

TABLE 4.6.1.1–1.—Flood Frequencies with Corresponding Elevations, Pantex Plant

PLAYA	FLOODING FREQUENCY (yr)	ELEVATION PEAK meters (ft)	APPROXIMATE ELEVATION OF NEAREST STRUCTURE meters (ft)	HEIGHT OF NEAREST STRUCTURE ABOVE FLOODPLAIN meters (ft)
Playa 1	100	1,073.4 (3,521.5)	1,077.5 (3,535)	4.3 (14)
	500	1,073.8 (3,523.1)		3.7 (12)
	SPF	1,074.7 (3,525.9)		2.7 (9)
Playa 2	100	1,074.7 (3,526.0)	1,079.0 (3,540)	4.3 (14)
	500	1,075.2 (3,527.4)		4.0 (13)
	SPF	1,076.0 (3,530.1)		3.0 (10)
Playa 3	100	1,086.5 (3,564.5)	1,088.7 (3,572)	0.6 (2)
	500	1,086.7 (3,565.3)		
	SPF	1,087.1 (3,566.6)		
Playa 4	100	1,068.5 (3,505.5)	1,077.5 (3,535)	9.1 (30)
	500	1,068.8 (3,506.5)		8.5 (28)
	SPF	1,069.4 (3,508.6)		7.9 (26)
Pratt Lake	100	1,074.6 (3,525.5)	Offsite	Not Applicable
	500	1,074.8 (3,526.3)		
	SPF	1,075.3 (3,528.0)		
Pantex Lake	100	1,056.0 (3,464.6)	No Structures Nearby	Not Applicable
	500	1,056.4 (3,465.9)		
	SPF	1,057.2 (3,468.6)		

SPF = Standard Project Flood

Sources: DOE 1995c:10; LLNL 1988:3-2; USCOE 1995:2-7

TABLE 4.6.1.1–2.—Surface Water Monitoring Stations and Sources of Flow at Pantex Plant Site

SAMPLE ID	MONITORING LOCATION	PERMITTED OUTFALL	CURRENT SOURCE OF FLOW	HISTORICAL SOURCES OF FLOW
PLAYA 1				
OW-WR-08	Playa 1	N/A	A, B, C	B
INCOMING Lagoon ISCO DAC	WWTF Influent WWTF Lagoon WWTF Time Integrated Sample From Chlorinator WWTF Discharge After Chlorination	Wastewater Treatment Facility Outfall 001	A, B, C	
Z-12-EN Z-12-E 12-17-N 12-17-S 12-19-N 12-19-S 12-43 12-24-NE*	Zone 12 East at Pantex Drive Zone 12 East at Washington Drive Bldg. 12-17 North Flume Bldg. 12-17 South Flume Bldg. 12-19 North Flume Bldg. 12-19 South Flume Bldg. 12-43 (from Bldg. 12-24 North) Ditch Northeast of Bldg. 12-24	Outfall 002 N/A Outfall 102 Outfall 202 Outfall 302 Outfall 402 Outfall 602 N/A	B, C	

**TABLE 4.6.1.1–2.—Surface Water Monitoring Stations and Sources
of Flow at Pantex Plant Site-Continued**

SAMPLE ID	MONITORING LOCATION	PERMITTED OUTFALL	CURRENT SOURCE OF FLOW	HISTORICAL SOURCES OF FLOW
Z-12-W 11-20	Zone 12 West at Pantex Drive Bldg. 11-44 Ditch (from 11-20)	Outfall 003 Outfall 103	B, C	
Z-12-SUB*	Zone 12 Washington Drive @ Substation	N/A	C	
Z-4-E	Zone 4 East	N/A	C	
PLAYA 2				
OW-WR-27	Playa 2	N/A	B, C	
16-1 11-50 NDITCH	16-1 Weir Bldg. 11-50 North Ditch	Outfall 004 Outfall 104 Outfall 005	B, C	
PLAYA 3				
OW-WR-36	Playa 3	N/A	C	D
PLAYA 4				
OW-WR-24	Playa 4	N/A	C	
Z-12-S	Zone 12 South	Outfall 006	C	
Z-11-SW 11-36*	Zone 11 Southwest Ditch Bldg. 11-36 Ditch	N/A N/A	C	
Z-11-SE	Zone 11 Southeast	N/A	C	
PLAYA 5				
N/A	Playa 5 (Not Monitored)	N/A	C	E
OTHER LOCATIONS				
OW-WR-01	Pantex Lake		C	F
OW-WR-34	Bushland (Background/Control Location)			

Current and Historical Sources of Flow:

A - Treated sanitary wastewater.

B - Processed wastewater (water used during the manufacturing of explosive components and the production of explosives, once-through cooling water, and steam condensate).

C - Stormwater.

D - Overflow from the Burning Ground evaporation pit.

E - Local sanitary and industrial wastestreams from former Air Force Base, Amarillo Airport, and Iowa Beef Processors plant.

F - Discharge from old sewage treatment plant.

N/A-Not applicable

* Inactive sampling location.

Sources: Pantex 1996:5.4; DOE 1996c:112