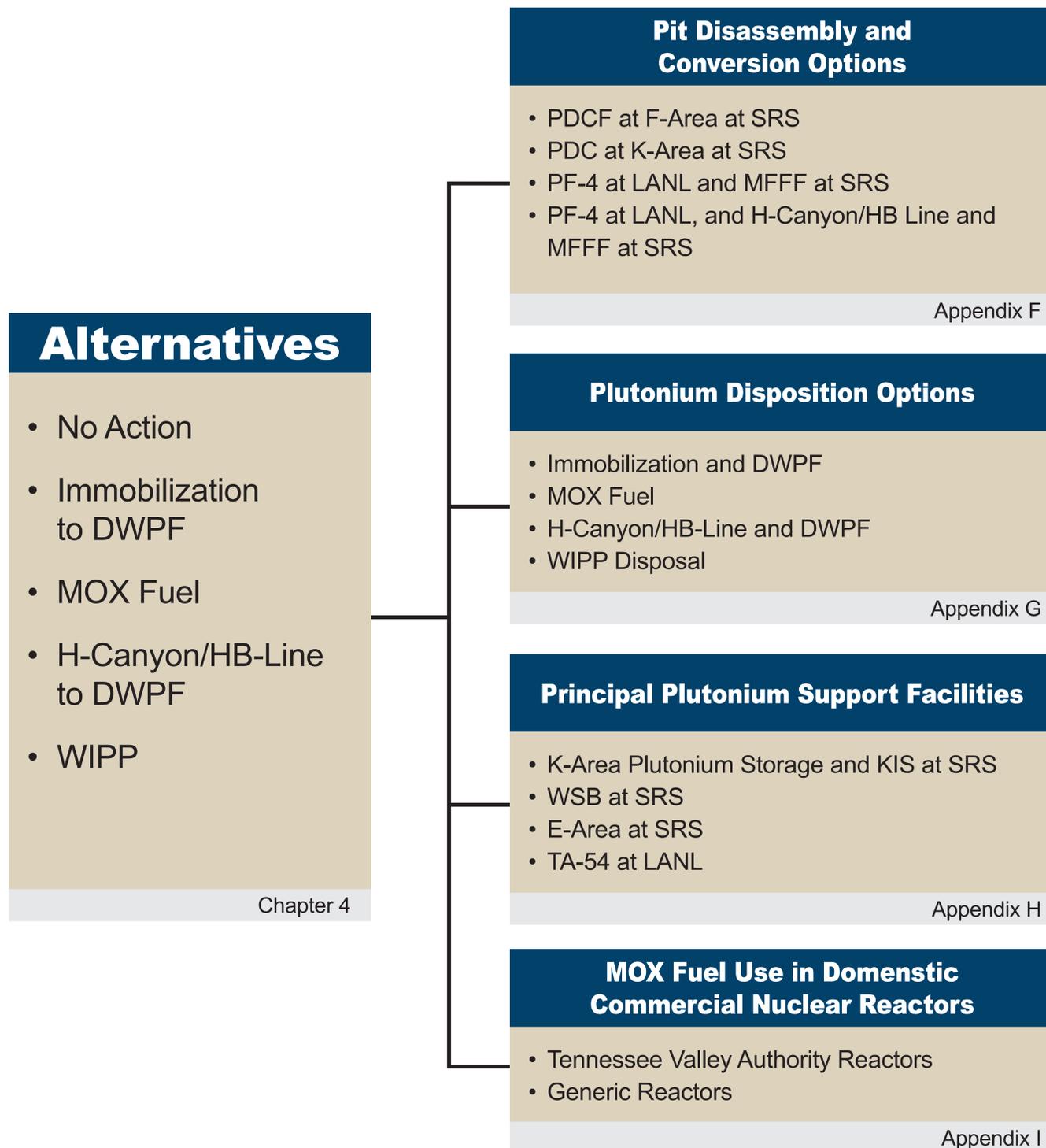




Surplus Plutonium Disposition Supplemental Environmental Impact Statement (SPD Supplemental EIS)



Relationship of Surplus Plutonium Disposition Alternatives and Options



Preferred Alternative

The MOX Fuel Alternative is DOE's Preferred Alternative for surplus plutonium disposition. DOE's preferred option for pit disassembly and the conversion of surplus plutonium metal, regardless of its origins, to supply feed for MFFF is to use some combination of facilities at PF-4 at LANL and K-Area, H Canyon/HB Line, and MFFF at SRS, rather than to construct a new stand-alone facility. This would likely require the installation of additional equipment and other modifications to some of these facilities. DOE's preferred alternative for disposition of surplus non-pit plutonium that is not suitable for MOX fuel fabrication is disposal at WIPP. TVA does not have a preferred alternative at this time regarding whether to pursue irradiation of MOX fuel in TVA reactors and which reactors might be used for this purpose.

DWPF = Defense Waste Processing Facility
 KIS = K-Area Interim Surveillance
 LANL = Los Alamos National Laboratory
 MFFF = Mixed Oxide Fuel Fabrication Facility
 MOX = mixed oxide
 PDC = Pit Disassembly and Conversion Project
 PDCF = Pit Disassembly and Conversion Facility
 PF-4 = Plutonium Facility
 SRS = Savannah River Site
 TA = technical area
 TVA = Tennessee Valley Authority
 WIPP = Waste Isolation Pilot Plant
 WSB = Waste Solidification Building

Note: Appendices C and D provide details about the analyses of human health effects at DOE facilities under normal and accident conditions, respectively, while Appendix E provides details about the analysis of human health effects from transportation of materials. Appendix J provides details about the analysis of human health effects from facility accidents at domestic commercial nuclear power reactors.