

# **RACO**

## **REMOTE ALARMS AND CONTROLS**

RACO Manufacturing and Engineering Co., 1400 62nd St., Emeryville, CA 94608 (510) 658-6713 800-722-6999 FAX (510) 658-3153

### **SILVER SPRINGS APPLICATION ARTICLE**

#### **REMOTE SUPERVISORY CONTROL APPLICATION**

A Chatterbox® Model CB-4 with the Remote Supervisory Control Output (RSC-4) provides critical monitoring and remote control functions for a well- and spring-fed water storage system for the Silver Springs Water Company in Park City, Utah.

The Silver Springs Water Co. serves Park City's potable water needs. The control system was designed, furnished, and installed by CTF Controls of Woods Cross, Utah. The system is managed by Lynn Stevens.

Referring to the diagram, the Chatterbox® system is programmed to monitor low storage tank level with a level controller [LC], high spring turbidity from a turbidimeter [T], spring valve open/close status [V], and chlorine leakage using a chlorine leak detector [CL]. The facility is normally unattended.

When the water from the spring is too turbid, the turbidimeter closes the spring valve and sends a high turbidity alarm to the Chatterbox®. The Chatterbox® then calls Lynn at home, at the office and on his portable radio telephone until it finds him. When Lynn receives the voice synthesized message he can decide if the water level in the storage tank should be raised by turning on the well pump, which he can do using touch tone commands on his phone.

In the event of a low tank level alarm, he checks the status of the manually operated spring control valve. If it is already open he

can then turn on the well pump to augment the flow of water to the storage tank.

If a chlorine leak is detected, personnel can be properly outfitted to take care of the problem prior to leaving for the site.

One day last summer while on business in Denver, CO, Stevens called the Chatterbox® back at Silver Springs Water Co.. It reported that the half million gallon water storage tank was down by nearly one third its normal level. Since the tank is normally maintained to within 6 inches of full, he knew there must be a problem with at least one of his water sources. After further interrogation of the Chatterbox® he was able to determine that the spring valve was off and that the well pump had been set to manual off. He was able to command the spring valve to open and begin refilling his storage tank by using his touch tone telephone.

Stevens states that "The Chatterbox® has saved us money by allowing me to call it and determine the status of the water system equipment instead of making an unnecessary and sometimes due to snow, physically inconvenient visit to the site."

"Chatterbox® has been one of the few items in the water system I have had no problems with." Because you never know what can happen, Lynn has gained peace of mind since adding a Chatterbox® to the water system, knowing that if a problem occurs he will be notified immediately.

(Note: See Diagram on Reverse Side)

SILVER SPRINGS WATER SYSTEM CONTROL DIAGRAM

