

**WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION
BULK SECONDARY CONTAINMENT LINER MATERIAL APPROVALS
October 17, 2005
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**APPROVED FOR SOLUTIONS/SUSPENSIONS OF THE
FOLLOWING MATERIALS**

**SYNTHETIC LINER MATERIAL
(MUST BE A MINIMUM OF 30 MIL THICK)**

	Ammonium hydroxide	Ammonium nitrate	Ammonium phosphate	Ammonium polyphosphate	Ammonium thiosulfate	Dipotassium phosphate	Metham sodium	Phosphoric acid	Potassium chloride	Potassium nitrate	Propionic acid	Trisodium phosphate	Urea
EPI Polyvinyl Chloride (PVC)	✓ ¹		✓ ²	✓ ²		✓ ²		✓ ¹	✓ ¹	✓ ¹		✓ ¹	✓ ¹
MPC Petrogard VI (polyester)		✓ ³	✓ ⁴					✓ ⁴					✓ ³
Poly-Flex High Density Polyethylene (HDPE)		✓ ⁵		✓ ⁵									✓ ⁵
Raven Rufco PP30 & PP40 (polypropylene)				✓ ⁶	✓ ⁶				✓ ⁶				✓ ⁶
Seaman Corporation 8130 XR-5 (30 mils)		✓ ⁷						✓ ⁸			✓ ⁹		✓ ⁹
Stevens Chlorosulfonated Polyethylene (CSPE) aka Hypalon®	✓ ¹⁰	✓ ¹⁰	✓ ¹⁰	✓ ¹⁰	✓ ¹¹	✓ ¹¹		✓ ¹⁰	✓ ¹⁰	✓ ¹⁰		✓ ¹⁰	✓ ¹⁰
Stevens Polypropylene	✓ ¹²	✓ ¹³	✓ ¹⁴	✓ ¹³	✓ ¹⁵	✓ ¹³	✓ ¹⁶	✓ ¹³	✓ ¹³				✓ ¹³

¹ EPI compatibility literature submitted with letter from Jerome Foods to DATCP, September 3, 1992, Approved for solutions with a maximum concentration of 10% ammonium hydroxide, 90% phosphoric acid.

² Inferred from EPI compatibility literature submitted with letter from Jerome Foods to DATCP, September 3, 1992.

³ Seaman Corporation memo regarding strength tests following immersion in UAN solution, May 10, 1996, fax copy on file with DATCP

⁴ <http://www.mpccontainment.com/petrogardVI.shtml>, approved for solutions containing a maximum of 50% phosphoric acid

⁵ Poly-Flex letter to J.C Ramsdell Enviro Services, Inc., October 10, 2005, copy on file with DATCP.

⁶ Raven Industries statement of July 19, 2005, copy on file with DATCP

⁷ <http://www.xr-5.com/resistancechart.html>

⁸ See Note Number 7, approved for solutions containing a maximum of 50% phosphoric acid

⁹ Seaman Corporation statement of May 18, 2005, copy on file with DATCP

¹⁰ www.stevensgeomembranes.com/Technical/HypChemList.htm

¹¹ Inferred from www.stevensgeomembranes.com/Technical/HypChemList.htm

¹² www.stevensgeomembranes.com/Technical/PPChemList.htm

¹³ JPS Elastomerics letter to Ken Hunter of Hunter Agri Sales, July 13, 1995, Copy on file with DATCP; Stevens Geomembranes pdf letter to DATCP, July 6, 2005.

¹⁴ Inferred from JPS Elastomerics letter, July 13, 1995, and from Stevens Geomembranes pdf letter to DATCP, July 6, 2005

¹⁵ Inferred from www.stevensgeomembranes.com/Technical/PPChemList.htm

¹⁶ JPS Elastomerics letter to DATCP, September 2, 1997

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MANUFACTURER

Approved Installer(s)

<p>Environmental Protection, Inc. PO Box 333 Mancelona, MI 49659-0333 (800)-OK-LINER (800) 655-4637 http://www.geomembrane.com</p>	<p><i>Environmental Protection, Inc., is a fabricator of liners, but they do not manufacture/extrude liner material. EPI is the only known installer of EPI-fabricated liners.</i></p>	
<p>Integra Plastics Inc. 500 12th Street Madison, SD 57042 (800) 578-5257 http://www.integrplastics.com</p>	<p><i>Integra is a fabricator of liners, but does not manufacture/extrude liner material. Integra commonly fabricates liners from JPS' Reinforced Polypropylene. Integra and each installer listed below is approved to install approved liners fabricated by Integra Plastics, Inc.</i></p>	
<p>A & B Welding & Manufacturing PO Box 257 Thompson, IA 50478 (641) 584-2900</p>	<p>AgReliance 225 50th Avenue Cummings, IA 50061 (515) 285-5185</p>	<p>Baumgartner Environics 2510 West Lincoln Olivia, MN 56277-1711 (320) 523-1644</p>
<p>MPC Containment Systems, Ltd. 4834 South Oakley Chicago, IL 60609 (800) 621-0146 http://www.mpccontainment.com/</p>	<p><i>MPC the only known installer of MPC-manufactured liners.</i></p>	
<p>Poly-Flex, Inc. 2000 West Marshall Drive Grand Prairie, TX 75051 (888)765-9359 http://www.poly-flex.com</p>	<p><i>Poly-Flex also installs their own liners. JC Ramsdell is the only other known manufacturer-approved installer of Poly-Flex liners.</i></p>	
<p>J.C. Ramsdell Enviro Liners, Inc. PO Box 307 Veterans Street Flandreau, SD 57028 (605) 997-3704</p>		
<p>Raven Industries PO Box 5107 Sioux Falls, SD 57117-5107 (605) 336-2750 http://www.ravenind.com/</p>	<p><i>Each installer listed below is approved to install approved liners manufactured by Raven Industries</i></p>	
<p>J.C. Ramsdell Enviro Liners, Inc. PO Box 307 Veterans Street Flandreau, SD 57028 (605) 997-3704</p>	<p>Wagley & Associate, Ltd. 315 North Oakley Luverne, MN 56156 (320) 979-0801</p>	
<p>Seaman Corporation 1000 Venture Avenue Wooster, OH 44691 (330) 262-1111 www.seamancorp.com</p>	<p><i>Seaman the only known installer of Seaman-manufactured liners.</i></p>	
<p>Stevens Geomembranes 9 Sullivan Road Holyoke, MA 01040 (800) 621-2281 http://www.stevensgeomembranes.com/</p>	<p><i>Each installer listed below is approved to install approved liners manufactured by Stevens Geomembranes Inc.</i></p>	
<p>CW Neal Corporation 8625 Argent Street Santee, CA 92071 http://www.cwneal.com/index.cfm</p>	<p>Hunter Agri Sales PO Box 2 Coatesville, IN 46121 (800) 536-4131 http://www.hunterag.com/</p>	<p>Integra Plastics Inc. 500 12th Street Madison, SD 57042 (800) 578-5257 http://www.integrplastics.com</p>
<p>MPC Containment Systems, Ltd. 4834 South Oakley Chicago, IL 60609 (800) 621-0146 http://www.mpccontainment.com/</p>	<p>Wagley & Associate, Ltd. 315 North Oakley Luverne, MN 56156 (320) 979-0801</p>	<p>Watersaver Co., Inc. 5870 East 56th Avenue Commerce City, CO 80022 (303) 289-1818 http://www.watersaver.com</p>