

2.0 PURPOSE AND NEED FOR ACTION

The proposed action is to construct a new reactor fuel production facility adjacent to existing chemical separations facilities in H-Area. The new Fuel Production Facility (FPF), Building 225-H, is needed to replace the present SRP process of melting, casting, and machining U-Al metal alloy fuel cores with a process based on Powder Metallurgy. This process reduces existing environmental impacts, offers less potential for failure from thin cladding, results in less scrap, and requires less aluminum than cast cores.

The new facility will improve security by centralizing processes that handle enriched uranium in one fuel processing complex away from the site boundary, reduce the risks to the environment by eliminating liquid uranyl nitrate shipments between SRP and Oak Ridge, reduce fuel recycle costs, and decrease the offsite consequences of potential accidents by its new location at the center of the site rather than on the site boundary as the existing facility is.