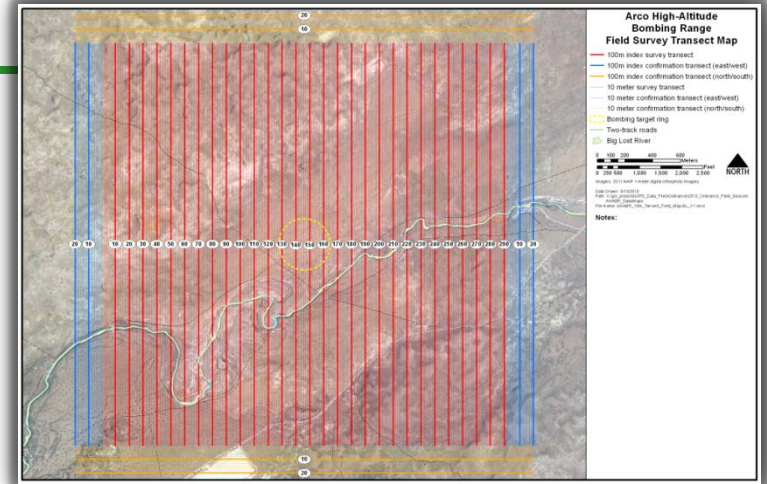


Incendiary



# Visual Pedestrian Survey Design

- Purpose of survey is to refine boundaries to reduce CERCLA footprint.
- North and south parallel transects with 10-m spacing.
- 10 confirmation transects on each side to verify the absence of MEC.
- Field team members locate, identify, and record MEC, munitions debris, and other evidence of military munitions.





## *Twin Buttes Bombing Range*

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- Completed visual pedestrian survey
- Miles walked: 492
- Munitions debris: 1,423
- Items destroyed: 2



Team members performing visual surveys



Practice bomb



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## *Arco High Altitude Bombing Range*

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- Completed visual pedestrian survey
- Miles walked: 601
- Munitions debris: 6,350
- Items destroyed: 7



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## *Ordinance - Recovery, transport, and disposal operations*



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# *Ordnance Disposal*



## *INL CERCLA Land Use Assumptions*

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- Land use assumptions evaluated as part of Risk Assessment
- Land use decision in ROD
- Land use can be restricted or unrestricted
- RODs typically assume unrestricted land use
- Land use decisions made prior to facility D&D



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## *Land Use Assumptions*

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- Unrestricted-use assumptions
  - Future resident could live in home on former facility
  - Resident could disturb top 10 ft of soil (e.g., build basement, plant garden, build child's sandbox etc.)
  - Clean-up standards must be met by a future date to allow resident to safely live on land
  - Assumes that Government may relinquish control of land when clean-up standard is met by compliance date (100 yrs. from ROD)
- Restricted-use assumptions
  - Facility remains industrial with controlled public access
  - Worker could disturb top 4 ft (e.g., digging trenches, foundations)
  - Clean-up standards less restrictive but protective of worker
  - Institutional Controls i.e. deed restrictions, signs, drilling restrictions
  - Government will maintain control of land

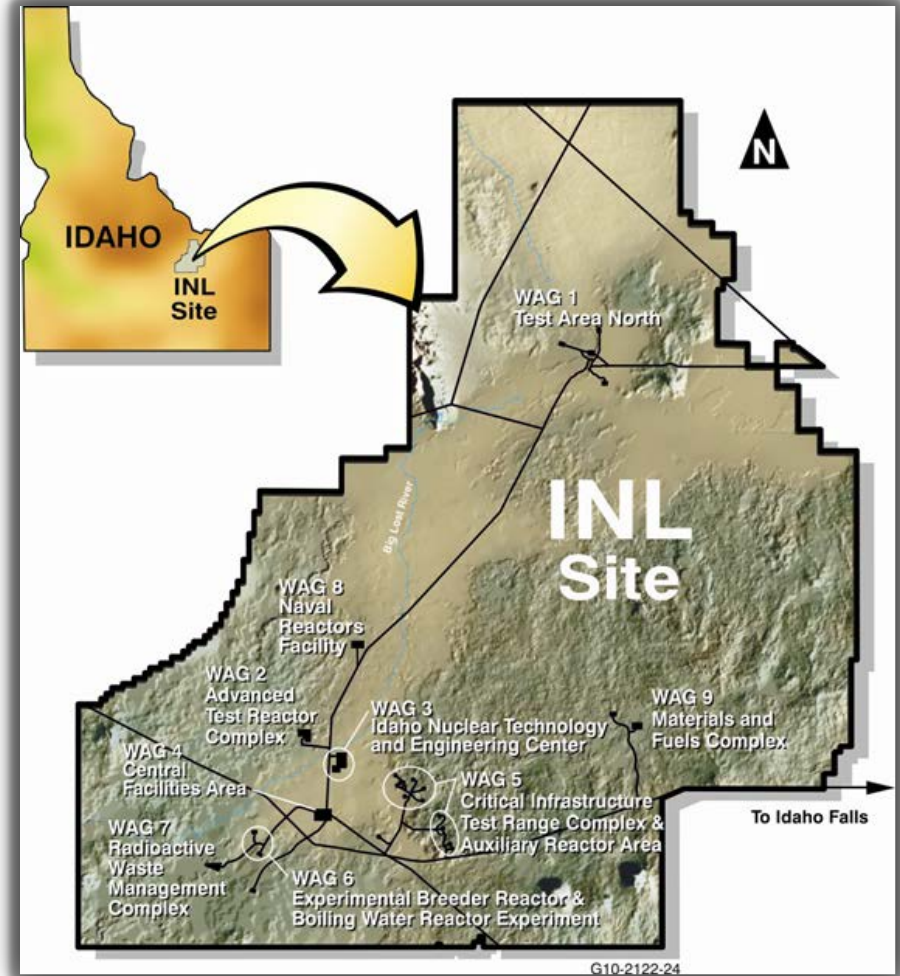
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## Examples of INL Restricted Land Use Facilities

- Northern INTEC (tank farm) and RWMC are land use restricted
- Additional restricted areas being considered
  - Idaho Nuclear Technology and Engineering Center
  - Advanced Test Reactor Complex



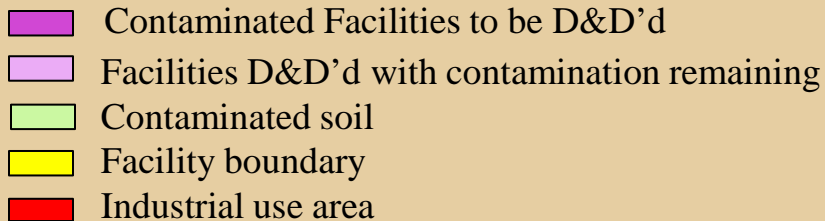
## *Why Designate a Facility as Restricted Land Use?*

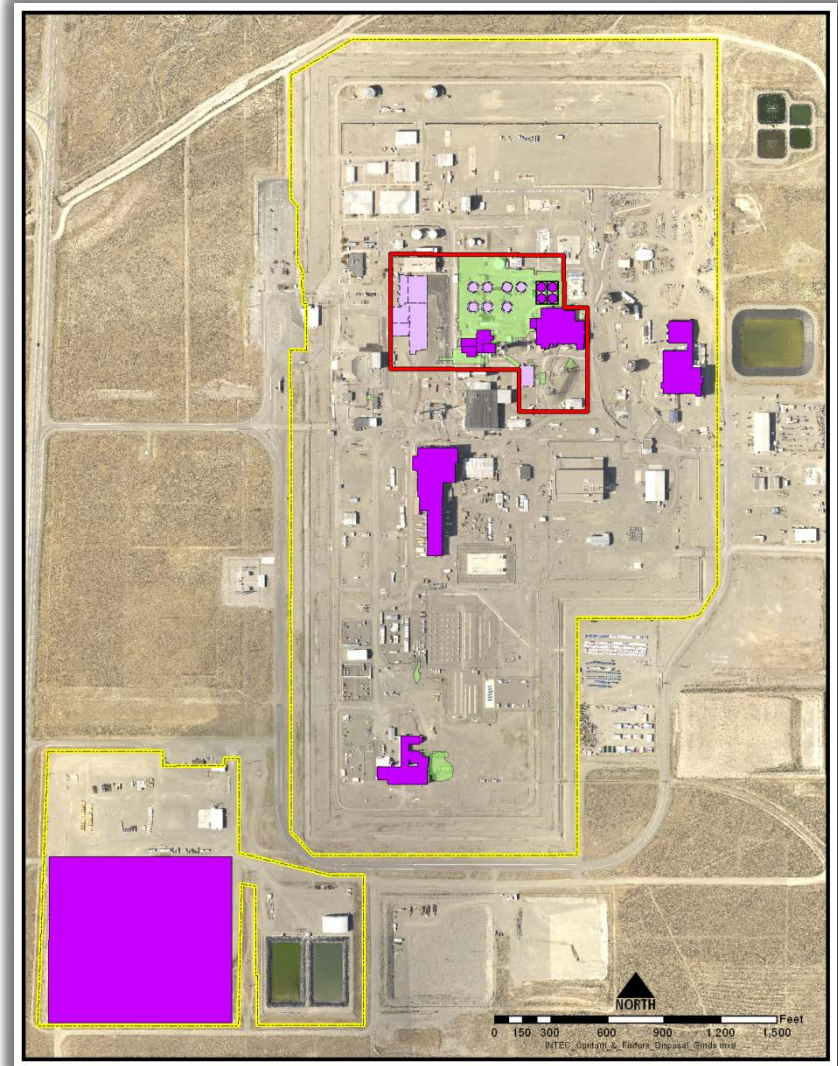
- Long established industrial area with lots of buried infrastructure
- Following D&D, underground structures remain:
  - Building foundations, grouted underground tanks, basements, piping, etc.
- Permanent barriers, such as landfill caps
- Deep soil contamination that is not a threat to groundwater
- When residential (unrestricted) use of the area is not a reasonably anticipated future use
- Ensure governmental management and control for as long as necessary
- Restrict access
- Protect workers



## Proposed Changes to INTEC Land Use

- Expand restricted use area to all of INTEC
- Include Idaho CERCLA Disposal Facility

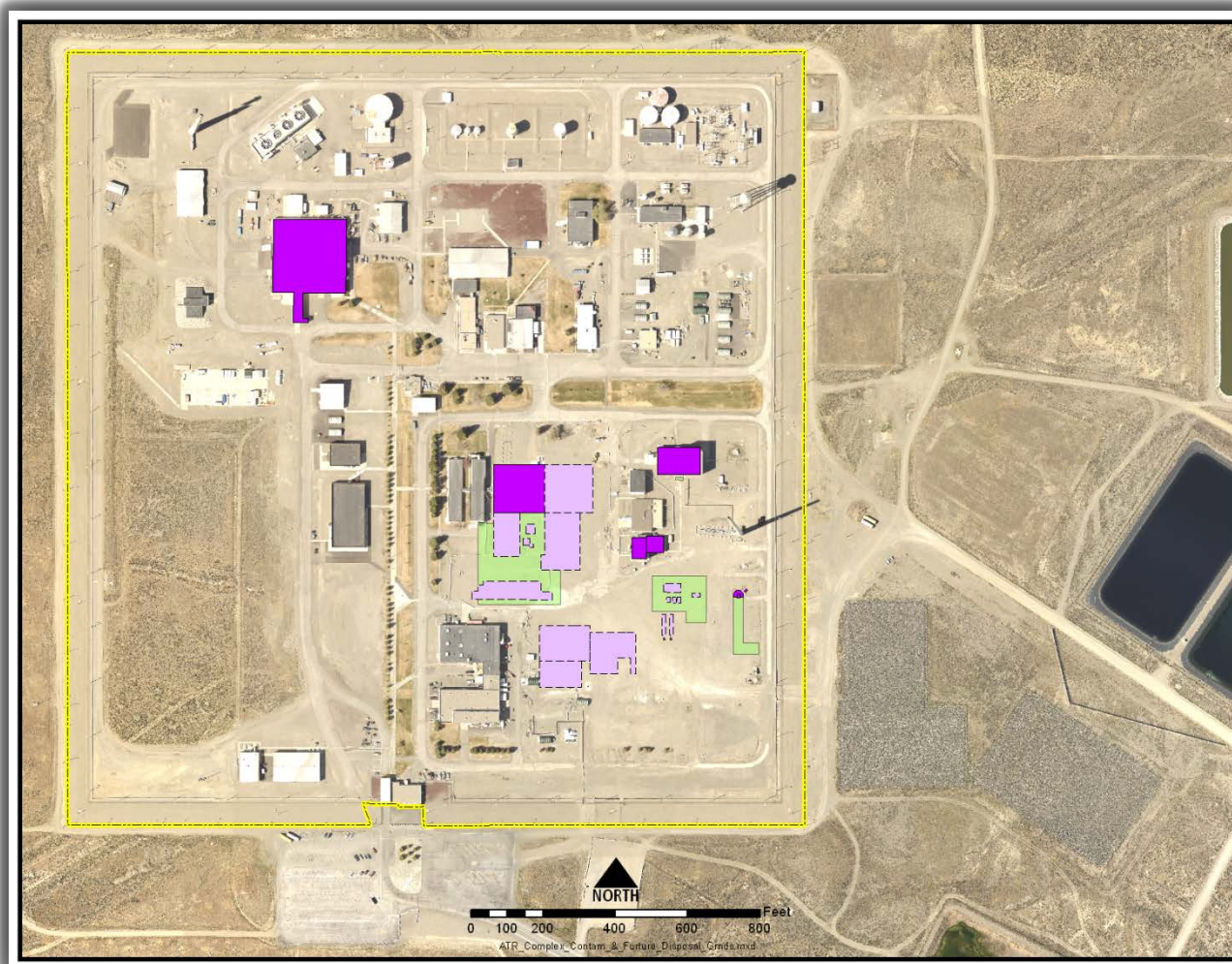
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- Legend:
- Contaminated Facilities to be D&D'd
  - Facilities D&D'd with contamination remaining
  - Contaminated soil
  - Facility boundary
  - Industrial use area





## *Proposed Changes to ATR Complex Land Use*

- Designate all of ATR Complex restricted land use area



## *How are Land Use Restrictions Established and Enforced?*

- CERCLA Record of Decision (ROD)
- Explanation of Significant Differences to a CERCLA ROD
- RODs are legally binding agreements between DOE, EPA, and Idaho DEQ
- Managed under the INL Institutional Controls and Operations and Maintenance Plan with annual inspections
- Evaluated every five years through the established 5 year review process



# *Questions?*






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## *Dashboard Summary*

Key Questions	Dashboard Indicator	Comments
Impact on budget for activity/cleanup		Project continues to be ahead of schedule and has come in under budget for FY-13
Impact on employment/economic development		CWI has maintained employment for ER activities
Affect on agreements		Milestones have been met in accordance with the FFA/CO and supporting documents
Impact on safety and environment		Clean-up activities and GW monitoring continue to progress
Impact on cleanup DOE-wide		Clean-up accomplishments reflect positively on DOE complex

