e. Control Panel: The control panel shall meet State approval and meet the specifications set forth in Rule .1952 (c)(6) with the additional requirements of:

i. High-water level alarm event counter
ii. Timer over-ride counter

iii. Pump event counter
iv. Pump elapsed time meter
v. Magnetic motor contactor
vi. HOA switch
vii. Control circuit fuse
viii. Alarm circuit fuse
ix. Float switch terminal block
x. For each pump, either a:
- Programmable timer with variable controls for setting the on and off times from .05 seconds to 30 hours, or
- a repeat cycle timer that afford the amount of control needed for pump run time and off time.
xi. Circuit breaker for each pump
xii. Circuit breaker for the alarm /control circuit
xiii. NEMA 4X Alarm strobe beacon
xiv. NEMA 4X Alarm Horn (83 decibels @ 3' minimum) w/ auto reset
xv. NEMA 4X Exterior Horn Test/ Normal/Silence Switch
xvi. Ground lug
xvii. 2 Lockable Hasps or one lockable hasp & 2 captive screws opposite the hinges of the NEMA 4X enclosure
xviii. Pump Run light

Controls shall require the pump enable float switch to be activated (minimum dose volume present) before the start of any pump cycle. Cycles shall be shut off by the run timer or the low-water cut-off float (not by deactivation of the enable float).

Approved flow equalization panel models shall be listed on the On-Site Wastewater Section web page. (http://www.deh.enr.state.nc.us/oww).

h. The control panel shall be mounted within 10 feet of the pump tank and at a height to allow the Operator in Responsible Charge (ORC) to easily adjust and observe the timer control device and other appurtenances of the control panel (e.g., center of box to be 3 to 5 feet above finished grade).

j. Floats: The following floats shall be provided and shall meet the requirements of Rule .1952 (c)(5)

   i. A low - level / redundant-off switch shall prevent the pump from running in the event the level in the tank is below the pump intake.
   ii. A timer-enabling switch shall be set at or above the pump submergence level and shall not allow for partial doses.
   iii. A high-level alarm shall activate after the equalization volume is exceeded. If there is a controlled delay before alarm activation, the delay shall be no more than 5 minutes. After being silenced, the alarm horn shall automatically reset and shall be audible with each high level event. The alarm event counter shall record each activation of the alarm.
   iv. A timer override switch located at or above the alarm shall dose no more than a designed dose event to the drainfield. The alarm shall re-activate at each override event. The timer override float may be integral with the alarm float.

   Other sensor devices may be utilized as approved by the State but must meet all four float actions.