

GALENA AIR STATION, AK UTILITY SYSTEM DESCRIPTIONS

General: Galena Air Station is located near the City of Galena in west central Alaska on the north bank of the Yukon River, 270 miles west of Fairbanks.

System Descriptions: The following information is only an estimate and is subject to change.

Electrical: Power for Galena Air Station is received from the City of Galena at the air stations power plant. The power plant serves as a back up power supply with three 600 kW and one 650 kW diesel generators. Power is distributed from the power plant through three distribution circuits to the site at 2400 volts. The distribution system consists of approximately 14,800 feet of overhead circuits and 11,850 feet of underground circuits. Located throughout the site are 109 single and three phase distribution transformers ranging in size from 10 to 500 kVA which serve the various loads. The annual electric energy usage for this facility is roughly 4,781,209 kWh.

Water: Potable water is supplied by on-base groundwater supply wells and water treatment system. The wells have a capacity of 90 gpm each. Treated water is distributed by approximately 15,000 feet of 4-inch to 8-inch galvanized steel and ductile iron water main piping. Well water is treated in a water treatment system that includes aeration/degasifier tower, three multimedia pressure filters, three water softening units, chemical feed systems, and a chlorination system. Treated water is stored in a 100,000 gallon storage tank. Stored water is supplied to the distribution system by two 175 gpm pumps, a 750 gpm fire protection pump, and a 3,000 gallon hydropneumatic tank. A third well is equipped with a 500 gpm diesel driven pump for backup fire protection water supply. Water production flows can range between 30,000 and 80,000 gallons per day. The water system was originally installed in the 1950s and portions of the system have been refurbished.

Sanitary Wastewater: The Base wastewater collection system consists of gravity sewers, forced mains, grinder pumps and lift stations that convey sewage to an on-base wastewater lagoon treatment system. Treated wastewater is discharged to a wetlands area. The collection piping system includes approximately 12,870 feet of steel, PVC, ductile iron, and asbestos cement piping installed from the 1950s to the present. The wastewater is treated in a two cell aerated lagoon with a capacity of 1,567,000 gallons that was constructed in the early 1970s. Treated lagoons effluent is chlorinated/dechlorinated and discharged to an offsite wetlands area. Wastewater flow can range between 30,000 to 80,000 gallons per day.

The point of contact is Randy Wolf (randy.wolf@tyndall.af.mil), FAX (850)283-6336.

