

AMENDMENT NO. 3 to the Above Referenced Specifications.

Approval Date: 12 December 2006

Amend: Division II “Design Requirements”, Section 6 “Lift Stations”, Subsection 6.04 “Telemetry” **as follows:**

Delete: existing Subsection 6.04 “Telemetry”.

Add: new Subsection 6.04 “Telemetry” **as follows:**

6.04 Telemetry

- A. A monitoring/dialer system shall interface the lift station alarms to a cellular phone network. Upon receipt of one or more alarm trips, the system shall automatically dial out to the phone network with preprogrammed messages.
1. The system shall have the capability to monitor from 8 to 48 dry contacts or digital inputs, 8 to 48 analog inputs or energize from 4 to 24 relays in any combination.
 - a) Each input shall monitor a set of dry contacts (normally-closed or normally-open).
 - b) The dialer shall monitor the AC power and battery voltage continuously.
 2. Upon detecting an alarm on any of its inputs, a low battery condition or detecting loss of its AC power, the system shall begin dialing the first of up to 16 user programmed telephone numbers; each number shall be up to 50 digits.
 3. The system shall speak user-recorded messages to the called party describing its location and the alarm conditions that are present. The system shall verbally request that an acknowledgement be given. The system shall continue calling until the call is completed and acknowledged.

The dialer shall provide acknowledgement of alarms from:

 - a) The front panel.
 - b) An input channel.
 - c) A phone that is called with an alarm.
 - d) A dial-in from a remote location with appropriate access codes.
 4. The dialer shall be situated in a NEMA 4X enclosure.

Acceptable Manufacturer – Product

1. Antx, Inc. - Antx DiaLog™ Elite dialer.
2. Other Approved.

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- B. A fixed cellular terminal shall transmit signals from the lift station to the cellular phone network.
1. Air interface standard shall be as follows.
 - a) GSM 900/1800 Phase 2+.
 - b) GSM 850/1900 TIA/EIA J-STD-007.
 2. Transmit power as follows.
 - a) GSM 850 and 900: 2 watts.
 - b) GSM 1800 and 1900: 1 watt.
 3. Frequency ranges as follows.
 - a) GSM 850: Transmit (824-849 MHz), Receive (869-894 MHz).
 - b) GSM 900: Transmit (890-915 MHz), Receive (935-960 MHz).
 - c) GSM 1800: Transmit (1710-1785 MHz), Receive (1805-1880 MHz).
 - d) GSM 1900: Transmit (1850-1910 MHz), Receive (1930-1990 MHz).
- Acceptable Manufacturer – Product
1. Telular Corporation - Phonecell[®] SX5e cellular terminal.
 2. Other Approved
- C. Input/Output wiring shall use quick-disconnect pluggable connectors.
- D. Electrical Protection shall be as follows.
1. Transient voltage/surge protection shall be provided on power line, telephone and all input channels.
 2. Solid-state surge protection shall be provided on digital input, analog input, serial port, parallel port, telephone and AC power circuitry.
 3. All fuses shall be solid-state automatically resettable such that the user is not required to manually change a fuse.