



John A. Kitzhaber, MD, Governor

Department of Environmental Quality

Western Region Eugene Office 165 East 7th Avenue, Suite 100 Eugene, OR 97401 (541) 686-7838 FAX (541) 686-7551 TTY 711

December 13, 2011

Calvin Locker Ecological Tanks, Inc. 2247 Highway 151 North Downsville, LA 71234

RE: AS5001 & AS600L Supplemental Plan Approval

On May 26, 2010, the Oregon Department of Environmental Quality (Department) approved the Aqua Safe[®] AS500L, AS600L and AS1100L Alternative Treatment Technology (ATT) onsite wastewater treatment systems for use as Treatment Standard 1 in Oregon. The approval is contingent upon Ecological Tanks, Inc. manufacturing the above mentioned ATT's in compliance with the Departments rules, regulations and the approved plans and specifications.

The Department has reviewed the supplemental plans provided by you and a letter from NSF dated November 8, 2011 authorizing the physical attachment of a dosing tank to the AS500L and AS600L NSF Certified Systems.

I am pleased to advise you the Department has approved the following supplemental plans dated December 9, 2011.

<u>AS500L</u>

- ETI 500 GPD Unit W/ Oregon Approved Dosing Septic Tank & High Head Pump Station AS500L-4.
- ETI 500 GPD Unit W/ Oregon Approved Dosing Septic Tank & pump tank, drawing number AS500L-5.
- > ETI 500 GPD unit W Laminated Pump Tank & Oregon approved septic tank AS500L-6

<u>AS600L</u>

- ETI 600 GPD Unit W/ Oregon Approved Dosing Septic Tank & pump tank, drawing number AS600L-4.
- ETI 600 GPD Unit W/ Oregon Approved Dosing Septic Tank & pump tank, drawing number AS600L-5.
- ETI 600 GPD Unit W/ Laminated Pump Tank & Oregon approved septic tank, drawing number AS600L-5.

Please be aware that Ecological Tanks, Inc. must continue to meet all the requirements found in Oregon Administrative Rules (OAR) 340-071-0345.

This determination should not be construed in any way as the Department's endorsement of this product or any advertising. Moreover, the Department is not responsible for any situation which may result from use or mis-application of your product.

Please feel free to contact Dan Wiltse at (541) 687-7436 if you have any questions about this letter.

Sincerely,

Michael Z. Kumsh.

Michael E. Kucinski, Manager Water Quality/ Onsite

Enclosure: Approved Plans NSF Approval Letter dated 11/8/2011

Ec: County & DEQ Onsite Program Staff (W/enclosure)





Department of Environmental Quality

Western Region Eugene Office 165 East 7th Avenue, Suite 100 Eugene, OR 97401 (541) 686-7838 FAX (541) 686-7551 OTRS 1-800-735-2900

May 26, 2010

Calvin Locker Ecological Tanks, Inc. 2247 Highway 151 North Downsville, LA 71234

RE: Aqua Safe® AS500L, AS600L & AS 1100L for Treatment Standard 1

The Oregon Department of Environmental Quality (Department) has evaluated your Alternative Treatment Technology (ATT) applications and the plans, specifications and other required application exhibits. In the application, your company has certified that the ATT systems manufactured by your company will comply with all applicable Department rules and regulations. The Department has reviewed your application materials for compatibility with the standards and criteria found in Oregon Administrative Rule (OAR) 340-071-0345.

I am pleased to advise you that the following ATT systems have been found to meet the approval criteria for <u>Treatment Standard 1</u> when used as part of an onsite wastewater treatment system in Oregon:

- Aqua Safe® Treatment System Model AS500L (Rated for up to 500 gallons per day or gpd)
- > Aqua Safe® Treatment System Model AS600L (Rated for up to 600 gpd)
- > Aqua Safe® Treatment System Model AS1100L (Rated for up to 1,100 gpd)

You are authorized to manufacture, market, and distribute these ATTs for use in Oregon, providing the following conditions are met:

1. The ATT systems must be manufactured in compliance with the Department's rules, and the plans and design specifications provided. Any deviation from the approved plans and specifications are not permitted unless authorized by NSF® International and in writing by the Department. Product modification approvals must be copied to the Department.

The approved plans are drawings numbered AS 500L-1, 2 & 3 (3 different drawings), AS 600L-1, 2 & 3 (3 different drawings), and AS 1100L-1 & 2 (2 different drawings) dated October 19, 2009 and approved May 26, 2010.

2. In the event of aerator failure, the control panel must lock out effluent pump operation to prevent untreated or partially treated effluent from discharging to the absorption facility. An audible alarm must activate in the event of either effluent pump or aerator failure.

- 3. The ATT system must be preceded by a septic tank approved for use in Oregon. The tank sizing will be appropriately sized for the flow. For example, a 450 gpd residence may use a 1,000 gallon Oregon-approved septic tank.
- 4. The manufacturer must provide training for, and maintain a list of, certified installers and maintenance providers authorized to work on these ATT systems and provide certificates to those individuals.
- 5. Systems less than 10 years old may not exceed a failure rate of 10 percent.
- 6. The ATT system must maintain ongoing NSF® International Standard 40 certification.
- 7. As the manufacturer of these products, it is your responsibility to assure that each assembled ATT system delivered to the construction site is water-tight. Assurance must be achieved by periodic testing of the ATT system's components for water-tightness at the manufacturing facility.
- 8. A minimum two-year service contract, including a minimum of four service visits (scheduled every six months) must be included in the purchase price of the ATT system. A service contract must be in place for the life of the system.
- 9. Each ATT system must be delivered with an installation guide and owner's manual.
- 10. Each ATT system is only acceptable at locations were the top loading will not exceed the engineering design parameters. ATT systems proposed for use at other locations will require an engineering analysis of the potential top loading, and may require the preparation of site-specific plans, specifications, and a plan review fee.

This determination should not be construed in any way as the Department's endorsement of this product or any advertising. Moreover, the Department is not responsible for any situation which may result from use or mis-application of your product.

If you have any questions regarding this letter, please contact the Department's Onsite Program Coordinator, Randall Trox at (541) 687-7338 or by email,(<u>trox.randall@deq.state.or.us</u>).

Sincerely,

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Michael E. Kucinski, Manager Water Quality/Onsite

ec: All Contract County Offices, All DEQ Direct Service Offices



Department of Environmental Quality

Western Region Eugene Office 165 East 7th Avenue, Suite 100 Eugene, OR 97401 (541) 686-7838

FAX (541) 686-7551 OTRS 1-800-735-2900

November 23, 2010

Calvin Locker Ecological Tanks, Inc. 2247 Hwy 151 North Downsville, Louisiana 71234

RE: Aqua Safe Models AS500L and AS600L Alternative Treatment Technology (ATT) Treatment Standard 1 Material Plan Review Application Replacement Diagrams

Dear Mr. Locker:

On October 29, 2010 we sent a letter to you approving the new installation diagrams that incorporated the following revisions:

- Clarify the requirements for the external pump vault.
- Provide an alternate float setting configuration allowing the use of either a two (2) or three (3) pump/alarm float assembly.

Since that date, you have submitted replacement installation diagrams for the revisions listed above. I am pleased to advise you that the replacement installation diagrams (attached) were reviewed and approved on November 18, 2010. The small diameter pump vault with either the 2 or 3 float design is approved for use with the following Aqua Safe ATT Treatment Standard 1 models:

- AS500L-1 [ETI 500 GPD Unit with Oregon Approved Septic Tank & High Head Pump Station]
- AS600L-1 [ETI 600 GPD Unit with Oregon Approved Septic Tank & High Head Pump Station]

All of the conditions listed in the original approval letter dated May 26, 2010 remain in effect. The diagrams will be posted on our website soon. The most current version of approved ATT diagrams can be found at: <u>http://www.deq.state.or.us/wq/onsite/att.htm</u>.

If you have any questions regarding this letter, please contact Dan Wiltse at (541) 687-7436 or by email at <u>wiltse.daniel@deg.state.or.us</u>.

Sincerely,

Michael E. Kningh.

Michael E. Kucinski, Manager Water Quality/ Onsite

ec: All Contract County Offices All DEQ Direct Service Offices Dan Wiltse, DEQ Eugene





Kate Brown, Governor

Western Region Eugene Office 165 East 7th Avenue, Suite 100 Eugene, OR 97401 (541) 686-7838 FAX (541) 686-7551 TTY 711

January 8, 2021

Trey Johnson Ecological Tanks, Inc 2247 Hwy 151 North Downsville, Louisiana 71234

RE: Aqua Safe® AS800L

Dear Mr. Johnson,

You applied to Oregon Department of Environmental Quality to list the above-referenced product as an approved alternative treatment technology. DEQ has reviewed your application, plans, specifications, and other required exhibits for the Aqua Safe[®] Model AS800L. The system's design flow rating is 800 gallons per day and your application was submitted requesting treatment standard 1 designation.

You provided third party NSF/ANSI testing data from an organization whose accreditation is specific to onsite wastewater treatment products certifying the product complies with all applicable DEQ rules. DEQ has reviewed these materials for compatibility with the standards and criteria found in Oregon Administrative Rules 340-071-0345. I am pleased to advise you that DEQ has found the following ATT system manufactured by Ecological Tanks, Inc. to meet the approval criteria for <u>**Treatment Standard 1**</u> when used as part of an onsite wastewater treatment system in Oregon:

> Aqua gallons Safe[®] AS800L – Design Flow 800 per day

Ecological Tanks, Inc. is authorized to manufacture, market, and distribute these ATTs for use in single family dwellings and commercial facilities in Oregon so long as the following conditions are met:

- 1. You must manufacture the ATT in compliance with DEQ's rules, approved plans and design specifications. Alteration of the ATT system design that might affect system performance must be approved by an ANSI accredited, third-party testing and certification organization and DEQ.
- 2. The approved versions of the plans are labeled Ecological Tanks, Inc Aqua Safe[®] AS800L-2 and AS800L-3, and are dated January 7, 2021.
- 3. The ATT system must be preceded by a properly sized septic tank, dosing tank or followed by a properly sized dosing tank or pump vault approved for use in Oregon.

- 4. Per OAR 340-071-0345(6)(a), the system must be designed to prevent untreated waste passing into the absorption field if the plant malfunctions. The manufacturer has stated that the system is designed that if a malfunction occurs, sewage would surface before passing untreated or partially treated effluent to the soil absorption system.
- 5. An audible and visual alarm must activate in the event of electrical, mechanical equipment or hydraulic malfunction of the system.
- 6. Your company must provide training for, and maintain a list of certified installers and maintenance providers authorized to work on these ATT's and provide certificates to those individuals. Individuals installing your system, and regulators in the County of installation, must be trained prior to installation of your products in Oregon.
- 7. As the Manufacturer of these products, it is your responsibility to assure that each assembled ATT delivered to the construction site is watertight. Assurance must be achieved by periodic testing of the ATT products for watertightness at the manufacturing facility.
- 8. Service contracts and inspection / service visits must meet or exceed the requirements of OAR 340-071-0130(23).
- 9. Unless otherwise authorized by DEQ, Ecological Tanks, Inc. must submit an annual manufacturer report. The report must include, but is not limited to:
 - (A) A list of each ATT sold in the State of Oregon for the reporting period including the model number, serial number, and the property address the ATT is located;
 - (B) A current list of all maintenance providers certified by Ecological Tanks, Inc. and;
 - (C) The material plan review fee in OAR 340-071-0140(5).
- 10. DEQ reserves the right to remove ATT's from the approved list if a determination is made that:
 - (A)Ten percent or more of system under 10 years of age fail;
 - (B) The ATT does not produce effluent quality equal to or better than Treatment Standard 1 or 2 requirements, respectively under normal operating conditions;
 - (C) The manufacturer fails to submit the annual report and annual compliance determination fee by the date specified by DEQ; or
 - (D) The manufacturer goes out of business.
- 11. Each ATT is only acceptable for use at locations where the top loading will not exceed the engineering design parameters. ATT's proposed for use at other locations requires an engineering analysis of the potential top loading, and may require the preparation of site-specific plans and specifications.
- 12. All other applicable rules and requirements within OAR 340-071 and 73 must be followed.

This determination should not construed in any way as DEQ's endorsement of the product or any advertising. Moreover, DEQ is not responsible for any situation which may result from use or misapplication of your product.

If you have any questions regarding this letter, please contact Randall Trox at <u>Randall.trox@deq.state.or.us</u> or by phone, (541) 687-7338.

Sincerely,

Signed letter in file

Deborah Mailander, Manager Onsite/ 401 Programs

- EC: All Contract County Offices All DEQ Direct Service Offices
- ec: Calvin Locker, R.S., Ecological Tanks, Inc. <u>calvinlocker@sbcglobal.net</u>