

studying secondary physics issues at shock pressures and velocities approaching those of actual weapon conditions.

**Atlas Facility.** The Atlas Facility at LANL would be used for hydrodynamic experiments to resolve issues related to boost-gas mixing and other primary physics, and improving the predictive capabilities related to the aging, reliability, and performance of secondaries. The facility builds on special existing equipment at LANL. The PEIS will contain a full evaluation for site-specific construction and operational impacts.

**X-Ray Hardness.** The study of radiation-effects science and materials certification. The facility under consideration is:

**Jupiter Facility.** If proposed, Jupiter would provide an x-ray environment to

enhance the ability to certify that critical weapon components meet military requirements for x-ray hardness.

**Computational Capabilities.** To handle simulations of weapon performance and assessments of weapons safety without underground nuclear testing, improved computational capabilities are needed. However, because there are not expected to be any environmental impacts from this activity, the PEIS is not expected to provide any assessment of these capabilities.

**PEIS Alternatives.** Preliminary Stockpile Management and Stockpile Stewardship alternatives have been developed for public comment and are described below.

**Stockpile Management.** The PEIS will assess the alternatives for conducting

the Stockpile Management mission. Based upon the capabilities and facilities that already exist in the Complex, no major new production facilities are currently proposed. Instead, the PEIS will evaluate upgrading and/or downsizing facilities at the sites where the Stockpile Management capabilities are currently located, as well as transferring the functions to other sites which have existing facilities that could be modified to perform the capability. Based upon an evaluation of the existing capabilities and facilities at the sites in the Complex, the following matrix of proposed alternatives has been developed for Stockpile Management:

Capability	Site alternatives							
	KCP	LANL	LLNL	NTS	Y-12	PX	SNL	SRS
Weapons assembly/dis-assembly .....	.....	.....	.....	X	.....	X	.....	.....
Nonnuclear components ...	X	X	X	.....	.....	.....	X	.....
Nuclear components:								
—Pit reuse (minor) ....	.....	X	.....	X	.....	X	.....	X
—Replacement pit fabrication and reuse (major) .....	.....	X	.....	.....	.....	.....	.....	X
—Secondaries and cases .....	.....	X	X	.....	X	.....	.....	.....
High explosives components .....	.....	X	X	.....	.....	X	.....	.....

In addition, the PEIS will also evaluate the no action alternative. For Stockpile Management, no action is described by the following matrix:

Capability	Sites							
	KCP	LANL	LLNL	NTS	Y-12	PX	SNL	SRS
Weapons assembly/dis-assembly .....	.....	.....	.....	.....	.....	X	.....	.....
Nonnuclear components ...	X	X	.....	.....	.....	.....	X	.....
Nuclear components:								
—Replacement pit fabrication and reuse (major) .....	.....	X	X	.....	.....	.....	.....	.....
—Secondaries and cases .....	.....	.....	.....	.....	X	.....	.....	.....
High explosives components .....	.....	.....	.....	.....	.....	X	.....	.....

**Stockpile Stewardship.** The PEIS will assess the alternatives for conducting the Stockpile Stewardship mission. New facilities and upgraded facilities that will enable the Department to maintain confidence in the safety and reliability of the stockpile in the absence of underground nuclear testing will be assessed in the PEIS. Because the nuclear weapons testing mission has always been a primary responsibility of the weapons laboratories and the NTS, the Department does not believe it is reasonable to expand the stockpile stewardship mission to other sites. Therefore, only the three weapons laboratories (LANL, LLNL, and SNL) and the NTS are expected to be considered for new Stockpile Stewardship facilities. This is also consistent with one of the Stockpile Stewardship program's main purposes to preserve the core intellectual and technical competencies of the weapons laboratories. Because there is currently a moratorium on underground nuclear testing, and because the nation is pursuing a Comprehensive Test Ban Treaty, the Department has not made a decision whether it is reasonable to include underground nuclear testing as an alternative in the SSM PEIS to fulfill the Stockpile Stewardship mission. Comments on this issue are specifically invited during the scoping period.

The following matrix of proposed alternatives and facilities under consideration for proposal has been developed for Stockpile Stewardship: