

Appendix K. Groundwater Well and Surface Water Station Background

Following the discovery of TCE in groundwater (1984), a network of 214 monitoring wells was installed to map groundwater flow and the distribution of contaminants. Of these 214 monitoring wells, there are 13 facility water supply wells (WS), 11 Engineering Chemistry Lab wells (SH), 27 alluvial series wells (RS), 31 Chatsworth series wells (RD), 32 extraction wells (ES), and 33 hydro-geological assessment report wells (HAR). The offsite wells where contaminants were detected are presented in the following table (Table K-1). Details associated with these wells can be found from the following references: Boeing, 1990–2003, 2002; CDHS, 1999; GRC, 2000; McLaren/Hart, 1993; Rocketdyne, 1959–1989, 1995.

Wells labeled using “OS” prefixes are “offsite” private wells monitored by Rocketdyne to ascertain contaminant mobility from SSFL. For example, wells OS-17 and OS-27 are drinking water supply wells, and are not owned by Rocketdyne. Wells labeled using “RD” are Rocketdyne-constructed monitoring wells; “RD” signifies Rocketdyne’s “deep” wells. (Rocketdyne’s shallow wells, not presented here, are designated “RS.”) Due to acquisitions of neighboring property, wells previously considered off site may currently be regarded as on site. For example, contaminants were detected in wells RD-56AB, RD-34ABC, RD-57, and RD-33ABC, which were previously located on the Brandeis-Bardin Institute property; this land was acquired by Rocketdyne/Boeing after the contaminants were detected and is now considered on site.

SSFL also has a National Pollutant Discharge Elimination System (NPDES) permit (No. CA0001309) allowing it to discharge up to approximately 180 million gallons of treated water per year. These offsite sampling stations are noted using the NPDES prefix followed by the number of the specific “outfall” (e.g., NPDES 001). Approximately 90% of the facility’s surface water is discharged via NPDES outfalls 001 and 002 to areas south of SSFL (into Bell Canyon via Bell Creek); 10% of the facility’s surface water is discharged via NPDES outfalls 003 through 007 to areas north of SSFL (into Simi Valley via Runckle and Meier Canyons) (Rockwell International, 1987; Boeing, 2003).

Offsite wells where significant contaminant levels were detected include RD-32 and -43 (Sage Ranch and Woolsey Canyon Wells, respectively); OS-2 and -5 (offsite wells used for livestock northwest of SSFL at Brandeis-Bardin); RD-56A and RD-38A (Santa Monica Mountains Conservancy wells); and RD-59A (a deep well on Brandeis-Bardin property). Additional offsite groundwater well data are provided in Section 4.1.1.

Onsite wells where significant contaminant levels were detected include RD-13 (by Building 55); RD-25 and -24 (by Building 59); RS-11, -16, -18, -23 through -25, and ES-31 (in Area IV); RS-26 (by the Old Conservation Yard); RD-7, WS-7, and RS-27 and -28 (Chatsworth Formation wells); and OS-14 (in Area II, about 3,000 feet upstream of the southern boundary).

Table K-1. Offsite Surface Water and Groundwater Sampling Stations with Significant Contaminant Detections

Direction	NW	N	NE, E, SE	S, SW
Location	Brandeis-Bardin Institute	Santa Monica Mountains Conservancy	Private Lands Woolsey, Dayton Canyons	Bell Canyon Area
Groundwater wells	OS-1 to -10 RD-59ABC RD-68AB	OS-24-27 RD-36ABCD RD-38AB,71 RD-39AB,66	OS-15, -16, -17, -19, -20, -27 RD-32, -43	OS-21
Surface water stations	NPDES 003– 007 OS-8	No surface water drainage into this area	NPDES Near Well 13, OS-12, -13	Bell Creek NPDES # 001, 002 OS-14