



STATE OF WISCONSIN
Department of Agriculture,
Trade and Consumer Protection

Approval # 20140003

Bureau of Weights and Measures
Storage Tank Regulation
P.O. Box 7837
Madison, WI 53707-7837

Wisconsin ATCP 93 Material Approval

Equipment: SanEco Used Cooking Oil Storage Tank
System

Manufacturer: Sanimax USA LLC
2099 Badgerland Avenue
Green Bay, WI 54303

Expiration of Approval: December 31, 2017

SCOPE OF EVALUATION

The SanEco Used Cooking Oil Storage Tank System as manufactured by Sanimax USA LLC, for inside storage of used cooking oil, an NFPA code class IIIB combustible, has been evaluated for use as a storage tank system complying with **ss. ATCP 93.300** of the current edition of the Wisconsin Flammable and Combustible Liquids Code.

This evaluation summary is condensed to provide the specific installation, application and operational parameters necessary to maintain the subject systems in compliance with the Wisconsin Administrative Code – ATCP 93.

DESCRIPTION AND USE

The SanEco Used Cooking Oil Storage Tank System is a used cooking oil/grease recovery and storage system for use in restaurants and other food preparation facilities.

The system consists of the following:

- (1) 198 gallon (750 L) polyethylene storage tank with adjustable steel support stand and wall anchoring straps
- (1) transfer pump for transferring used oil/grease from a bucket or small caddy to the storage tank
- (1) mechanical float overfill valve
- (1) thermostatically controlled tank heater encased in a stainless thermo-well
- (1) remotely operated anti-theft valve for transferring the used oil/grease from the storage tank to a Sanimax used oil/grease collection vehicle
- Polypropylene and black iron transfer piping and edible oil hydraulic hose
- (1) 10 X 10 open vent with carbon filter

Operation of the SanEco Used Cooking Oil Storage Tank system begins with an employee of the facility transporting in either a bucket or a small caddy the used oil/grease from the facility's cooking equipment to the storage tank. The used oil/grease is transferred from the bucket or caddy to the storage tank via a transfer pump and hydraulic hose. The transparent property of the tank material allows for continuous visual monitoring of the liquid level during tank filling, the tank is marked to show when the level has reached 80% capacity. The customer is directed to stop filling the tank at the 80% level and call Sanimax for a pick-up. The transfer system also has a mechanical float overfill valve; when the used oil/grease level has reached 85% of the tanks capacity the overfill valve float assembly closes the valve thus preventing overfill of the tank. When the mechanical overfill closes the transfer pump will begin emitting an audible alarm noise indicating that it is no longer able to fill the tank. If the pump is not shut-off by the operator a thermal overload device will stop the motor. A carbon filter covers the open normal vent to eliminate any odors that may be emitted by the tank during filling.

When Sanimax is notified the tank is at the maximum fill level a collection truck is dispatched to empty the used oil/grease tank. Access to the tank discharge for emptying the tank is provided by a connection external to the facility building. Upon arrival at the facility the collection vehicle driver attaches a transfer hose to the external connection and activates via a Bluetooth signal the remotely operated anti-theft valve which allows for the transfer of the used oil/grease from the storage tank to the collection vehicle's tank.

The storage tank is mounted on an adjustable base steel support stand that can be adjusted for increased stability on uneven surfaces. Two metal straps are installed around the tank and secured to the closest wall to prevent the tank from tipping over.

A tank heater is provided in order to keep the used cooking oil/grease in a liquid state. The heating element is enclosed in a stainless steel thermo-well to protect the heating element from the oil/grease and to protect the tank from direct contact with the heating element. The normal operating temperature range of the heater is 100 - 160° F, with a thermal cut-off at 170° F.

Emergency venting is accomplished through the open normal vent and by the low melting point of the tank material. The polyethylene tank has a melting point of 260° F, if a pool fire did occur at the tank, the tank would melt thereby releasing any pressure build-up that may have occurred due to heating the tank contents.

TESTS AND RESULTS

All major components of the SanEco used Cooking Oil Storage Tank System have been tested and approved by third-party independent testing laboratories. This includes the storage tank resin material, transfer pump/motor assembly, electronic control card, motor controls, heater, and anti-theft valve.

LIMITATIONS / CONDITIONS OF APPROVAL

This approval is based on a review of the information provided by Sanimax USA LLC, including the used oil/grease collection/storage system design components and description of the intended use of the system. In addition, a review of the appropriate sections of ATCP 93 and NFPA 30-2008 edition codes was performed.

This approval is granted based on the following considerations and conditions:

- The design, installation, and operation of the SanEco Used Cooking Oil Storage Tank system shall be in accordance with the information provided in the Description and Use section of this material approval and the specific Limitations/Conditions of Approval listed in this section.
- The requirements for Plan Review under ATCP 93.100; Installation Inspection under ATCP 93.115; Tank Registration under ATCP 93.140; and Certified Installation under ATCP 93.300, are waived.
- Tanks shall be installed in locations appropriate for storage of foodstuffs or inventory and shall not be installed in areas designated as cooking areas.
- Tanks shall be spaced at least 3 ft (0.9 m) away from any cooking appliance or any surface heated to a temperature above 140°F (60°C) continuous and at least 6 ft (1.8 m) away from any open flame.
- Tanks shall not be installed under commercial kitchen ventilation hoods.
- As an alternate method to the testing requirements in NFPA 30 Chapter 21, cooking oil storage tanks shall be tested for leaks at the time of installation by filling the tank with cooking oil or water to a liquid level above the highest tank seam or connection within the normal liquid level. Before the tank is placed in service, all leaks shall be corrected in an approved manner or the tank shall be replaced.
- An approved listing mark on a cooking oil storage tank shall be considered to be evidence of compliance with tank testing requirements.

- A sign or marking that meets the requirements of NFPA 704, Standard System for the Identification of the Hazards of Materials for Emergency Response, or another approved system, shall be applied to each cooking oil storage tank in accordance with NFPA 30 Chapter 21. Additional signage shall be applied to each tank identifying the contents of the tank as cooking oil, either fresh or waste.
- In areas where tanks are located, no additional ventilation shall be required beyond that necessary for comfort ventilation, provided that all cooking equipment is equipped with exhaust systems in accordance with NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations.
- If ventilation is not provided as specified above, then the tank shall be vented to another room inside the building that meets these requirements, or the tank shall be vented to the outside of the building.
- This material approval does not waive any of the applicable ATCP 93 or NFPA 30 code requirements relating to aboveground storage tanks (ASTs) that are not specifically addressed in this material approval.
- This material approval does not take the place of any required inspection or permit functions. All permits required by the state or local municipality shall be obtained prior to commencement of operation.

This approval will be valid through December 31, 2017, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Material Approval Number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The Department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement unless specified in this document.

Effective Date: June 27, 2014

Reviewed by: Signature on file
Greg Baretta, P. E.
Section Chief
Storage Tank Regulation
Bureau of Weights and Measures

Approved by: Signature on file Date: _____