



May 11, 2012

Aero-Stream®, LLC
KARL HOLT
W300 N7706 CHRISTINE LANE
HARTLAND WI 53029

Re: Description: SEWAGE TREATMENT APPARATUS (Tier 1- downsizing credit)
Manufacturer: Aero-Stream®, LLC
Product Name: AERO-STREAM™ AEROBIC TREATMENT UNIT
Model Number(s): AS450 AND AS600
AEROBIC TREATMENT DEVICE UTILIZING REMEDIATOR™, PRO LINE™, PRO LINE PLUS™
[SEE SIZING TABLE BASED UPON MAX. BOD5 IN LBS./DAY AND MAX. DWF IN GPD]
Product File No: 20120113

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. **This approval is valid until the end of May 2017.**

This approval is contingent upon compliance with the following stipulation(s):

- When this product receives wastewater from dwellings, it will produce an effluent quality with a maximum monthly average value for BOD5 of less than or equal to 30 mg/L, TSS of less than or equal to 30 mg/L TSS and F.O.G. of less than 30 mg/L.
- This product must be utilized in accordance with the manufacturer's printed installation instructions and this product approval. If there is a conflict between the manufacturer's installation instructions and the product approval, the product approval requirements will take precedence.
- The outlet baffle of the septic tank, which has this product installed, must have installed an effluent filter capable of filtering particles of 1/8 inch in size or larger.
- A state Sanitary Permit must be obtained when this product is installed.
- AS OF MARCH 1, 2009 ALL ELECTRICAL CONNECTIONS FOR PRIVATE SEWAGE SYSTEMS MUST COMPLY WITH S. SPS 16.300 (FORMERLY S. COMM 16.300) WIRING METHODS.
- When this product is installed in a POWTS component, it is considered a modification of the existing POWTS. A state sanitary permit must be obtained when this product is to be installed in a POWTS component. Installation of this product may necessitate evaluation and further modification of the POWTS where this product will be installed. Whichever reviewing agency (governmental unit or state) reviewed and approved the original POWTS plans, shall review the proposed modifications to the existing POWTS.
- A copy of this approval letter and the manufacturer's printed installation and maintenance instructions must be supplied to the buyer of this product and the property owner.

- This product may be installed in an existing POWTS in the following components:
 - . the most downstream sewage treatment tank;
 - . the most downstream sewage treatment tank with an approved effluent filter;
 - . a dose tank;
 - . a distribution box;
 - . a seepage pit.

- Because many Commerce approved products are readily available for sale on the internet; it is important that buyers in Wisconsin are aware of approval stipulations for Commerce-approved products.

For example, in the state of Wisconsin, the installation of this product/device in a POWTS requires a credentialed/licensed person, local or state plan review, and/or the issuance of a state sanitary permit. See applicable codes—chs. SPS 305 and 381-387 (formerly ch. Comm 5 and 81-87), <http://commerce.wi.gov/SB/SB-DivCodesListing.html>.

It is recommended that when required (a credentialed/licensed person, plan review and a state sanitary permit), such information is included in written and electronic communications (brochures/advertisements/webpages, etc.) regarding this product/device.

- The elevation of the system's dispersal component infiltrative surface must be above the estimated highest groundwater elevation or bedrock by the distance prescribed in column labeled "Fecal Coliform >10,000 cfu/100 mL" in Table SPS 383.44-3, Wis. Adm. Code.

- When this product is installed in a POWTS component, a properly credentialed/licensed person must perform the installation.

- This product must be installed in sewage treatment tanks that were approved at the time of existing installation and/or currently approved for new/replacement tank installation by the Department, Division of Safety and Buildings, for use with this product.

- Any and all risers used with the installation of this product/device must have Commerce product approval, s. SPS 384.10.

- A copy of this approval letter must accompany each installation of this product in the State of Wisconsin.

- When this product/device is installed as a component in an approved POWTS plan, it must be operated and maintained as a permanent appurtenance of the POWTS design. Any changes or deviations to the approved plan are subject to review and approval by the governmental unit having jurisdiction. All tanks must be state-approved tanks meeting the tank specifications listed by the device manufacturer.

TABLE 1
 INSPECTION, MAINTENANCE AND PUMPING
 PRODUCT/ (Models): AERO STREAM™ AS450 AND AS600

Initial/Startup Inspection/ Maintenance:	See manufacturer's Installation and Operation Guide, 2003-2011 Rev. A
Routine Inspection/Maintenance:	Check/clean filters 3-12 mos.; pump at 30% Sludge or at least as per local and state requirements
Ongoing Pumping Cycle And/Or Requirements:	No additional service intervals Other than prescribed by state or local units of government
Back-Wash Cycle:	N/A
Effluent Performance Levels:	monthly avg. TSS/FOG/BOD5 <30 mg/L
BOD5 Credit For Downsizing Distribution Area:	YES*
Fecal Credit for Reduction of Vertical Separation:	NO
Additional Comments:	NONE

*Proper function based on domestic wastewater or flows with similar wastewater characteristics. Device not approved for high strength wastewater or commercial uses other than domestic wastewater from these occupancies.

TABLE 2 DWF and Daily BOD5

ATU Model	Max. DWF (gals./day)	Max. BOD5 (lbs./day)
AS450	450	1.1
AS600	600	1.5

TABLE 3 TANK SPECIFICATIONS

ATU Model	Tank Capacity	Aeration Tank-Liquid Depth
AS450	Min. 1500 gal. capacity of multiple tanks or with chamber capacity of min. 400 gals. each	32 – 70 in.
AS600	Min. 2000 gal. capacity of multiple tanks or with chamber capacity of min. 500/520/400 gals.	32 – 70 in.

(Only department-approved tanks may be installed.)

- When this product is installed in a state-approved septic tank, a properly licensed person must perform the installation.
- This product must be installed in a department-approved tank that meets the design criteria for this product, as specified by the device manufacturer. For concrete tanks see: http://commerce.wi.gov/php/sb-ppalopp/prodcode_result.php/STC/SEWAGE_TANKS,_CONCRETE.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

Jean M. MacCubbin, CST
 Engineering Consultant--Plumbing Products Review
 DSPS WEST, Safety & Buildings Div.
 PO Box 2658
 201 W Washington Ave.
 Madison WI 53703-2658
 Phone: 608-266-0955; Fax: 608-283-7456
 E-mail: Jean.MacCubbin@WI.GOV