6.0 WATER SUPPLY

6.1 WATER SOURCE

As described in Section 2.5.4, plant operations will require up to 1,100 acre-feet per year (afy) of water, with an expected flow range of 1,626 gallons per minute (gpm) to 2,059 gpm with all eight units operating.

The proposed project will use reclaimed water supplied by the Mission Springs Water District's (MSWD) Horton Wastewater Treatment Plant (WWTP), located approximately 5 miles east of the proposed project site. Wastewater at Horton is currently treated to secondary levels, but MSWD plans to upgrade the treatment system to tertiary levels. The reclaimed water will be discharged to existing percolation ponds located adjacent to the Horton WWTP, where it will recharge the underlying Mission Creek subbasin, which is part of the Coachella Valley Groundwater Basin (Basin), and be banked for later use by the proposed project. CPV Sentinel will purchase from MSWD, at the Horton WWTP, 1,500 acre-feet per year (afy) of reclaimed water, of which the proposed project is expected to use up to approximately 1,100 afy. The proposed project will access its banked water supply via onsite wells, which will extract groundwater from the same Basin. The proposed project is expected to be dispatched, on a lifetime average basis, approximately half of the maximum annual permitted capacity, resulting in an expected lifetime average extraction of 550 afy from the Basin.

The proposed project will also require potable water for personnel consumption, eyewash stations, showers, and sanitary needs. Potable water requirements are expected to average 2 afy (see Table 2.4-6). Potable water will be supplied by MSWD from an existing MSWD water supply pipeline along Dillon Road via a new buried potable water line to the project site.

Negotiations are underway between CPV Sentinel and MSWD regarding the purchase of wastewater from the Horton WWTP and the conditions for water extraction by site wells. A well metering agreement is in place with Desert Water Agency.

6.2 WATER CONVEYANCE

6.2.1 Water Supply Pipeline

The proposed project will install up to five wells onsite (see Figure 2.5-2 for the tentative locations of the proposed wells). Water will be routed from these wells to the raw water storage tanks via a system of onsite water lines. The diameter of the pipelines will depend on the final number, arrangement, and size of the wells. Pipes are expected to be high-density polyethylene (HDPE) pipe. Most of the pipe would be buried.

6.2.2 Potable Water Line

The proposed project will connect to an existing 12-inch-diameter potable water main line located adjacent to Dillon Road on the south side. The total length of the new 3-inch-diameter pipeline will be approximately 3,200 feet.

6.3 WATER PIPELINE CONSTRUCTION

The new process water supply pipeline(s) from the onsite wells to the water storage tank will be installed in a trench using standard pipeline installation techniques and in accordance with the manufacturer's

requirements for the installation of HDPE piping. The pipe sections will be joined by fusion welding and laid in the trench. Once backfilled, the surface will be covered in asphalt or gravel.

The potable water supply pipeline will be installed in a trench along the site access road from Dillon Road. Standard pipeline installation techniques will be used. Spoils from trenching will be stored alongside the trench. The pipe sections will be joined by fusion welding and laid in the trench on a sand base. To the extent possible, excavation spoils will be used for backfill. Where trenching spoils are not suitable, imported backfill will be used. Once backfilled, the surface will be paved after construction of the plant is complete. All applicable state and local regulations concerning the connection and routing of water piping used for potable services will be followed in the design of this system.

6.4 LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

A description of the laws, ordinances, regulations, and standards that pertain to the construction of the water supply pipeline is included in Section 2.10 and Sections 7.14.5 through 7.14.7, inclusive.