

The public health and safety analyses also indicate that radiological releases from accidents would not result in significant adverse human health or environmental impacts. Therefore, such accidents would not have disproportionately high and adverse impacts on minority or low-income populations. For the Preferred Alternative, for accidents associated with existing LWRs using MOX fuel, the maximum risk (which includes accident probability) of latent cancer fatalities to the public within 80 km (50 mi) would be 0.10 for the 11-year Pu disposition campaign. Therefore, it is unlikely that there would be disproportionately high and adverse impacts to minority populations or low-income populations surrounding the LWRs. Any potential transportation accidents would be random events that would not disproportionately affect minority or low-income populations.

S.7 CUMULATIVE IMPACTS

Cumulative impacts are those that could result from the incremental impact of the proposed action and alternatives identified above when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such actions. The reference condition is the No Action Alternative, which addresses the impacts of past, present, and ongoing programs. In particular, for alternatives that are proposed for DOE sites, the analysis focuses on the potential for cumulative impacts at each candidate site where other programs are reasonably anticipated.

The reasonably foreseeable future actions that have the potential to be implemented at some of the DOE sites under consideration, in addition to the long-term storage and disposition alternatives considered in the Storage and Disposition PEIS, include the following DOE programs: Waste Management (at Hanford, NTS, INEL, Pantex, ORR, SRS, RFETS, and LANL); Stockpile Stewardship and Management (at NTS, Pantex, ORR, SRS, and LANL); Tritium Supply and Recycling (at SRS); HEU Disposition (at ORR and SRS); Foreign Research Reactor Spent Nuclear Fuel (at INEL and SRS); and Spent Nuclear Fuel Management (at Hanford, INEL, and SRS).

[Text deleted.]

LONG-TERM STORAGE

Long-Term Storage Alternatives

The cumulative impact analysis, including the long-term storage alternatives and the six other reasonably foreseeable DOE programs, identified the following resource areas and issues at each site as having the potential to result in cumulative impacts:

- At Hanford, potential cumulative impacts from the maximum case alternative (Collocation) were identified for land resources, air quality, biological resources, and waste management.
- At NTS, potential cumulative impacts from the maximum case alternative (Collocation) were identified for land resources, site infrastructure, air quality, biological resources, cultural and paleontological resources, and waste management.
- At INEL, potential cumulative impacts from the maximum case alternative (Collocation) were identified for land resources, air quality, biological resources, socioeconomics (local transportation), and waste management.
- At Pantex, potential cumulative impacts from the maximum case alternative (Collocation) were identified for land resources, site infrastructure, air quality, water resources, and waste management.

- At ORR, potential cumulative impacts from the maximum case alternative (Collocation) were identified for land resources (visual quality), air quality, biological resources, cultural and paleontological resources, socioeconomics (local transportation), and waste management.
- At SRS, potential cumulative impacts from the maximum case alternative (Collocation) were identified for land resources, site infrastructure, air quality, biological resources, cultural and paleontological resources, socioeconomics (local transportation), public and occupational health and safety, and waste management.
- At RFETS, potential cumulative impacts from the maximum case alternative (Phaseout) were identified for socioeconomics.
- At LANL, no potential cumulative impacts were identified.

Preferred Alternative

The contribution to long-term storage cumulative impacts from the Preferred Alternative would be lower than the impacts identified above for the maximum case alternative at any one DOE site. Based on the cumulative impact analysis for long-term storage described above, the following resource and issue areas were identified at each site as having the potential to result in cumulative impacts:

- At Pantex, potential cumulative impacts were identified for land resources, site infrastructure, air quality, water resources, and waste management.
- At ORR, potential cumulative impacts were identified for air quality, cultural resources, local transportation, and waste management.
- At SRS, potential cumulative impacts were identified for air quality, public and occupational health and safety, and waste management.
- At RFETS, potential cumulative impacts were identified for socioeconomics.

Because the Preferred Alternative for storage at Hanford, NTS, INEL, and LANL is No Action, the storage program would not contribute to the cumulative impacts at these sites.

DISPOSITION

Disposition Alternatives

A site-specific cumulative impact analysis was not performed for all of the disposition alternatives because many of the facilities (for example, deep borehole complex and existing LWRs) do not allow site-specific cumulative impact analysis. Instead, a generic analysis that is applicable to all DOE sites was developed for these disposition alternatives. This representative scenario includes all of the common activities that would be needed for all of the disposition alternatives (construction and operation of pit disassembly/conversion and Pu conversion facilities), the common activity that would be required for the reactor alternatives (construction and operation of a MOX fuel fabrication facility), and the immobilization alternative that would generally have the largest impacts (ceramic immobilization facility). The scenario assumes that all four of the facilities would be constructed and operated concurrently at the same DOE site. Potential cumulative impacts could result from constructing and operating the pit disassembly/conversion, Pu conversion, MOX fuel fabrication, and immobilization facilities at a single DOE site.