4.6.2.2 *Impacts of New Facility Construction and Upgrades*

Six new facilities have been proposed for Pantex Plant. The projected construction phase for these facilities spans from 1996–2001. All of these facilities would be located in Zones 11 and 12. Since no 100-year, 500-year, or Standard Project Flood boundaries have been delineated in Zones 11 and 12, there would be no impacts to floodplains. Surface water use is not an issue because all water required for construction or operation would be supplied from groundwater. The treated effluent from the process wastewater treatment would be discharged to the playas and monitored to comply with EPA NPDES Permit and TNRCC Wastewater Discharge Permit requirements. Environmental impacts to water resources from the proposed facility construction and upgrades for each of the six facilities are summarized in Table 4.6.2.2–1.

All water required for construction or operation would be supplied from groundwater withdrawn from Pantex Plant wells. Projected water usage is compared to current water usage on a site-wide and facility-specific basis. The upper bounding conditions (i.e., 2,000 weapons level) would result in a projected annual groundwater withdrawal of 1,011 million liters (267 million gallons), or an increase of 64 percent over FY 1995 industrial and domestic water use. Under the 2,000 weapons scenario, Pantex Plant groundwater withdrawals would only account for 0.8 percent of the total estimated annual groundwater withdrawals in Carson County.

Hazardous Waste Treatment Plant Facility

Domestic wastewater from the Wastewater Treatment Facility (HWTPF) would be collected in the Pantex Plant sanitary sewer system and treated in the WWTF prior to discharge into Playa 1. A treatment facility, such as the HWTPF, that is constructed and maintained properly would prevent further

TABLE 4.6.2.2–1.—*Current and Projected Annual Water Usage for Facility Upgrades, Pantex Plant (million liters [million gallons])*

USAGE	HWTPF	PIT REUSE	GAS ANALYSIS LABORATORY	MCAF	NDEF	METROLOGY HPCAF
WASTEWATER GENERATED						
Current	0.685 (0.181)	0 (0)	0.912 (0.241)	7.62 (2.013)	8.02 (2.1)	9.30 (2.45)
Projected	3.80 (1.00)	0.32 (0.084)	0.912 (0.241)	7.62 (2.013)	8.02 (2.1)	9.30 (2.45)
Change[1]	+3.12 (+0.819)	+0.32 (+0.084)	0	0	0	0
WATER USAGE						
Current	0.685 (0.181)	0 (0)	0.912 (0.241)	8.64 (2.28)	9.12 (2.41)	10.5 (2.78)
Projected	4.31 (1.14)	0.32 (0.084)	0.912 (0.241)	8.64 (2.28)	9.12 (2.41)	10.5 (2.78)
Change[1]	+3.63 (+0.959)	+0.32 (+0.084)	0	0	0	0

[1]Change designates the difference between current and projected usage. "+" denotes a projected increase in usage.
MCAF-Materials Compatibility Assurance Facility
NDEF-Nondestructive Evaluation Facility
HPCAF-Health Physics Calibration and Acceptance Facility

Sources: DOE 1995j:10; PC 1995g