

S.3.4.7 Other Department of Energy/National Nuclear Security Administration Sites

Section S.3.2.2 describes the site screening process utilized to determine the reasonable site alternatives for the MPF EIS. As described in that section, all existing, major DOE sites were considered to serve as the host location for a MPF. A two-step screening process was employed: first, all potential sites were judged against “go/no go” criteria; and second, those sites satisfying the go/no go criteria were judged against desired, weighted criteria. Sites that did not satisfy the go/no go criteria, or which scored lowest against desired, weighted criteria were judged to be unreasonable site alternatives for a MPF.

S.3.4.8 Construct and Operate a Smaller Modern Pit Facility

As stated previously, the exact size and composition of the enduring stockpile is uncertain. Studies in the classified appendix have examined capacity requirements that would result from a wide range of enduring stockpile sizes and compositions, pit lifetimes, emergency production needs (referred to as “contingency” requirements), and facility full-production start dates. Although the precise future capacity requirements are not known with certainty, enough clarity has been obtained through these ongoing classified studies that the NNSA has identified a range of pit production capacity requirements (125-450 ppy) that form the basis of the capacity evaluations in this EIS. The EIS evaluates the impacts of a new MPF designed to produce three capacities: 125 ppy, 250 ppy, and 450 ppy. If there were significant further reductions in the nuclear weapons stockpile (beyond those already considered in the classified analyses), or if future technical studies demonstrate that pit lifetimes significantly exceed 45-60 years, then the need, capacity, and timing for a new MPF would need to be reassessed. With respect to these uncertainties, NNSA has chosen not to speculate beyond the assumptions described in this EIS. As such, this EIS does not propose to construct and operate a new MPF with a capacity smaller than 125 ppy. However, as described in Sections S.3.3.3, this EIS does evaluate a TA-55 Upgrade Alternative (80 ppy) as a “hedge” in the event of unforeseeable significant changes in stockpile size or pit lifetime.

S.4 PREFERRED ALTERNATIVE

The CEQ regulations require an agency to identify its preferred alternative to fulfill its statutory mission, if one or more exists in a draft EIS (40 CFR 1502.14 [e]). For this MPF Draft EIS, constructing and operating a new MPF is the preferred alternative based on considerations of environmental, economic, technical, and other factors. A preferred host site for the MPF has not yet been determined, but will be identified in the Final EIS, if the Secretary decides to proceed with a MPF.

S.5 COMPARISON OF ALTERNATIVES

S.5.1 Introduction

To aid the reader in understanding the differences among the various alternatives, this section presents a summary comparison of the potential environmental impacts associated with the alternatives in the MPF EIS. The comparisons concentrate on those resources with the greatest potential to be impacted.