

DAVIS-MONTHAN UTILITY SYSTEM DESCRIPTIONS

General: Davis-Monthan AFB is located in the Sonoran Desert of southern Arizona (AZ), in Pima County, within the city limits of Tucson. The 355th Wing is the host wing at DMAFB. Davis-Monthan AFB occupies 10,633 acres and contains approximately 1850 buildings.

System Descriptions: Natural gas is the only system considered for privatization at Davis-Monthan AFB. The following information provided is only an estimate and is subject to change.

Natural Gas: Natural Gas is supplied to Davis-Monthan Air Force Base by Southwest Gas Corporation through a 4 inch main line and 4 inch meter (Wilmot City Gate) and a 6 inch main line and a 4 inch meter (Swan Gate). These metering and regulating stations serve the base at 35 PSIG. Southwest Gas Corporation owns the two supply lines, metering stations and regulators. The natural gas system is owned by the base from the metering stations onward. These two separate supply systems are linked at the FamCamp area. The main metering station is located just south of the North Ramp near Building 1632. At this station, the lines supplying the housing areas are split from those supplying the main base. All lines are looped except those supplying the Kachina Housing Area. Southwest Gas Corporation also supplies and owns a 4 oz natural gas service to Bldg. 8030 with a separate 1.5 inch main and 1.5 inch meter.

There is an El Paso Natural Gas Company 10 ¾ inch High Pressure Natural Gas pipeline that crosses a southwest portion of the Base. This line is not connected to the Base natural gas system.

There are no physical on-base natural gas wells. The Southwest Gas Corporation metering stations used for billing purposes is identified in Table 7.1.1-1. The Air Force-owned distribution system consists of approximately 366,555 linear feet of underground piping. The majority of the piping is less than 10 years old. The old gas system replaced is carbon steel pipe and is abandoned in place.

Natural gas is used primarily for central gas chiller plant, space heating, hot water, and exclusively for stove, range, hot water and majority heating in all housing. There are service regulators for every building including all housing that reduces the pressure of the gas. Approximately 99 percent of the system piping is polyethylene (PE) and the remaining 1 percent is PVC or carbon steel. The PE piping was installed in the early 1990's. No cathodic protection systems exist for the natural gas system. The existing 2 inch PVC line with steel risers remain in the trailer park area and is projected to be abandoned in the future. PVC pipe for gas is not industry standard and due to yard irrigation, it is probable that deterioration of the steel risers is likely. Since the steel is not interconnected adding cathodic protection could be costly. Abandonment of the system entirely or a renovation project to upgrade the system to industry standards should be considered for the trailer park area. The PE piping diameter ranges from 8 inches to 1 inch. A total of 40 meters are located within the base gas system.

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