

Alternative 2			
<b>Waste Sites</b>	62 remediated under Interim Action ROD (RTD) (currently or by the end of 2012)		
	45 RTD		
	1 RTD with soil flushing		116-K-3
	12 RTD with soil flushing and bioinfiltration		120-KE-1 (KE Head house), 100-K-98, 120-KE-2, 120-KE-3, 120-KE-6, 120-KE-9, 100-K-25, 100-K-27, 100-K-35, 120-KE-4, 120-KE-5, 126-KE-2
	2 Bioventing with Landfarming	TPH	130-KE-2, 130-KW-2
	Landfarming	TPH	100-K-48, 100-K-49
	2 Surface barrier followed by RTD with soil flushing and air stripping, concurrent with Reactor Removal	Carbon-14	116-KE-1, 116-KW-1
	2 Surface barrier followed by RTD concurrent with Reactor Removal		100-K-82, 100-UPR-K-1
<b>Groundwater</b>	Pump and Treat Ion Exchange	Cr(VI)	Rate is time variant and ranges between 600-950 gpm
	Bioinjection	Cr(VI)	Rate is time variant and ranges between 500-850 gpm 6-8 wells operating within East and North Cr(VI) plumes
	Co-extracted/MNA	nitrate, tritium, strontium-90, TCE	
	New Wells		35 (6 Injection and 29 Extraction)
	Air Stripping	Carbon-14	50 gpm at 3 wells Complimented with vadose zone soil flushing
	Time Frame to Achieve Goals		2020- DWS <i>drinking water standard</i> 2037- AWQC
<b>Treatment Zone Associated with Persistent GW Plumes</b>	Bioinfiltration	Cr(VI)	150-450 gpm Contingent for KW Head house and and defined KE Head house (see 120-KE-1)

Alternative 3			
<b>Waste Sites</b>	62 remediated under Interim Action ROD (RTD) (currently or by the end of 2012)		
	62 RTD		
	2 Surface barrier followed by RTD with soil flushing and air stripping, concurrent with Reactor Removal	Carbon-14	116-KE-1, 116-KW-1
	2 Surface barrier followed by RTD concurrent with Reactor Removal		100-K-82, 100-UPR-K-1
<b>Groundwater</b>	Pump and Treat	Cr(VI)	Rate is time variant and ranges between 900-2500 gpm (adds 1400 gpm capacity)
	Co-extracted/MNA	nitrate, tritium, Strontium-90, TCE	
	New Wells		65 (12 Injection and 63 Extraction)
	Air Stripping	Carbon-14	50 gpm at 3 wells Complimented with vadose zone soil flushing
	Time Frame to Achieve Goals		2020- DWS and AWQC

Benefits of Alternative 2, including differences between 2 & 3:

- Both alternatives implement RTD, Alternative 2 includes other technologies which address persistent contamination through treatment technologies; Alternative 3 only includes removal.
- Alternative 2 has less conflict between excavation and installation and operation of groundwater treatment system
- Less wells drilled results in reducing cultural and ecological impacts
- Less impact to cultural resources by using Bioinjection (provides reduction zone within aquifer, reduces number of wells)
- Reduces excavation depth with use of soil flushing, and bioinfiltration results in reducing cultural and ecological impacts
- Specifically targets TPH through use of treatment technology (bioventing/landfarming)
- Alternative 2 is lower in cost than Alternative 3