



STATE OF WISCONSIN
Department of Agriculture,
Trade and Consumer Protection

Approval # 20180003
(Renewal for 20060003)

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

Wisconsin ATCP 93 Material Approval

Equipment: Poly-Flex HDPE Dike Liner

Manufacturer: Poly-Flex, Inc.
2000 West Marshall Drive
Grand Prairie, TX 75051

Expiration of Approval: December 31, 2021

SCOPE OF EVALUATION

The Poly-Flex High Density Polyethylene Dike Liner manufactured by Poly-Flex, Inc. has been evaluated for use as a synthetic dike liner in accordance with **ATCP 93.130(3)(d)**, **ATCP 93.350(5)**, and **ATCP 93.420(2)(e)(1)**.

This Approval has been based upon evaluation of information submitted by the manufacturer and third party evaluation and is considered to be confidential. Specific information relating to qualifying the information submitted should be made to the manufacturer or submitter.

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

DESCRIPTION AND USE

The Poly-Flex Liner is made of high-density polyethylene. Approved thicknesses are 60, 80 and 100 mils. It can be provided in widths up to 22.5 feet. Seams are made by a heat fusion method, either by a hot shoe welder or by an extrusion welder. When installed over compacted soil, the ends of the liner are anchored in a trench. The trench must have rounded edges to avoid sharp bends in the liner.

Mechanical attachment to concrete may be achieved by using stainless steel fittings and neoprene gaskets. Neoprene caulk provides a liquid-tight adhesive attachment between gaskets and fittings. Another attachment method is the Poly-Lok channel. Poly-Lok is 125 mil thick, formed HDPE which is cast into concrete to provide a weldable anchoring surface.

TESTS AND RESULTS

TRI/Environmental, Inc., conducted chemical compatibility testing on Poly-Flex before and after immersion in unleaded gasoline, JP-5 jet fuel, and ethanol. Specimens were tested before immersion, immediately after 7 days of immersion and after 7 days of immersion followed by 12 hours in a drying oven. In all cases, the physical property changes were within acceptable limits established by the department.

LIMITATIONS / CONDITIONS OF APPROVAL

- Poly-Flex is approved as meeting the requirements of **ATCP 93.130(3)(d)** when installed and tested in accordance with manufacturer's specifications, and shall have a permeability of no faster than 10^{-6} centimeters per second for the substance stored as required by **ATCP 93.420(2)(e)(1)**
- Field seams shall be oriented down a slope rather than across a slope.
- All installation, repair and maintenance of the dike liner shall be performed in accordance with the manufacturer's recommendation and all applicable codes. In addition, a qualified technician shall conduct all necessary maintenance and calibration procedures as recommended by the manufacturer to assure continued and proper operation of the liner.

This approval will be valid through December 31, 2021, 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: August 22, 2018

Reviewed by: _____
Erik Otterson
Environmental Engineering Specialist
Bureau of Weights and Measures
Storage Tank Regulation

Date: _____

Approved by: _____
Greg Bareta, P. E.
Section Chief
Bureau of Weights and Measures
Storage Tank Regulation

Date: _____