

SPECIFICATIONS – SHORT VERSION

PART 1 - GENERAL

1.1 SUMMARY

- A. The CONTRACTOR shall furnish, install, and place into operation a complete Septage Receiving System that shall enable the facility to manage waste delivered by haulers from remote sites. This specification outlines the required control system and software that shall, at a minimum, identify permitted haulers and automatically transfer the transaction data to the administrator's office PC and other networked PCs.

1.2 APPROVED MANUFACTURER

- A. The control system and software shall be the *PortALogic System* supplied by EleMech Inc of Aurora, IL.

PART 2 – CONTROL SYSTEM AND SOFTWARE

2.1 HAULER ACCESS STATION

- A. The manufacturer shall provide a secured Hauler Access Station that shall identify waste haulers and be configurable to interface with associated equipment such as doors, gates, valves, samplers, and screens & washers.
- B. Hauler access shall be established using a keypad, magnetic-stripe card, non-insertion proximity card, or long-range proximity card. When accessing the station, the hauler shall be prompted at log-in to identify the waste type that will be unloaded.
- C. The Hauler Access Station shall include the following components:
1. Enclosure
 - a. NEMA 4X Stainless Steel
 - b. Internal Swing-out Door (Stainless Steel)
 - c. Lockable Full-Grip Handle with 3-Point Latch
 - d. Drip Shield
 - e. Thermally Protected for Severe Cold Weather Installations
 - f. Instruction Decals
 - g. Optional Sun Shield and Pedestal

2. Access Keypad / Card Reader
 - a. Secure, Robust, and Outdoor Rated
 - b. Clear, Backlit LCD Display, Visible in All Levels of Light
 - c. Compliant with Local and Global Security Standards
 - d. Advanced Tamper-Proof Design
 3. Programmable Logic Controller, PLC, Including:
 - a. Ethernet Connection to PortALogic Software
 - b. Configurable Spare Analog and Digital I/O
 - c. Printer Interface
 - d. Detachable Terminals
 - e. Non-Volatile Memory
 4. Printer Terminal
 - a. Compact Thermal Printer
 - b. Exclusive Anti-Paper-Jam System (Self feeding, Self Correcting)
 - c. Integral Auto-cutter
 - d. Backlit Receipt Dispenser
 - e. Printed Receipt for Each Hauler
 - f. RS232 and USB Data Port
 5. Pilot Devices
 - a. Heavy Duty, 30mm. AB Type 800H or Equal
 - b. 2-Position Switch with Done-Start Legend
 - c. Green Light with System Ready Legend
 6. 24VDC Power Supply
 7. Ethernet Switch (Non-Managed)
- D.** Each printed hauler receipt shall list the following information:
1. Date and Time of Transaction
 2. Station ID and Ticket Number
 3. Hauler ID number
 4. Volume Unloaded
 5. Elapsed Time
 6. pH Reading (*If configured*)
 7. Alarm ID
 8. Waste Type
 9. Capacity Balance (*If debit-based accounts are used*)

2.2 MANAGEMENT SOFTWARE

- A.** The necessary management software shall be installed on one or more site owned PCs with a network card using Windows XP Pro OS or Windows 7 OS. The software shall monitor the hauler access station and automatically upload hauler transaction data to the networked office PC(s).
- B.** The data from each hauler transaction shall be collected and stored in a secure SQL database. The following data shall be collected:
1. Site ID
 2. Station ID
 3. Ticket Number (*On Hauler Receipt*)
 2. Hauler ID
 3. Date and Time of Transaction
 4. Volume Unloaded
 5. pH
 6. Waste ID
 7. Alarm ID
 8. Sample Information (*If configured*)
 9. Volume Remaining
 10. Five (5) additional fields will be available for the administrator to define
- C.** The software shall allow the facility to manage each customer on a debit or credit basis. Each customer shall receive a Hauler ID number and 4-digit PIN number for each truck. The software shall auto-generate customer PIN numbers or shall allow the facility to manually assign pin numbers to customers.
- D.** The software shall debit account balances automatically and auto-deactivate the truck's access privilege should the customer's balance drop below the set minimum.
- E.** The software shall allow the facility to bill on a truck capacity basis, a metered basis (flow-meter or weight), or by manually entered volume basis.
- F.** The software shall have multiple pre-formatted reports that can be sent to a networked printer, emailed, or exported as a PDF, Excel, or Word document. At a minimum, the software shall include reports to show activity with daily totals, statements, and customer and truck usage.