

addition of some elements of the Expanded Operations Alternative. NNSA did not make any decision related to the CMRR–NF. It explained in the SWEIS ROD that it would not make any decisions regarding proposed actions analyzed in the SPEIS prior to completion of the SPEIS (73 FR 55833; Sept. 26, 2008). NNSA considered the analyses in the CMRR EIS and the 2008 LANL SWEIS, as well as those in the SPEIS in deciding to construct the CMRR–NF.

With respect to uranium manufacturing and R&D, the cost analyses indicated that building a UPF at Y–12, eliminating excess space, and shrinking the security area at the site will significantly reduce annual operational costs. The UPF at Y–12 will replace 50-year-old facilities, providing a smaller and modern production capability. It will enable NNSA to consolidate enriched uranium operations from six facilities at Y–12, and to reduce the size of the protected area at that site by as much as 90 percent. A new UPF will also allow NNSA to better support broader national security missions. These missions include providing fuel for Naval Reactors; processing and down-blending incoming HEU from the Global Threat Reduction Initiative; down-blending HEU for domestic and foreign research reactors in support of nonproliferation objectives; providing material for high-temperature fuels for space reactors (NASA); and supporting nuclear counter-terrorism, nuclear forensics, and the render safe program (program to disable improvised nuclear devices).

The life cycle cost analysis predicts an average annual savings over the 50-year facility life of approximately \$200 million in FY 2007 dollars. The risk analysis found that moving the uranium mission to a site other than Y–12 would more than double the technical risks. The site-specific impacts for a UPF, including issues such as its location and size, will be analyzed in a new SWEIS for Y–12 that NNSA is currently preparing.

With respect to weapons assembly and disassembly and high explosives production, NNSA's decision to keep that mission at Pantex will result in the least cost and pose the lowest programmatic risk because the facilities necessary to conduct this work safely and economically already exist. Although no further NEPA analysis is required to continue these missions at Pantex, NNSA will continue to evaluate and update site-specific NEPA documentation as required by DOE regulations (10 CFR Part 1021).

With respect to SNM removal from LLNL, transferring Category I/II SNM to other sites and limiting LLNL operations to Category III/IV SNM will achieve a security savings of approximately \$30 million per year at LLNL.

#### *Potential Environmental Impacts*

As described in greater detail in the following paragraphs, NNSA considered potential environmental impacts in making these decisions. It analyzed the potential impacts of each alternative on land use; visual resources; site infrastructure; air quality; noise; geology and soils; surface and groundwater quality; ecological resources; cultural and paleontological resources; socioeconomic; human health impacts; environmental justice; and waste management. NNSA also evaluated the impacts of each alternative as to irreversible or irretrievable commitments of resources, the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity, and cumulative impacts. In addition, it evaluated impacts of potential accidents on workers and surrounding populations. The SPEIS includes a classified appendix that assesses the potential environmental impacts of a representative set of credible terrorist scenarios.

The environmental impacts of the alternatives are analyzed in Chapter 5 of the SPEIS. The impacts of the alternatives NNSA has decided to pursue are summarized as follows:

*Land Use*—Minor land disturbance during construction of new facilities (approximately 6.5 acres at LANL for a CMRR–NF and 35 acres at Y–12 for a UPF); less area would be disturbed after construction is complete. At Y–12, construction of a UPF will allow NNSA to reduce the protected area by as much as 90 percent, which will improve security and reduce costs. At all sites, land uses will remain compatible with surrounding areas and with land use plans. At LANL and Y–12, the land required for operations will be less than 1 percent of the sites' total areas.

*Visual Resources*—Changes consistent with currently developed areas, with no changes in the Visual Resource Management classification. All sites will remain industrialized.

*Infrastructure*—Existing infrastructure is adequate to support construction and operating requirements at all sites. During operations, any changes to power requirements would be less than 10 percent of the electrical capacity at each site.

*Air Quality*—During construction, temporary emissions will result, but

National Ambient Air Quality Standards will not be exceeded as a result of this construction. Operations will not introduce any significant new emissions and will not exceed any standards.

*Water Resources*—Water use will not change significantly compared to existing use and will remain within the amounts of water available at the NNSA sites. Annual water use at each site will increase by less than 5 percent.

*Biological Resources*—No adverse effects on biota and endangered species. Consultations with the U.S. Fish and Wildlife Service have been completed for the CMRR–NF. Consultations with the Fish and Wildlife Service will be conducted for a UPF during preparation of the Y–12 SWEIS.

*Socioeconomics*—Short-term employment increases at LANL and Y–12 during construction activities. The selected alternatives will have the least disruptive socioeconomic impacts at all sites. At Y–12, the total workforce will be reduced by approximately 750 workers (approximately 11 percent of the site's workforce) after UPF becomes operational. Employment at all other sites will change by less than 1 percent compared to any changes expected under the No Action Alternative.

*Environmental Justice*—No disproportionately high and adverse effects on minority or low-income populations will occur at any affected site; therefore, no environmental justice impacts will occur.

*Health and Safety*—Radiation doses to workers and the public will remain well below regulatory limits at all facilities and at all sites. Doses to the public and workers will cause less than one latent cancer fatality annually at all sites. Conducting future operations in the CMRR–NF and UPF will reduce the dose to workers compared to the doses they receive in existing facilities.

*Accidents*—The risk of industrial accidents is expected to be low during construction of the new facilities. Radiological accident risks will be low (i.e., probabilities of less than one latent cancer fatality) at all sites. The CMRR–NF and a UPF are expected to reduce the probability and impacts of potential accidents.

*Intentional Destructive Acts*—Construction of a UPF and CMRR–NF will provide better protection to the activities conducted in these facilities, as it is generally easier and more cost-effective to protect new facilities because modern security features can be incorporated into their design. Although the results of the intentional destructive acts analyses cannot be disclosed, the following general conclusion can be drawn: The potential consequences of