Addendum to the Aero-Tech Manual for Indiana - Dated 12/19/12

Tank Safety:
All Aero-Tech tanks are equipped with a main lid and secondary grate. Both the lid and grate are equipped with locks that utilize an Aero-Tech proprietary key.

Trash Tank Sizing:
Trash tanks preceding Aero-Tech ATUs must meet the manufacturer's recommendations for sizing, capacity of =>24 hour retention is needed. The exception is the AT-600 ATU (600 gpd system) which was approved by NSF 40 using a 500 gallons trash tank.

Water softener backwash should not flow through the Aero-Tech ATU. Instead, softener backwash water should discharge to either:

- The effluent sewer on the downstream side of the Aerobic treatment unit.
- The dosing tank serving the soil absorption field.
- The effluent sewer upstream of the distribution box serving the soil absorption field.
- A separate soil absorption field constructed specifically for the softener backwash. If a separated soil absorption field is constructed, it must meet the criteria s described in ISDH guidance document "Water Softener Backwash and Onsite Sewage Systems."

ATU Components: See page seven of the Aero-Tech manual for an ATU parts and components list.

Flow Equalization:
When flow equalization is required by ISDH, Aero-Tech recommends the ATU(s) are dosed as follows:

- Dosed every hour, 24 hours a day at the DDF/24 (as long as timer-on is enabled)
- If actual daily flow rates become known, then timer settings should be adjusted to match those known rates.
- Aero-Tech recommends that pumps be sized to dose individual ATUs at gpm rates up to 10% of the ATU's rated capacity. Higher rates may be used if pumps are not available at the job specific design-head.
- Surge tanks should have a surge capacity of approximately 20% of the DDF between the timer engage "Float-On" and the "Timer Override Alarm" float when the ATU is being dosed at the DDF/24. This surge

capacity may approach 100% of DDF if effluent is being stored to be delivered to the ATU, and field system, over multiple days. Each site is different and system design will reflect these details.

- A Surge Tank controller (PLC) must provide a timer-override program setting that increases the dose time (and volume) by 33%. The program is automatically reset to the original program settings once the tank is pumped down and "timer off" is engaged. A single control panel with multiple PLCs is typically used to control the time-dose surge tank pumps and alternating or sequencing pumps in the dosing tank (when applicable).

Alarms: Audible/visual alarms and pumps will be on separate circuits.

General Reference and Rule:
All septic system design and construction for gravity, mound and flood dose systems must comply with Indiana 410 IAC 6-8.3 and 410 IAC 6-10.1. Subsurface drip systems must be installed in accordance with "Indiana Standards for Subsurface Drip."

Abandonment of Tanks:
For abandonment of tanks and septic systems, see residential 410 IAC 6-8.3 Sec 90 and commercial 410 IAC 6-10.1 Sec 98

Trash Tank Maintenance:
The trash tank must be cleaned when the sludge in the tank reaches 1/2 the tank's depth. The sludge depth is determined with the use of a septic tank core sampler. The Aero-Tech manual requires that the sludge depth be checked during scheduled maintenance and the tank be cleaned when needed. The manual estimates that cleaning will be necessary every 2-4 years.

Anti-Floatation:
Aero-Tech fiberglass tanks are equipped with a 6" anti-flotation ring when installed in areas with a high water table. In situations of extreme wetness, dewatering may be necessary prior to setting the tank(s). Anti-Flotation rings can be fortified (when necessary) by pouring 2-4 yards of concrete over them. The added concrete greatly enhances the ring's effectiveness and adds ballast.

Discharge:
The chlorination/de-chlorination and spray irrigation reference in the Aero-Tech manual does not apply to Indiana in regards to residential or commercial on-site septic systems.