

**Tank Closure & Waste
Management Environmental
Impact Statement
Groundwater Model Impacts**

The EIS Groundwater Model design

- Used the most up to date inventory.
- Was only intended to compare remediation alternatives.
- Model was not designed to produce protective alternatives; do analyses then mitigate impacts.
- Alternatives designed for selected impacts; no way to use results to evaluate other impacts separately; grouping of issues in alternatives makes their actual evaluation difficult.
- The model had no groundwater-vadose zone remediation (addressed in sensitivity analyses, part of alternatives)

EIS Model showed us:

- Clear that large inventory of contaminated water came from leaks, releases, disposals.
- The leaks from SSTs present high risk.
- Supplementary waste forms (other than vitrification) have poor performance (technetium, iodine).
- Importation of offsite waste exceeded Hanford's waste capability.

EIS Preferred Alternatives

- Retrieval; 99% of tank waste.
- SST Closure; No tank removal anticipated, landfill closure; soil RTD decided at Tank Farm ROD.
- TRU tank waste classification to ship some to WIPP.
- No preference chosen for supplementary waste form (later).
- Waste Management; LLW/MLLW disposal in IDF-200E and SST waste in RPPDF; landfill closure; to use limitation of I-129 content.

What are the implications of these choices?

- With no tank removal, the vadose zone contaminants below tanks may not be addressed (*); but workers not exposed, waste volume less.
- HAB “RTD preferred over landfill cover”, but non-leak tanks may be OK.
- TRU tank waste to WIPP means less tank waste to vitrify.
- No supplementary waste form preference; still no answer to whether LAW vitrification is to be used (which provides less contaminant to groundwater over time).
- IDF-200E and RPPDF (landfills)

Future Focus?

- Tank Farm RODs:
 - Tanks with leaks removed to get at leak contamination.
 - Tank gear, pipes, valves, etc to be removed.
 - RTD contaminated soils where necessary.
- Watch for Secondary Waste form option; LAW vitrification preference.
- Landfill disposal; watch for technetium and iodine limits.
- Watch for actions about Waste Importation to Hanford.