
Application of Industrial Land Use

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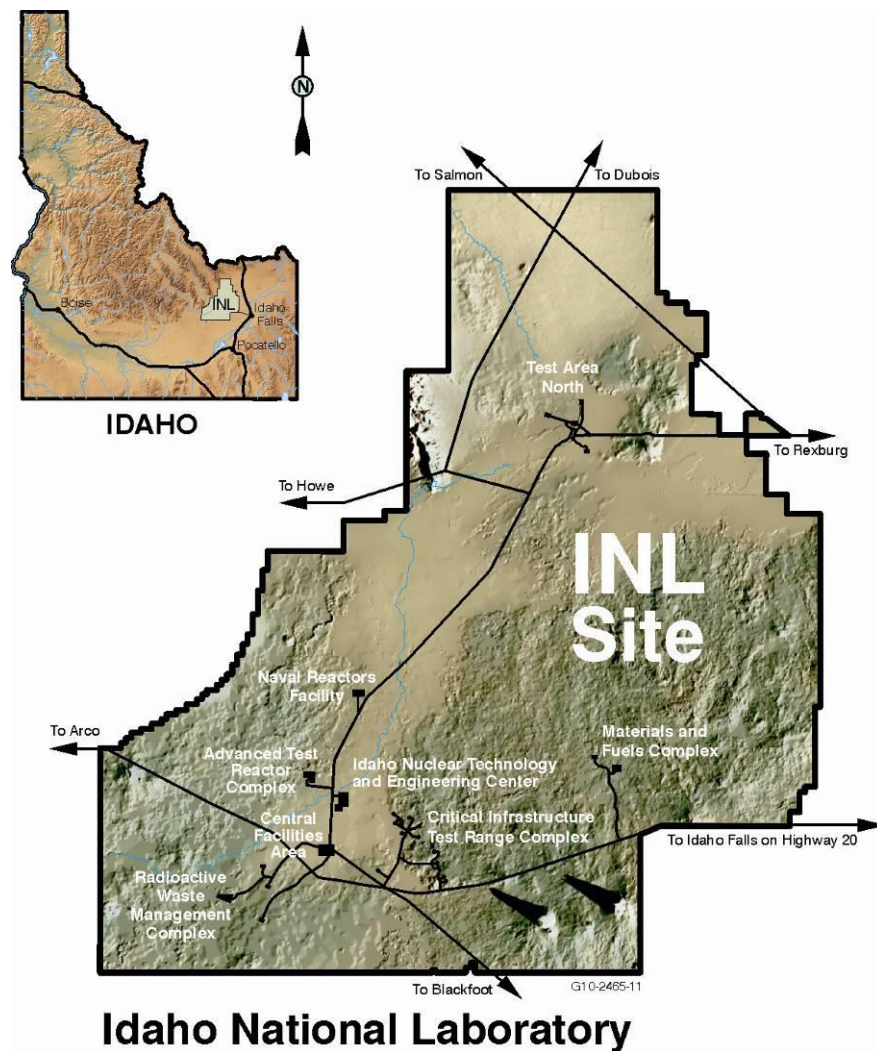
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Industrial Use: Overview

- When does industrial use make sense?
- Why did DOE propose a land use change for all of INTEC and ATR Complex?

Presentation Agenda

- Terminology
- History of industrial use on INL
- INTEC sites appropriate for industrial use
- ATR Complex sites appropriate for industrial use
- Summary



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Terminology

- Land use assumption
 - Use is assumed to be either **residential** or **industrial**
 - Hypothetical use assumption is made to assess risk and make cleanup decisions
 - Determines depth of cleanup (10 ft residential vs 4 ft industrial)
- Land use restrictions
 - Are either **unrestricted** or **restricted**
 - Pertain to residual hazards following cleanup
 - Land use restrictions (institutional controls) are applied when residual hazards remain in place following cleanup
 - Sites cleaned up to residential standard (10 ft) cannot be released for unrestricted use if contamination remains below 10 ft

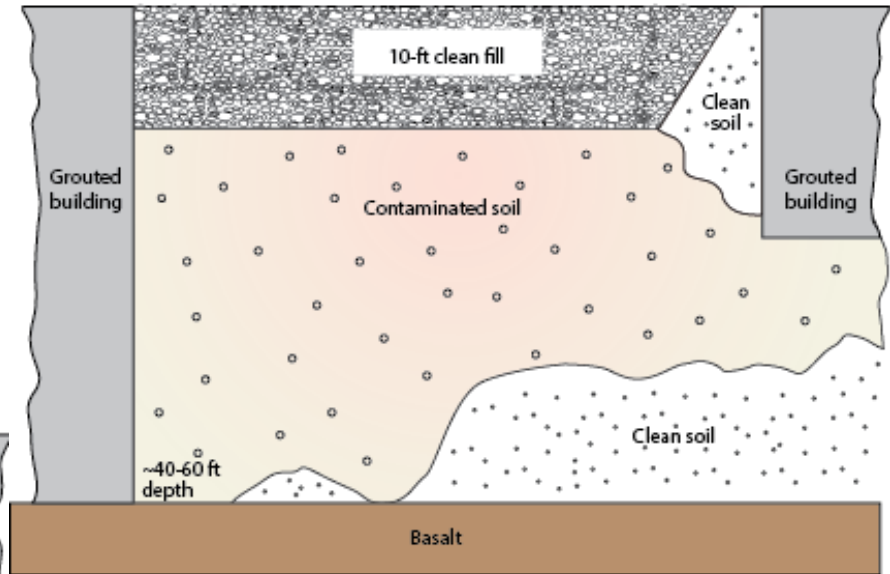


Cleanup to Residential vs Industrial Standards

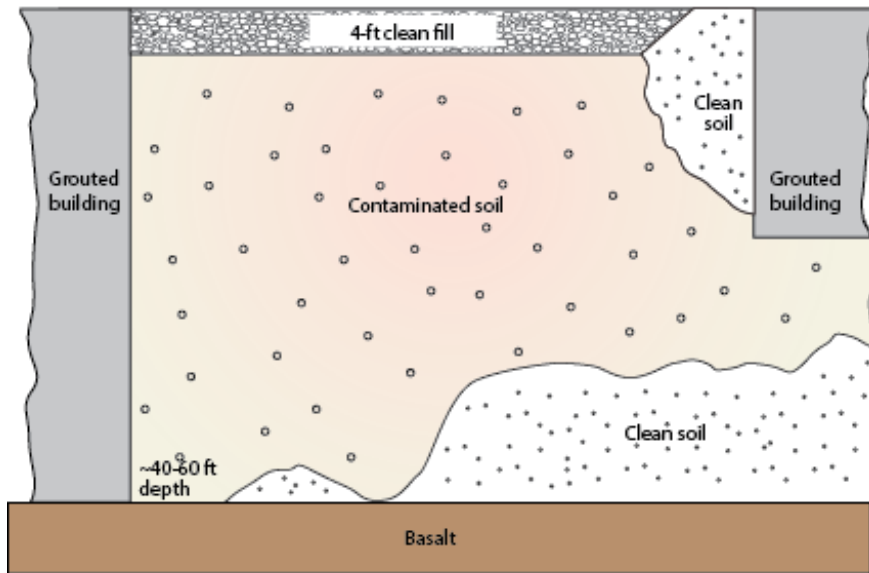
Cleanup to Residential Standard

- Remove contaminated soil to 10 ft
- Restricted use is required (ICs)

Cleanup to Residential Standard (to 10'). Use remains restricted (ICs)



Cleanup to Industrial Standard (to 4'). Use remains restricted (ICs)



Cleanup to Industrial Standard

- Remove contaminated soil to 4 ft
- Restricted use is required (ICs)
- DOE can build on site in future if appropriate measures are taken, e.g., DOE removes contaminated soil in construction zone



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INL areas designated industrial use

- Two RODs designated industrial use areas
 - RWMC – after targeted removal, buried waste will remain
 - INTEC tank farm
 - Contamination is at depths greater than 10 ft (to 50 ft in tank farm)
 - Deep residual contamination (grouted buildings, tanks, pipelines)
- These areas will require long-term restrictions (>> 100 years)
- DOE must continue to manage areas with residual contamination
- **Both RODs require cleanup of groundwater to drinking water standards**



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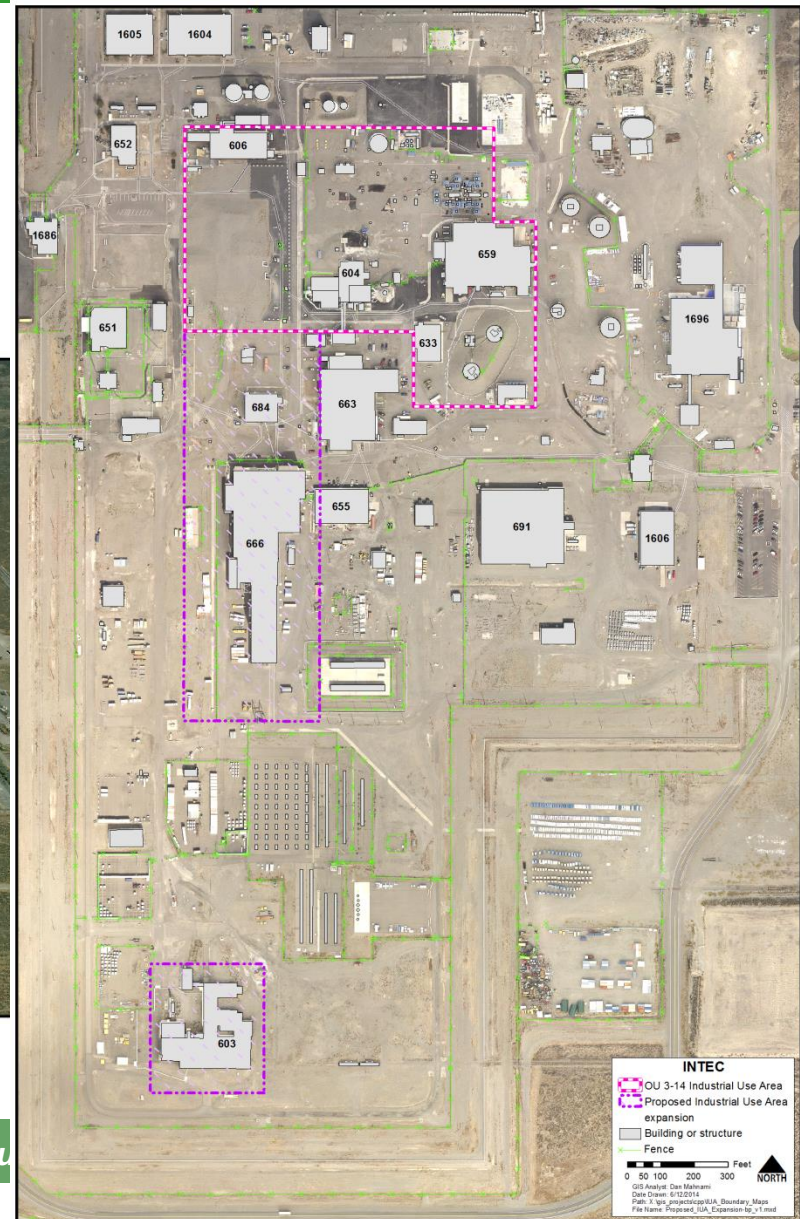
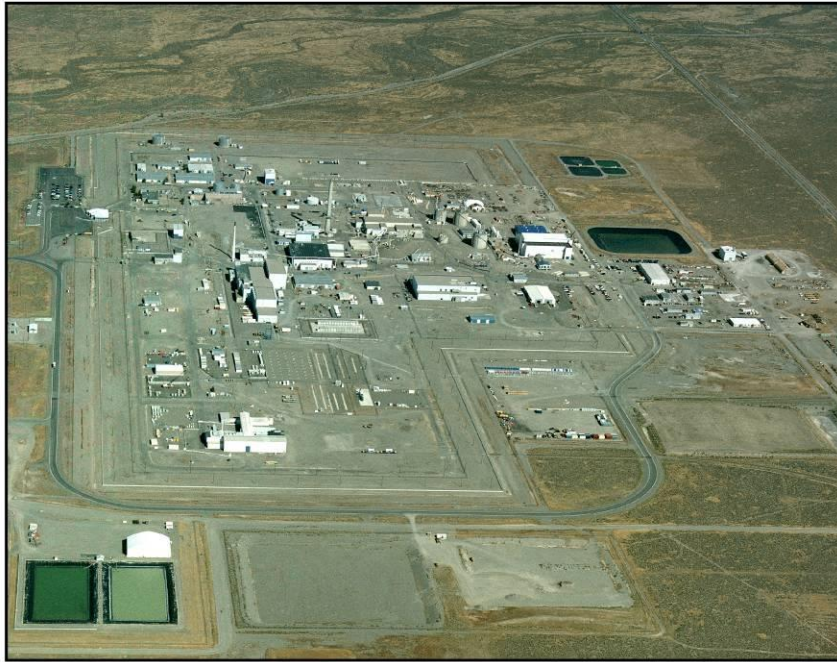
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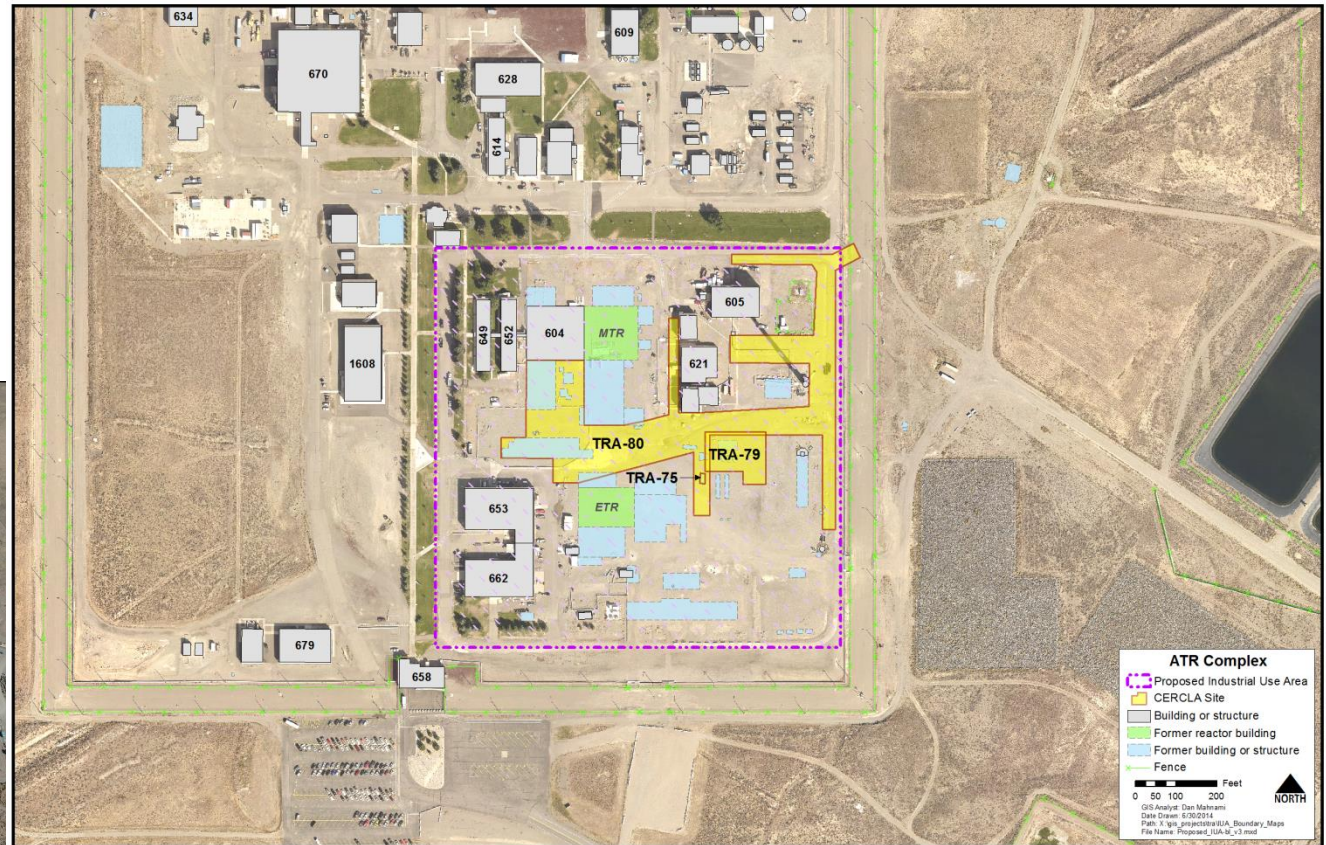
Which areas of INTEC are similar to IUA?

- CPP-666 (fuel storage/dissolution)
- CPP-603 (fuel wet/dry storage facility)
- Waste transfer lines



Which areas of ATR Complex are similar to IUA?

- “Courtyard”
- New site TRA-79
- New site TRA-80
- Former reactors (ETR and MTR)



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Summary

- INL has precedence for designating industrial use areas (IUAs)
- Areas at INTEC and ATR Complex have characteristics similar to IUAs such as
 - Deep contamination that will remain below 10 ft
 - Buried infrastructure (e.g., grouted buildings, tanks, pipelines)
 - DOE will have to maintain control even if cleaned up to 10 ft (residential)
- Proposed IUA only applies to new sites and will not affect previous decisions
- All groundwater will be cleaned up to drinking water standards regardless of whether industrial or residential use assumed



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Acronyms

ATR	Advanced Test Reactor (Complex)
CAB	Citizens Advisory Board
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CPP	Chemical Processing Plant
DOE	Department of Energy
ETR	Engineering Test Reactor
ICs	institutional controls
INTEC	Idaho Nuclear Technology and Engineering Center
IUA	Industrial Use Area
MTR	Materials Test Reactor
RAL	Remote Analytical Laboratory
ROD	record of decision
RWMC	Radioactive Waste Management Complex



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