

Proposed Plan for Remediation of 100-KR-, KR-2 and KR-4 Operable Units

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Presentation to RAP Committee

October 12, 2011

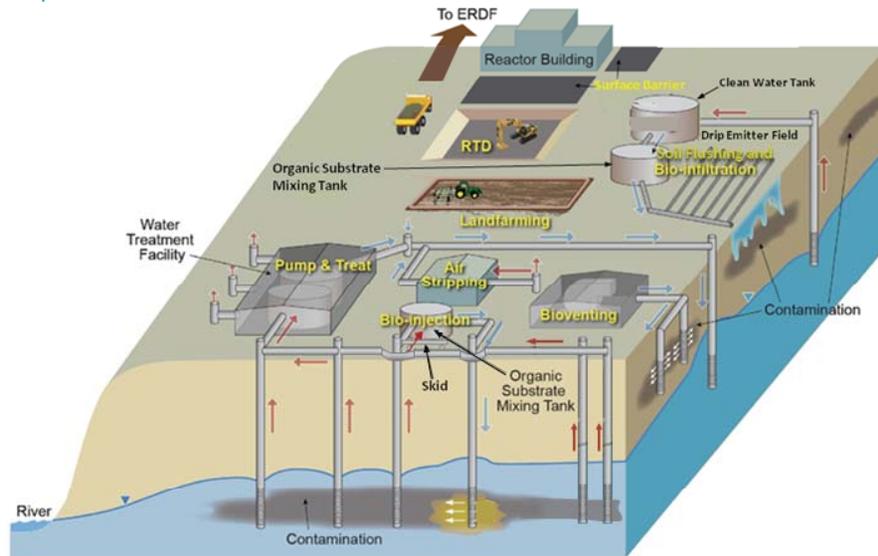
Proposed Plan for Remediation of 100-KR-, KR-2 and KR-4 Operable Units

A brief comparison of the two 100-K
Remediation Alternatives (not counting the
“No Action” Alternative)

- How do they compare for implementability?
- For remediation effectiveness?
- For Protectiveness?
- For Cost?

Alternative 2: RTD and Groundwater Pump-and-Treat, Optimized With Other Technologies

Conceptual Schematic



Cost	Waste Site Treatment	Groundwater Treatment	Total
Total Present Value of Alternative (Discounted)	\$422,494,000	\$194,314,000	\$616,808,000
Total Non-Discounted Cost	\$764,611,000	\$265,540,000	\$1,030,151,000

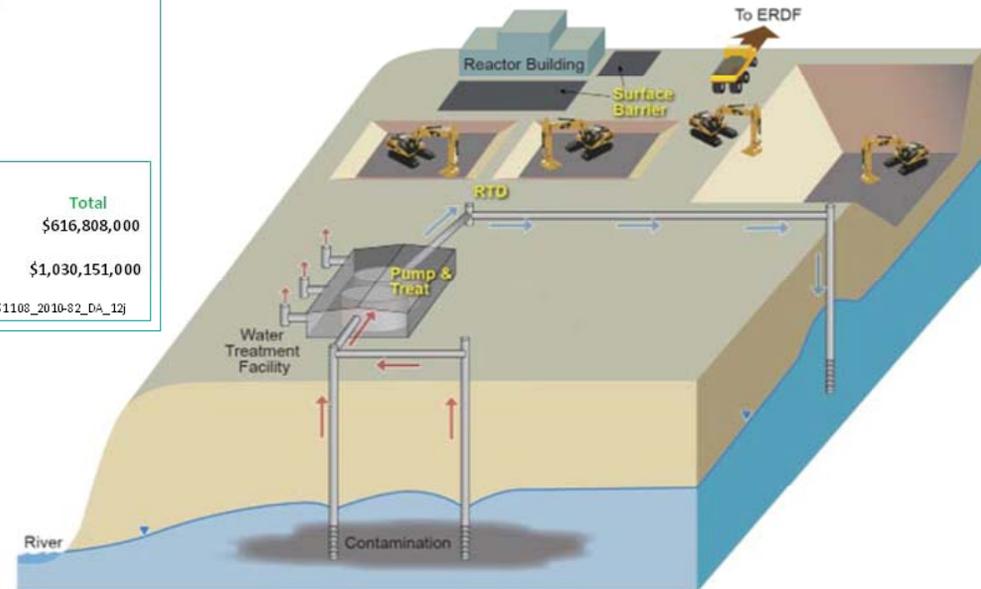
Note: Waste site treatment costs include the cost for institutional controls.

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Implementable?

TD and Expanded Groundwater Treatment

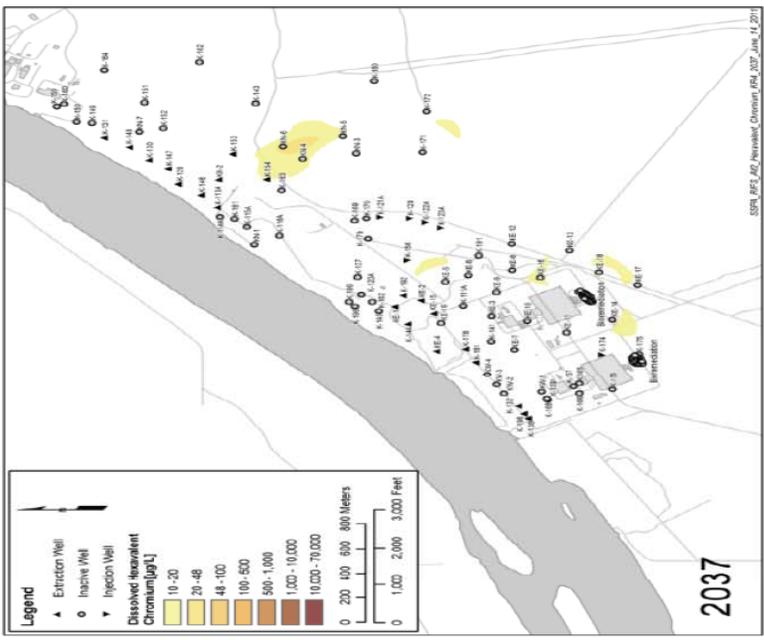
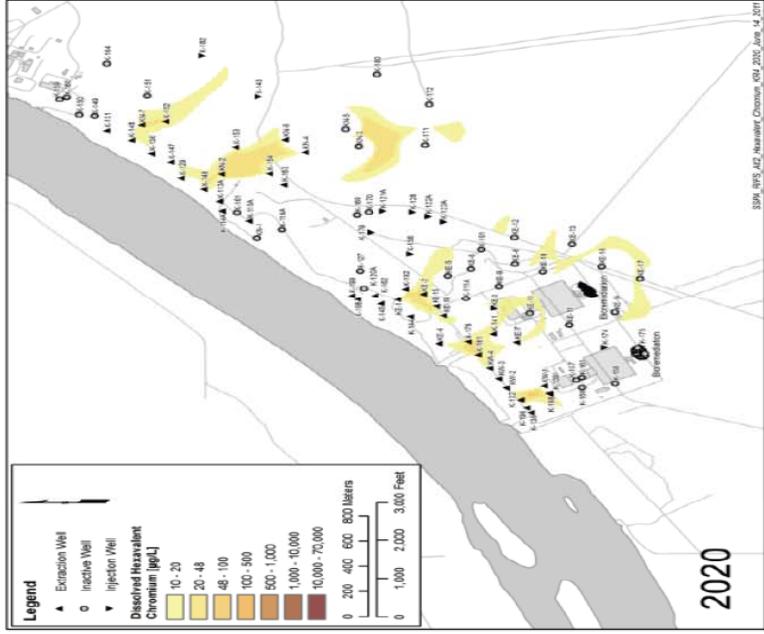
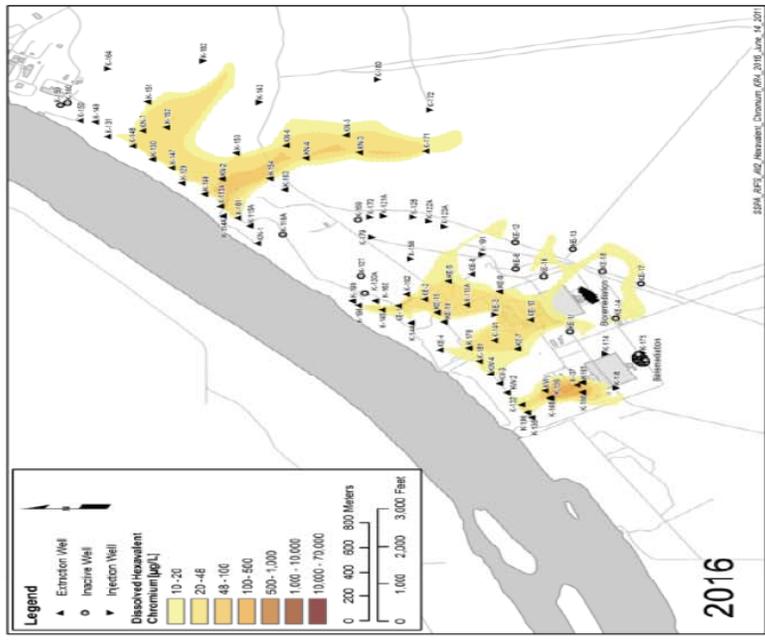
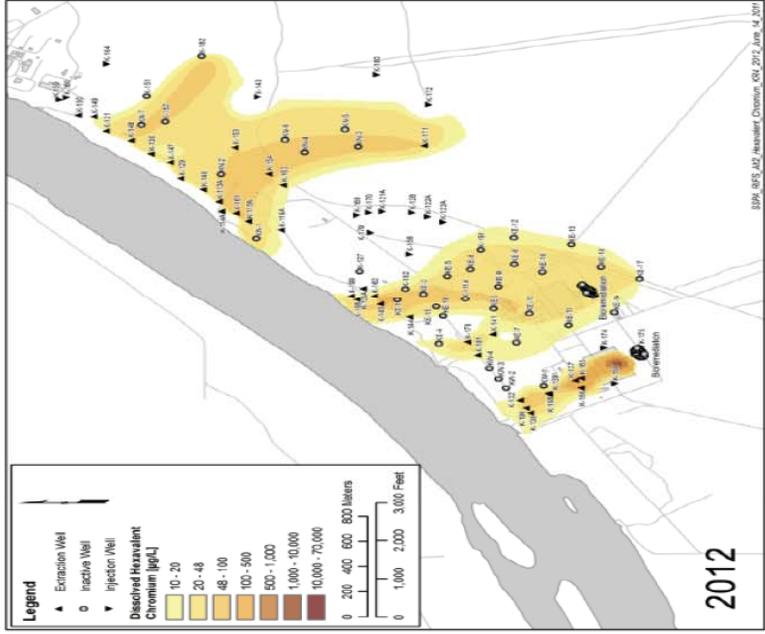
Conceptual Schematic

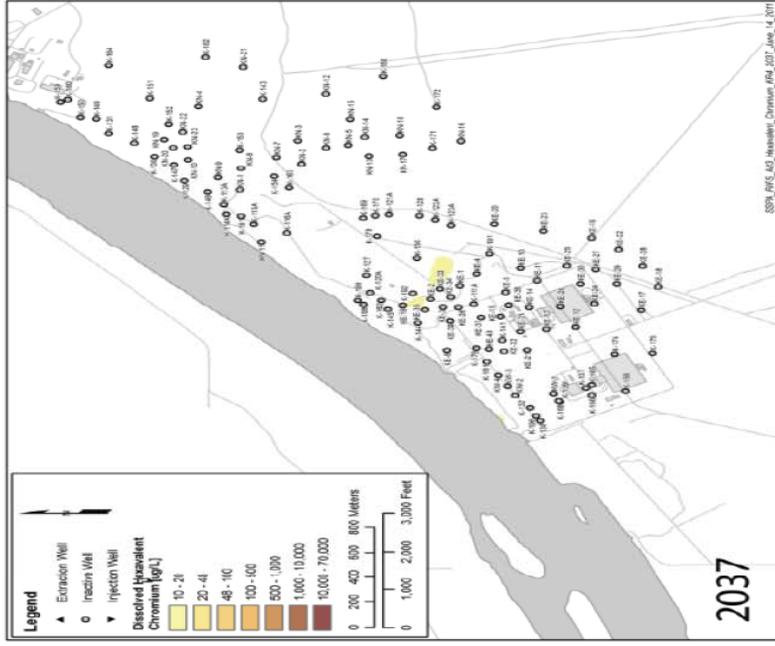
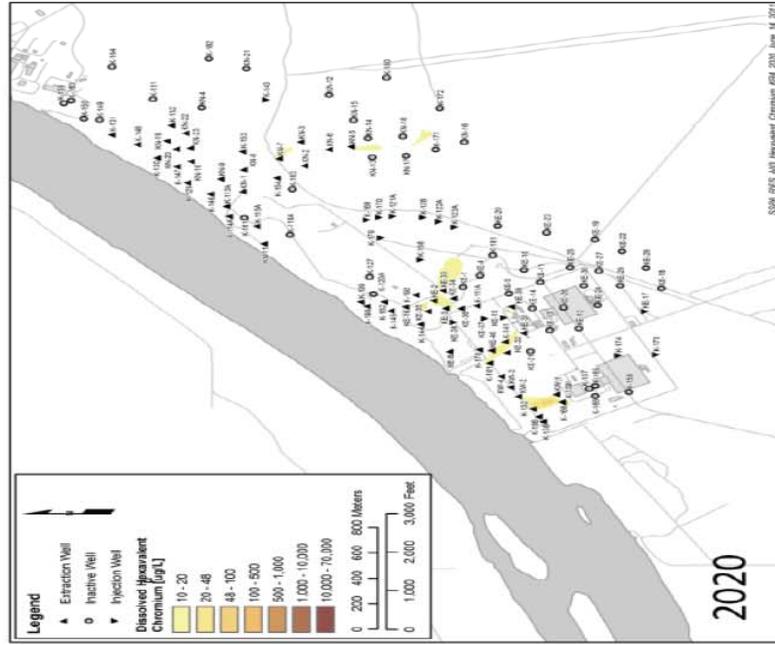
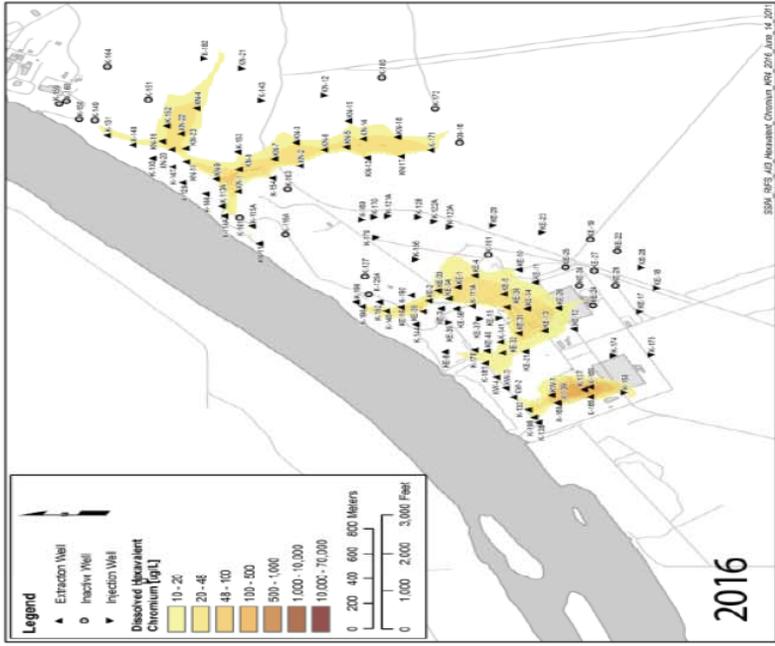
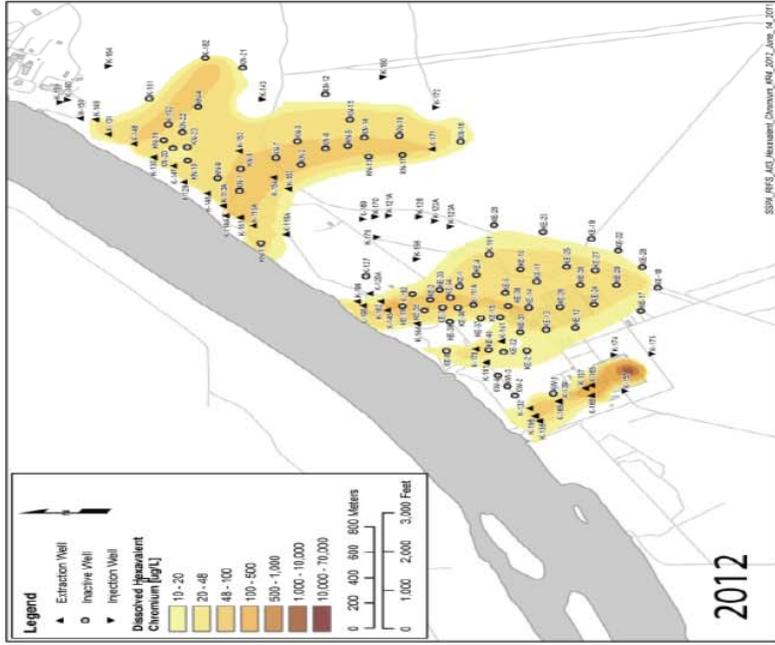


Cost	Waste Site Treatment	Groundwater Treatment	Total
Total Present Value of Alternative (Discounted)	\$467,525,000	\$247,129,000	\$714,654,000
Total Non-Discounted Cost	\$812,687,000	\$275,810,000	\$1,088,497,000

Note: Waste site treatment costs include the cost for institutional controls.

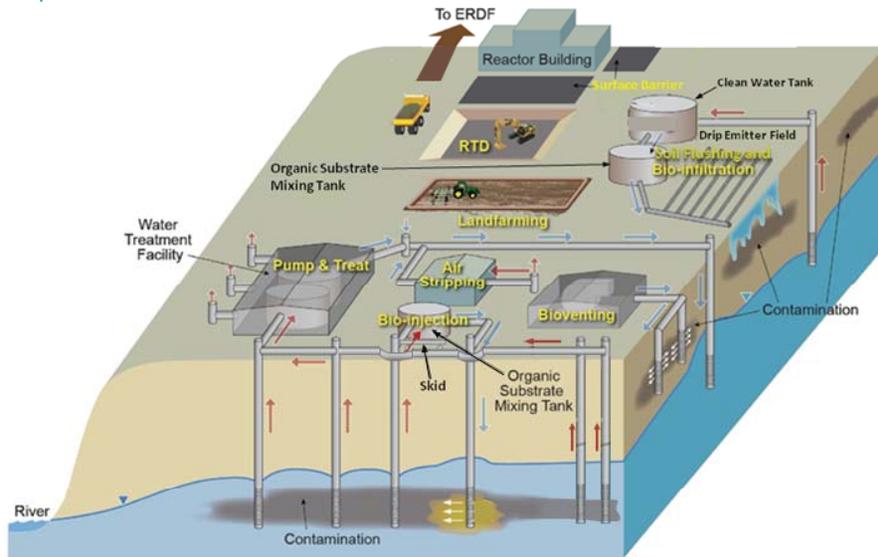
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Alternative 2: RTD and Groundwater Pump-and-Treat, Optimized With Other Technologies

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In General:

Alt 2 leaves immobilized waste in place/ Alt 3 RTD

100-K waste sites near Columbia River

Alt 2 has unproven technologies with built in delay factor

Other Technologies:

Bio-Injection

needs lab testing

Bio-infiltration

one trial done at hanford

Bio-venting

needs testing

Soil Flushing (C-14)

needs lab testing

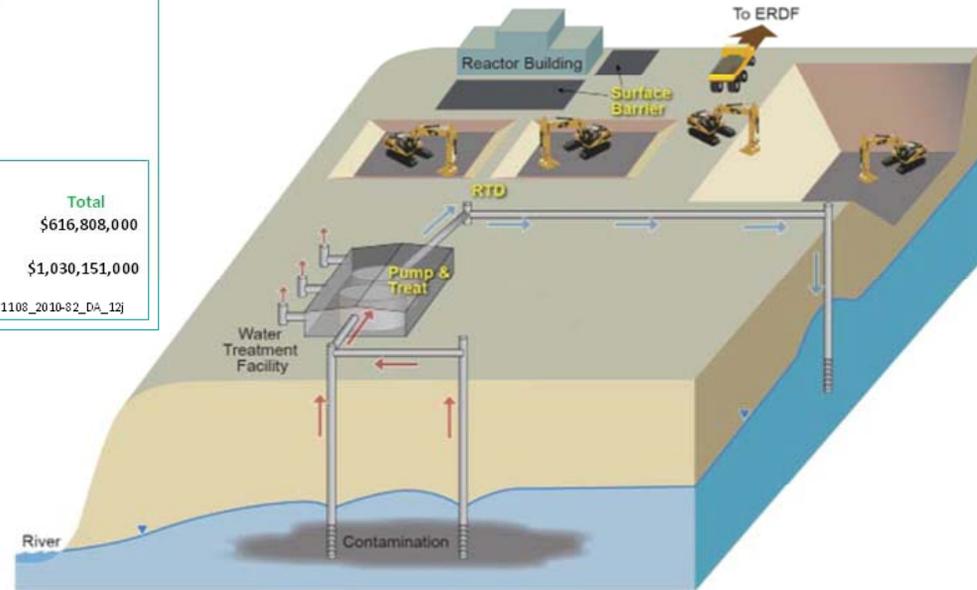
Air Stripping (C-14)

needs lab testing

Land Farming (TPHs)

TD and Expanded Groundwater Treatment

Conceptual Schematic



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