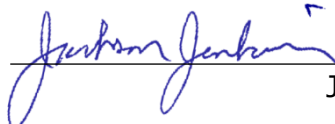


Substantive Policy Number: SPN2016-01  
Responsible Division: Technical Services & Engineering  
Effective Date: July 1, 2018  
Date of Next Review: June 30, 2020

**Approved:**   
Jackson Jenkins, Director

**SUBJECT: PCRWRD Product Selection Committee**

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**I. PURPOSE**

- A. This Substantive Policy Statement establishes a Product Selection Committee (PSC) for public sanitary sewer conveyance facilities operated by the Pima County Regional Wastewater Reclamation Department (PCRWRD).

**II. GENERAL PROVISIONS**

- A. The purpose of the PSC is to evaluate new products for use in the public sanitary sewer conveyance system operated by PCRWRD and to ensure that the PCRWRD rate payers are receiving quality and value. In addition, the PSC is responsible to the Director for ensuring that the safety of the public is maintained by the use of products that have been tested, evaluated, or examined for conformance with PCRWRD standards.

The PSC is also responsible for the content and maintenance of the PCRWRD List of Approved Products (LAP) for Public Sanitary Sewer Conveyance Facilities. The Director of RWRD shall approve all revisions to the LAP.

**III. REVISIONS**

- A. This Substantive Policy shall be reviewed periodically as necessary to ensure best product performance and support for the efficient operations and maintenance of the PCRWRD conveyance system.

**1. PRODUCT SELECTION COMMITTEE**

The Pima County Regional Wastewater Reclamation Department (PCRWRD) Product Selection Committee (PSC) is administered by the PCRWRD Field Engineering Unit (FEU). The purpose of the PSC is to evaluate new products for use in the public sanitary sewer conveyance system operated by PCRWRD and to ensure that the PCRWRD rate payers are receiving quality and value. In addition, the PSC is responsible to the Director for ensuring that the safety of the public is maintained by the use of products that have been tested, evaluated, or examined for conformance with PCRWRD standards.

The PSC is the sole entity through which products may be selected or deleted from use in the public sanitary sewer conveyance system operated by PCRWRD. The PSC is also responsible for the content and maintenance of the PCRWRD List of Approved Products (LAP). For the purposes of product selection, PCRWRD regards "product" to also include materials, mechanisms, equipment, processes, and construction procedures. The PSC is also responsible for the formal removal of products from approved use in the public sanitary sewer system operated by PCRWRD.

The PSC shall consist of a minimum of five (5) members selected from PCRWRD staff. The members of the PSC shall be selected on the basis of their combined technical competence, experience, and familiarity with the product categories under consideration. Additional members may be added based upon the needs of the PSC at that time. The Chairman of the PSC shall be selected from a member of the FEU engineering staff and shall be responsible for facilitating the PSC for an assigned period.

## 2. NEW PRODUCT SUBMITTAL PROCEDURES

All requests for consideration of new products shall be directed to the PSC at the following address:

Product Selection Committee  
PCRWRD Field Engineering Unit  
1313 South Mission Road, Bldg. 17  
Tucson, Arizona 85713-1398  
(520) 724-2651

Requests may also be submitted to the following email address: [pcrwrdpvc@pima.gov](mailto:pcrwrdpvc@pima.gov)

Initial requests for product consideration should include a submittal with the following information:

- a. Letter identifying the representative making the submittal, the manufacturer, the product or material requesting consideration, and its intended application within the sanitary sewer system.
- b. User references, including key contact persons.
- c. Need for certified installers, applicators, or operators and a description of the certification program.
- d. Nearest supplier and/or service provider.
- e. Pertinent literature, including applicable certifications and reference standards, such as AWWA/ANSI, ASTM, UL, etc.
- f. A material sample, if practical.
- g. Information regarding the safe use and limitations of the product.
- h. SDS information as appropriate.
- i. Warranty information.

In addition, submitters may request time for a formal presentation to the PSC. This would be especially beneficial for products that are unique or significantly different from those currently approved or used. Such requests should be made through the PSC Chairman who may be contacted at the email address above or by calling PCRWRD Field Engineering at the phone number above. Presentations will normally be conducted during the regularly scheduled meetings of the PSC.

The PSC shall meet quarterly at the PCRWRD Field Engineering office located at the address listed above. Committee meetings are routinely scheduled for 10:00 AM on the second Thursday of March, June, September, and December. Formal presentations, including questions, are limited to no more than one hour. Requests for special meetings may be entertained in unusual circumstances, with sufficient advance notice.

### 3. REVIEW PROCESS

Decisions regarding new products will typically be phased. All new products will first be designated by the PSC as under Administrative Review. After the Administrative Review, during which the PSC reviews the quality and completeness of the submitted material, the new product shall be placed into an initial review status category. The product review will progress through the subsequent steps until reaching a final status. To summarize, the review status categories are as follows:

- a. Administrative Review: This period begins when the product submittal is received. This review involves confirming the quality and completeness of the submittal before distribution to the PSC.
- b. Technical Review: This period begins when the product information has been distributed to the PCS members for consideration. In general, all new products will be subject to this designation. When there are questions or items that require clarification, the PSC may request additional information or a meeting with a product representative.
- c. Under Test: Through its technical review, the PSC has determined that the product may be an "equal or better" or an otherwise viable alternate to existing products. However, there shall be a period of due-diligence operational testing and evaluation in the PCRWRD conveyance system to confirm product claims and ensure compatibility, durability, corrosion resistance, etc.
- d. Approved: Based on the product evaluation and testing, the PSC has determined that the product is approved for general use within the system, in accordance with PCRWRD standards and specifications.
- e. Conditionally Approved: The PSC has determined that use of the product shall be limited to pre-approved applications or locations.
- f. Not Approved: The PSC has determined that the product shall not be used in the PCRWRD system.
- g. Tabled: The PSC chooses to either take no action or to suspend Technical Review for a justifiable reason such as a delay while additional required information is produced.

4. REVIEW CRITERIA

The review criteria will depend on the product under consideration. Typical criteria may include, but is expressly not limited to the following:

- a. Product compliance with current PCRWRD technical specifications.
- b. Product conformance with current industry standards.
- c. Product safety.
- d. Product suitability for long-term use in the public sewer system.
- e. Product operation and maintenance (O&M) requirements.
- f. Product compatibility with O&M procedures used by PCRWRD.
- g. Product compatibility with other products used in the PCRWRD collection system.
- h. Product suitability as a cost-effective alternate to existing products.
- i. Product ability to fulfill a need not currently met.
- j. Product advantages/disadvantages versus major competitors or currently used products.
- k. Product repair/equipment inventory requirements.
- l. Cost impact for product change versus continued use of existing products.
- m. Availability of technical/operational support.
- n. Proprietary characteristics of the product.
- o. List of product approval by regional, state or municipal jurisdictions.
- p. Results of evaluation of the product by other jurisdictions.
- q. Supporting references from past users.
- r. History of the manufacture and use of the product.

5. TIMEFRAMES AND CONDITIONS

The PSC shall make every effort to complete their review in a timely fashion. However, there shall be no obligation to complete a review in any specific timeframe other than that which benefits PCRWRD and its rate payers.

Under normal circumstances, the goal of the PSC is to complete the Administrative Review within ten (10) business days and the Technical Review within sixty (60) calendar days. Products in Technical Review may be removed from consideration if the submitter fails to respond to requests for additional information within sixty (60) days.

In general, all but the most incidental new products shall be subjected to an operational test period of at least one (1) year. New product submitters are strongly advised to allocate sufficient time for the test period in their business plans. The parameters of specific product tests shall be established solely by the PSC based upon the product type. Product testing shall be arranged in a manner that is entirely conformable with the operational requirements of the conveyance system and shall be arranged at the discretion of the PCRWRD Deputy Director for Conveyance. Product testing shall be arranged to also consider the degree to which remediating a product failure would impact the conveyance system operation and the means by which remediation may be accomplished most efficiently.

In general, PCRWRD encourages the new product supplier to provide sufficient sample(s) of the product to PCRWRD for the purposes of testing in the conveyance system. If samples and technical support are not provided, PCRWRD can make no representations regarding the timeframe with which a product test may be conducted.

The approval of a product is limited to the stated models or conditions at the date of approval. Any product modifications shall require additional review and approval. Approval may be rescinded at any time by the PSC for sufficient cause such as poor material performance, unapproved design changes, changes in manufacturing process or inadequate product support services.

Products that are Not Approved may be reconsidered if the submitter can supply satisfactory additional information that may influence the reasons stated for the original decision. PCRWRD retains the right to decline approval of any product that is deemed to be incompatible with our current products or operational procedures. Furthermore, PCRWRD reserves the right to limit the number of approved products in a given classification based on need and efficiency.

Appeals to PSC decisions may be made to the PSC Chairman. Further appeals may be made to the Director of PCRWRD.



## Preface

- The List of Approved Products (LAP) is not an endorsement nor shall it be used for promotional purposes.
- The Pima County Regional Wastewater Reclamation Department (PCRWRD) is under no obligation to use the products listed in the LAP.
- The products listed in the LAP have been tested, evaluated, or examined under PCRWRD standards and have been found acceptable for use in the construction of public sanitary sewer systems.
- This list is believed to be accurate as of the date of posting. However, product specifications may change without notice. It is the Contractor's responsibility to verify that each product is suitable for the given application and complies with the requirements of the *PCRWRD Standard Specifications and Details for Construction* at the time of its intended use.
- PCRWRD makes no guarantee as to the availability of any products on the LAP. It is the Contractor's responsibility to verify product availability with sufficient lead-time to avoid project delays.
- Please refer to the current version of the PCRWRD Engineering Design Standards and the *PCRWRD Standard Specifications and Details for Construction* for applications that reference the LAP.
- PCRWRD reserves the right to update the LAP without prior notice.
- PCRWRD is not liable for any loss caused by use of LAP.
- A current LAP can be downloaded from the PCRWRD website or obtained from the PCRWRD Field Engineering Unit at 1313 South Mission Road, Tucson, Arizona 85713.
- The LAP is administered and maintained by the PCRWRD Field Engineering Unit. The LAP is updated based on recommendations made by the PCRWRD Product Selection Committee.
- Trade or manufacturer names which appear herein are cited because they are considered essential to the objectives of the list.
- Any questions concerning this publication or its use should be directed to:

**Attn: Product Selection Committee  
PCRWRD Field Engineering  
1313 South Mission Road  
Tucson, Arizona 85713  
(520) 724-2651 or [pcrwrpssc@pima.gov](mailto:pcrwrpssc@pima.gov)**

Pima County Regional Wastewater Reclamation Department  
**List of Approved Products for  
Sanitary Sewer Conveyance Facilities**

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**List of Approved Products for  
Sanitary Sewer Conveyance Facilities**

<b>A - Trenching and Earthwork</b>			
	<b>Product Description</b>	<b>Model</b>	<b>Manufacturer</b>
<b>A-1 GEOTEXTILES</b>			
A-1	Geotextile for Subsurface Drainage	Geotex® Nonwoven Geotextile	Propex Operating Company, LLC. 1110 Market Street, Suite 300 Chattanooga, TN 37402 USA 800-621-1273 <a href="http://www.propexglobal.com">www.propexglobal.com</a>
A-1	Geotextile for Subsurface Drainage	Mirafi®140N	TenCate Geosynthetics 365 South Holland Drive Pendergrass, GA 30567 706-693-2226 <a href="http://www.tencate.com">www.tencate.com</a>
<b>A-2 PIPE MARKING AND LOCATOR SYSTEMS</b>			
A-2	Electronic Marker Disk	EMS Disk Markers 80630000273, 80611303548	3M Infrastructure Protection Division 6801 River Place Blvd. Austin, TX 78726-9000 800-426-8688 <a href="http://www.3M.com/dynatel">www.3M.com/dynatel</a>
A-2	HCS Cap Housing for Electronic Marker Disk	GPK SMARTPlug PVC Fitting with EMS Disc Marker	GPK Products, Inc. 1601 43rd St. NW Fargo, ND 58102 800-437-4670 <a href="http://www.gpk-fargo.com">www.gpk-fargo.com</a>
A-2	Underground Marking Tape	Detectable Tape (5.0 mil)	Northtown Company PO Box 2064 Huntington Beach, CA 92647 800-972-7274 <a href="http://www.northtowncompany.com">www.northtowncompany.com</a>
A-2	Underground Marking Tape	Detectable Tape (5.0 mil)	Pro-Line Safety Products Company 1099 Atlantic Drive, Unit 1 West Chicago, IL 60185 800-554-3424 <a href="http://www.prolinesafety.com">www.prolinesafety.com</a>
A-2	Underground Marking Tape	Terra Tape® Detectable Warning Tape	Reef Industries, Inc. 9209 Almeda Genoa Rd. Houston, TX 77075 800-231-6074 <a href="http://www.reefindustries.com">www.reefindustries.com</a>
A-2	Box and Cover for Force Main Test Station	Brooks 1-RT Flush	Brooks Products 1850 S. Parco Ave. Ontario, CA 91761 909-947-7470 <a href="http://www.brooksproductsnw.com">www.brooksproductsnw.com</a>
A-2	Box and Cover for Force Main Test Station	Christy G05T Traffic Valve Box	Oldcastle Enclosure Solutions 1002 15th Street SW Auburn, WA 98001 800-421-1660 <a href="http://www.oldcastleenclosures.com">www.oldcastleenclosures.com</a>

**List of Approved Products for  
Sanitary Sewer Conveyance Facilities**

<b>B - Sanitary Sewer Pipe</b>			
	<b>Product Description</b>	<b>Model</b>	<b>Manufacturer</b>
<b>B-1: GRAVITY SEWER PIPE</b>			
B-1	Ductile Iron Pipe (DIP)	CL-350	McWane Ductile 2266 South Sixth St. Coshocton, OH 43812 740-622-6651 <a href="http://www.mcwaneductile.com">www.mcwaneductile.com</a>
B-1	Ductile Iron Pipe (DIP)	CL-350	US Pipe PO Box 10406 Birmingham, AL 35202 or Two Chase Corporate Drive Ste. 200 Birmingham, AL 35244 866-347-7473 <a href="http://www.uspipe.com">www.uspipe.com</a>
B-1	Ductile Iron Pipe (DIP)	CL-350	American 1501 31 <sup>st</sup> Ave. North Birmingham, AL 35207 205-325-7701 <a href="http://www.american-usa.com">www.american-usa.com</a>
B-1	Interior Corrosion Protection for Ductile Iron Pipe (DIP)	Novocoat SG 2500	ErgonArmor PO Box 1639 Jackson, MS 39215-1639 877-982-7667 <a href="http://www.ergonarmor.com">www.ergonarmor.com</a>
B-1	Interior Corrosion Protection for Ductile Iron Pipe (DIP)	Series 431 Perma-Shield PL	Tnemec 6800 Corporate Drive Kansas City, MO 64120-1372 800-TNEMEC1 <a href="http://www.tnemec.com">www.tnemec.com</a>
B-1	Interior Corrosion Protection for Ductile Iron Pipe (DIP)	Cured-in-Place Pipe (CIPP) (Refer to Section F)	
B-1	Centrifugally Cast Fiberglass Reinforced Polymer Mortar (CCFRPM) Pipe	CCFRPM	HOBAS Pipe USA 1413 Richey Road Houston, TX 77073 800-821-7715 <a href="http://www.hobaspipe.com">www.hobaspipe.com</a>
B-1	Glass-Fiber Reinforced Polyester (GRP) Pipe	GRP	Thompson Pipe Group-Flowtite 18585 Samuels Road Zachary, LA 70791 Phone: (225) 658-6166 <a href="http://www.flowtitepipe.com">www.flowtitepipe.com</a>
B-1	Polyvinyl Chloride Pipe (PVC)	Sani-21 SDR-35/SDR-26 C900 (DR-21 or lower)	Diamond Plastics Corporation 1212 Johnstown Road Grand Island, NE 68803 800-PVC-PIPE <a href="http://www.dpccpipe.com">www.dpccpipe.com</a>
B-1	Polyvinyl Chloride Pipe (PVC)	Gravity Sewer SDR-35, SDR-26 C900 (DR-21 or lower)	JM Eagle 5200 West Century Blvd.

**List of Approved Products for  
Sanitary Sewer Conveyance Facilities**

			Los Angeles, CA 90045 800-621-4404 <a href="http://www.jmeagle.com">www.jmeagle.com</a>
B-1	Polyvinyl Chloride Pipe (PVC)	Gravity Sewer SDR-35, SDR-26 C900 (DR-21 or lower)	Vinyltech Corporation 201 South 61 <sup>st</sup> Ave. Phoenix, AZ 85043 602-233-0071 <a href="http://www.vtpipe.com">www.vtpipe.com</a>
B-1	Polyvinyl Chloride Pipe (PVC)	Gravity Sewer SDR-35, SDR-26 C900 (DR-21 or lower)	North American Pipe Corporation 2801 Post Oak Blvd. Stu. 600 Houston, TX 77056 800-999-7473 <a href="http://www.northamericanpipe.com">www.northamericanpipe.com</a>
B-1	Gasket Fittings (PVC)	Trench Tough Plus SDR-35 Gasket Fittings	Multi Fittings 4507 LeSaint Court Fairfield, Ohio 45014 (513) 942-9910 <a href="http://www.multifittings.com">www.multifittings.com</a>
<b>B-2: FORCE MAINS</b>			
B-2	High Density Polyethylene Pipe (HDPE), DR-11 (Minimum)	DriscoPlex® PE4710	Performance Pipe 5085 West Park Blvd. Ste. 500 Plano, TX 75093 800-233-6495/972-599-6646 <a href="http://www.performancepipe.com">www.performancepipe.com</a>
<b>B-3: REPAIR COUPLINGS AND ADAPTERS</b>			
B-3	Compression Couplings	CC-441/442, FBE Coating	Smith-Blair, Inc. 30 Global Avenue Texarkana, AR 71854 800-643-9705 <a href="http://www.smith-blair.com">www.smith-blair.com</a>
B-3	Compression Couplings	Style 501 or RC501, FBE Coating	Romac Industries, Inc. 21919 20 <sup>th</sup> Avenue SE Bothell, WA 98021 800-426-9341 <a href="http://www.romac.com">www.romac.com</a>
B-3	Flexible Couplings	Flex-Seal, Adjustable/Reducing w/ 300 Series SS Worm Drive Clamps  (Use Requires Field Engineering Prior Approval)	Mission Rubber Company, LLC. 1660 Lesson Lane Corona, CA 92879 800-854-9991 <a href="http://www.missionrubber.com">www.missionrubber.com</a>
B-3	PVC Joint Adapter	SDR-35 Adapters Gasketed Molded Fittings	Specified Fittings, Inc. 164 W. Smith Road Bellingham, WA 98226 360-398-7700 <a href="http://www.specifiedfittings.com">www.specifiedfittings.com</a>
<b>B-4: OTHER PIPE RELATED COMPONENTS</b>			
B-4	Ductile Iron Pipe Fittings	C-153 Ductile MJ Fittings MJ Accessories (MJ Gaskets, T-Bolts & Nuts) C-110 Flanged Fittings	Sigma 700 Goldman Drive Cream Ridge, NJ, 08514 800-688-6230

**List of Approved Products for  
Sanitary Sewer Conveyance Facilities**

		Flange Accessories Packs (Flange Gasket, Bolts & Nuts)	<a href="#">Fittings   SIGMA Corporation</a>
B-4	Ductile Iron Pipe Fittings	Joint Restraints DIP Compact MJ Fittings MJ Accessories (MJ Gaskets, T-Bolts & Nuts) Flange Accessories Packs (Flange Gasket, Bolts & Nuts)	Star Pipe Products 4018 Westhollow Pkwy. Houston, TX 77082 800-999-3009 <a href="http://www.starpipeproducts.com">www.starpipeproducts.com</a>
B-4	Ductile Iron Pipe Fittings	C-153 Ductile MJ Fittings MJ Accessories (MJ Gaskets, T-Bolts & Nuts) C-110 Flanged Fittings Flange Accessories Packs (Flange Gasket, Bolts & Nuts) Joint Restraints DIP Series 1000 Tuf Grip DIP Series 1500 Tuf Grip PVC, DIP, & HDPE Series 2000 Tuf Grip PVC	Tyler Union 1501 W. 17 <sup>th</sup> St. Anniston, AL 36202 256-236-7601 <a href="http://www.tylerunion.com">www.tylerunion.com</a>
B-4	Casing Spacers/Insulators for Carrier Pipe	Calpico Model PX Galvanized: M-6, M-8, M-12 Stainless Steel: M-6-SS, M-8-SS, M-12-SS	Calpico Inc. 1387 San Mateo Ave. So. San Francisco, CA 94080 800-998-9115 <a href="http://www.calpicoinc.com">www.calpicoinc.com</a>
B-4	Casing Spacers/Insulators for Carrier Pipe and End Seals	DuoCon Centralizers Polyethylene	Advance Products & System, Inc. 108 Asset Ave. Scott, LA 70583 337-233-6116 <a href="http://apsonline.com/site">apsonline.com/site</a>
B-4	Casing Spacers/Insulators for Carrier Pipe and End Seals		CCI Pipeline Systems 1058 O'Neal Drive Breaux Bridge, LA 70517 800-867-2772 <a href="http://www.ccipipe.com">www.ccipipe.com</a>
B-4	Joint Restraining Systems	6500 Bell Restraint Harness PVC Joint Restraint 2000 PV Megalug PVC 1100 Megalug DIP 1500TD Tru-Dual Joint Restraint 1600TD Tru-Dual Joint Restraint 1700 Megalug Harness Joint Restraint	EBAA Iron, Inc. PO Box 877 Eastland, TX 76448 800-433-1716 <a href="http://www.ebaa.com">www.ebaa.com</a>
B-4	Joint Restraining Systems	600 Series Pipe Restraints RomaGrip Pipe Restraint PVC RomaGrip PVC Pipe Restraint	Romac Industries, Inc. 21919 20 <sup>th</sup> Avenue SE Bothell, WA 98021 800-426-9341 <a href="http://www.romac.com">www.romac.com</a>
B-4	Joint Restraining Systems	165 Bell-Lock Joint Restraint	Smith-Blair, Inc. 30 Global Avenue Texarkana, AR 71854

**List of Approved Products for  
Sanitary Sewer Conveyance Facilities**

			800-643-9705 <a href="http://www.smith-blair.com">www.smith-blair.com</a>
B-4	Joint Restraining Systems	Uni-Flange Series 1300-P Restraint for Sewer Pipe	The Ford Meter Box Company, Inc. 775 Manchester Avenue Wabash, Indiana 46992-0443 (260) 563-3171 <a href="http://www.fordmeterbox.com">www.fordmeterbox.com</a>
B-4	Joint Restraining Systems	PV-LOK Series PWP for DIP PV-LOK Series PWP for Bell Joint Restraint (CIOD)	SIGMA Corporation 700 Goldman Drive Cream Ridge, NJ 08514 800-688-6230 <a href="http://www.sigmaco.com">www.sigmaco.com</a>
B-4	Restrained Gaskets	Field Lok 350 Restraint Gaskets  (Non-Interior Epoxy Coated Ductile Iron Pipe Only)	US Pipe Two Chase Corporate Drive Suite 200 Birmingham, AL 35244 Phone (866) 347-7473 <a href="http://www.uspipe.com">www.uspipe.com</a>
B-4	Restrained Gaskets	Fast-Grip Restraint Gaskets  (Non-Interior Epoxy Coated Ductile Iron Pipe Only)	American Cast Iron Pipe Company 1501 31st Ave N. Birmingham, AL 35207 Phone (205) 325-7701 <a href="http://www.american-usa.com">www.american-usa.com</a>

**C – House Connection Sewer (HCS)**

	Product Description	Model	Manufacturer
<b>C-1: HCS-RELATED PRODUCTS</b>			
C-1	Gasket Sewer Fittings	SDR-35	Harco Harrington Corp. 3721 Cohen Place Lynchburg, VA 24501-5047 800-825-7094 <a href="http://www.harcofittings.com">www.harcofittings.com</a>
C-1	Gasket Sewer Fitting/ Solvent Weld Sewer Fitting	SDR-35	GPK Products, Inc. 1601 43rd St. NW Fargo, ND 58102 800-437-4670 <a href="http://www.gpk-fargo.com">www.gpk-fargo.com</a>
C-1	Stock Coupling Flexible Tap Saddles	4" ONLY	Fernco Inc. West 855 Linda Way Sparks, NV 89431 810-503-9000 <a href="http://www.fernco.com">www.fernco.com</a>
C-1	G-Series Gasket Sewer Fitting P-Series Solvent Weld Fitting	SDR-35 SDR-35	Royal Building Products 850 East Highway 77 Newburn, TN 38059 800-232-5690 <a href="http://www.royalbuildingproducts.com">www.royalbuildingproducts.com</a>
C-1	PVC Saddles	SDR-35 (8"x4" thru 12"x4")	GPK Products, Inc. 1601 43rd St. NW Fargo, ND 58102

**List of Approved Products for  
Sanitary Sewer Conveyance Facilities**

			800-437-4670 <a href="http://www.gpk-fargo.com">www.gpk-fargo.com</a>
C-1	PVC Saddles	SDR-35 (8"x4" thru 12"x4")	Harco Harrington Corp. 3721 Cohen Place Lynchburg, VA 24501-5047 800-825-7094 <a href="http://www.harcofittings.com">www.harcofittings.com</a>
C-1	PVC Saddles	SDR-35 (8"x4" thru 12"x4")	Royal Building Products 850 East Highway 77 Newburn, TN 38059 800-232-5690 <a href="http://www.royalbuildingproducts.com">www.royalbuildingproducts.com</a>
C-1	DIP/PVC Saddles	Style CB Sewer Saddle	Romac Industries, Inc. 21919 20th Avenue SE Bothell, WA 98021 800-426-9341 <a href="http://www.romac.com">www.romac.com</a>
C-1	Gasket Fitting and Solvent Weld Fittings	SDR-35 Gasket Fitting SDR-35 Solvent Weld Fittings	Multi Fitting 4507 LeSaint Court Fairfield, Ohio 45014 Phone (513) 942-9910 Fax (513) 942-9914 <a href="http://www.multifittings.com">www.multifittings.com</a>

<b>D - Sanitary Sewer Manholes</b>			
	<b>Product Descriptions</b>	<b>Model</b>	<b>Manufacturer</b>
<b>D-1: PRECAST MANHOLE COMPONENTS</b>			
D-1	Precast Manhole Sections		Jensen Precast 4801 E. Wyoming St. Tucson, AZ 85706 888-748-1698/520-748-1607 <a href="http://www.jensenprecast.com">www.jensenprecast.com</a>
D-1	Precast Manhole Sections		Hayden Concrete Products 7801 W. Tangerine Rd. Marana, AZ 85658 520-682-2528
D-1	Precast Manhole Sections		Olson Precast Company 2750 Marion Dr. Las Vegas, NV 89115 702-643-4371 <a href="http://www.olsonprecastcompany.com">www.olsonprecastcompany.com</a>
D-1	Precast Manholes	Armorock Polymer Concrete Manholes (Complete) in 48, 60, and 72-inch diameter sizes (Use Requires RWRD Prior Approval)	Armorock 14555 Spring Canyon Road Boulder City, NV 89006 702-824-9702 <a href="http://armorock.com/">http://armorock.com/</a>

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D-1	Prefabricated Manholes	Watertight, Closed-Bottom Fiberglass Manholes (Complete) in 48, 60, and 72-inch diameter sizes (Use Requires RWRD Prior Approval)	LF Manufacturing, Inc. (LFM) 5528 Easy Hwy. 290 Giddings, TX 78942 800-237-5791 <a href="http://www.lfm-frp.com/Products/Manholes">www.lfm- frp.com/Products/Manholes</a>
D-1	Precast/Prefabricated Manholes	Predl Manholes (Complete) w/polypropylene liner cast into concrete in 48, 60, and 72-inch diameter sizes (Use Requires RWRD Prior Approval)	Predl Systems North America Inc. 7520 Conrad Street Burnaby BC V5A 2H7 604-415-9944 <a href="mailto:predl.online@predlsystems.com">predl.online@predlsystems.com</a>
D-1	Joint Sealants for Precast Manhole Sections	Flexible Joint Gaskets ConSeal CS- 102 or CS-202	Concrete Sealants, Inc. 9325 State Route 201 Tipp City, OH 45371 800-332-7325 <a href="http://www.conseal.com">www.conseal.com</a>
D-1	Joint Sealants for Precast Manhole Sections	Polylok™ Butyl Sealant	Polylok™ Inc. 3 Fairfield Blvd. Wallingford, CT 06492 888-765-9565 <a href="http://www.polylok.com">www.polylok.com</a>
D-1	Joint Sealants for Precast Manhole Sections	RAM-NEK® BUTYL-NEK®	Henry Company 999 N. Sepulveda Blvd. Ste. 800 El Segundo, CA 90245 310-955-9200 <a href="http://www.us.henry.com">www.us.henry.com</a>
D-1	Frames and Covers	24-inch and 30-inch Diameter No. 00122402 No. 00122404 No. 00122401 No. 00201011/00201127 No. 00201011/00201129 No. 00201012/00201123	East Jordan Iron Works (EJ) 301 Spring Street East Jordan, MI 49727 800-874-4100 <a href="http://www.ejco.com">www.ejco.com</a>
D-1	Frames and Covers	24-inch and 30-inch Diameter Model 1264, 1296	Neenah Enterprises, Inc. 2121 Brooks Ave. Neenah, WI 54956 800-558-5075 <a href="http://www.nfco.com">www.nfco.com</a>
D-1	Frames and Covers	24-inch and 30-inch Diameter Model 1264, 1296	Deeter Foundry PO Box 29708 Lincoln, NE 68529 800-234-7466 <a href="http://www.deeter.com">www.deeter.com</a>
D-1	Manhole Steps	Prod: PS1-PF-SF Item# 004-501 Prod: PS1-DIS-DF Item# 004-506-DF Item# 004-516, Prod: PS3-PFC	M.A. Industries, Inc. 303 Dividend Drive Peachtree City, GA 30269 800-241-7761 <a href="http://www.maind.com">www.maind.com</a>
D-1	Manhole Steps		Lane International Corporation 10758 SW Manhasset Dr.

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			Tualatin, OR 97062 800-666-0076 <a href="http://www.laneinternational.com">www.laneinternational.com</a>
D-1	Adjustment Grade Rings	Pro Ring Adjustment Grade Rings (Use Requires RWRD Prior Approval and is limited to light traffic areas and 212 collars only)	Crete Specialty Products N16 W23390 Stone Ridge Drive, Suite A, Waukesha, WI 53188 Phone (800) 345-3764 Fax (262-542-0301 <a href="http://www.cretexseals.com">www.cretexseals.com</a>
<b>D-2: CURED-IN-PLACE MANHOLE COMPONENTS</b>			
D-2	Waterstop		Sika (AKA Green Streak) 3400 Tree Court Industrial Blvd. St. Louis, MO 63122 800-551-5145 <a href="http://www.usa.sika.com">www.usa.sika.com</a>
D-2	Waterstop		A-Lok Products, Inc. 697 Main Street Tullytown, PA 19007 800-822-2565 <a href="http://www.a-lok.com">www.a-lok.com</a>
D-2	Waterstop	Link-Seal® Modular Seal Model S-316 (EPDM)	GPT, An EnPro Industries Company 4990 Iris St. Wheat Ridge, CO 80033 303-988-1242 <a href="http://www.gptindustries.com">www.gptindustries.com</a>
D-2	Waterstop		Vertex Inc. 3956 Mogadore Industrial Parkway Mogadore, Ohio USA 44260-1201 Phone (330) 628-6230 <a href="http://www.vertexseals.com">www.vertexseals.com</a>
<b>D-3: INTERIOR CORROSION PROTECTION SYSTEMS</b>			
D-3	Interior Corrosion Protection Systems	Novocoat SC 1100 Primer Novocoat SL 100 Novocoat SG 2500	Ergon Armor PO Box 1639 Jackson, MS 39215-1639 877-982-7667 <a href="http://www.ergonarmor.com">www.ergonarmor.com</a>
D-3	Interior Corrosion Protection Systems	Raven 155 Primer Raven 405 Raven 405FS	Raven Lining Systems 13105 E. 61 <sup>st</sup> St. Suite A Broken Arrow, OK 74012 800-324-2810 <a href="http://www.ravenlining.com">www.ravenlining.com</a>
D-3	Interior Corrosion Protection Systems	Restokrete No. 208 Epoxy Filler Compound No. 209 Substrate Resurfacer No. F-121 SewerGard No. 210	Sauereisen 160 Gamma Drive Pittsburg, PA 15238 412-963-0303 <a href="http://www.sauereisen.com">www.sauereisen.com</a>
D-3	Interior Corrosion Protection Systems	HJ3 Carbon Fiber	HJ3 Advanced Composites for Infrastructure Repair 2440 W. Majestic Park Way



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			Tucson, AZ 85705 877-303-0453/520-322-0010 <a href="http://www.hj3.com">www.hj3.com</a>
D-3	Interior Corrosion Protection Systems	SprayWall (Use Requires RWRD Prior Approval)	Sprayroq, Inc. 4766 Grantswood Road Ste. 150 Irontdale, AL 35210 800-634-0504 <a href="http://www.sprayroq.com">http://www.sprayroq.com</a>
D-3	Interior Corrosion Protection Systems	C-120 Cement Sewer Shield 100 Sewer Shield 150	Environmental Coatings, LLC 4702 E. Virginia St. Mesa, AZ 85215 480-984-7608 <a href="http://www.sewershield.com">www.sewershield.com</a>
D-3	Interior Corrosion Protection Repair	Carboline Bitumastic 300M Coal Tar Epoxy (Use Requires Field Engineering Prior Approval)	Farwest Corrosion Control Company 12029 Regentview Ave. Downey, CA 90241 888-532-7937 <a href="http://www.farwestcorrosion.com">www.farwestcorrosion.com</a>
<b>D-4: INTERNAL DROP MANHOLE SYSTEMS</b>			
D-4	Internal Drop Manhole System	Inside Drop Bowls and SS Pipe Brackets	Reliner® /Duran Inc. 53 Mt. Archer Rd. Lyme, CT 06371 800-508-6001 <a href="http://www.reliner.com">www.reliner.com</a>
<b>D-5: NON-SHRINK GROUT</b>			
D-5	Non-Shrink Grout		L&M Construction Chemicals 14851 Calhoun Road Omaha, NE 68152 800-362-3331 <a href="http://www.lmcc.com">www.lmcc.com</a>
D-5	Non-Shrink Grout		Metalcrete Industries 4133 Payne Ave. Cleveland, OH 44103 800-526-5602 <a href="http://www.metalcreteindustries.com">www.metalcreteindustries.com</a>

<b>E - Pumping Stations</b>			
	<b>Product Description</b>	<b>Model</b>	<b>Manufacturer</b>
<b>E-1: SITE COMPONENTS</b>			
E-1	Exterior Paint-Coating Systems for Stucco, Masonry, Wood, and Metal Applications	Varies	Sherwin Williams 8450 E. Broadway Blvd. 85710 800-474-3794/520-298-5545 <a href="http://www.sherwin-williams.com">www.sherwin-williams.com</a>
E-1	Metal Framing System for Master Control Center	P3000, 1-5/8" Channel	Unistrut 2613 W. Birchwood Circle Mesa, AZ 85009 480-966-0049

**List of Approved Products for  
Sanitary Sewer Conveyance Facilities**

			swsales-az-nv.com <a href="http://www.unistrut.us">www.unistrut.us</a>
E-1	Safety Shower and Eyewash Systems	HAWS Model 8300FP	Haws Corporation 267 Winfield Circle Corona CA, 92880 951-371-8685 <a href="http://www.hawesco.com">www.hawesco.com</a>
<b>E-2: PUMPS</b>			
E-2	Duplex Submersible Wastewater Pumps	Varies	Flygt 1133 Westchester Avenue White Plains, NY 10604 914-323-5700 <a href="http://www.flygt.com">www.flygt.com</a>
E-2	Duplex Submersible Wastewater Pumps	Varies	Fairbanks Nijhuis 3601 Fairbanks Ave. Kansas City, KS 66106 913-371-5000 <a href="http://www.fairbanksnijhuis.com/">http://www.fairbanksnijhuis.com/</a>
<b>E-3: WET WELL COMPONENTS</b>			
E-3	Fixed Ladder Systems	Safrail™ Fiberglass Ladder and Cage Systems	Strongwell 400 Commonwealth Ave. Bristol, Virginia 24201 276-645-8000 <a href="http://www.strongwell.com">www.strongwell.com</a>
E-3	Level Transducer	XPS-10/15 F Series	Siemens International 1954 Technology Drive Post Office Box 4225 Peterborough, Ontario K9J 7B1 705-745 2431 <a href="http://www.automation.siemens.com/w1/smpi-peterborough-home-11834.htm">http://www.automation.siemens.com/w1/smpi-peterborough-home-11834.htm</a>
E-3	Access Hatches	Aluminum, Stainless Steel, Single and Double Leafs	The Bilco Company PO Box 1203 New Haven, CT 06505 203-934-6363 <a href="http://www.bilco.com">www.bilco.com</a>
E-3	Access Hatches	Aluminum, Stainless Steel, Single and Double Leafs	Halliday Products Inc. 6401 Edgewater Drive Orlando, Florida 32810 800-298-1027 <a href="http://www.hallidayproducts.com">www.hallidayproducts.com</a>
E-3	Concrete Fasteners Inside Wet Wells	KB-TZ SS316 stainless steel expansion anchor	Hilti, Inc. 5400 South 122nd East Avenue Tulsa, OK 74146 800-879-8000 <a href="http://www.us.hilti.com">www.us.hilti.com</a>

**List of Approved Products for  
Sanitary Sewer Conveyance Facilities**

E-4: MANIFOLD PUMPING COMPONENTS			
E-4	Exterior (Non-Immersion) Coating for Exposed Metal Piping (Vents and Manifolds)	Primer Coat: Devran 224HS Finish Coat: Devthane 379H	International Paint Pittsburg Airport Bus. Park Bldg 1 Suite 140, 181 Spring Run Rd Coraopolis, Pittsburgh, PA 15108 724-457-7657 <a href="http://www.international-pc.com">www.international-pc.com</a>
E-4	Exterior (Non-Immersion) Coating for Exposed Metal Piping (Vents and Manifolds)	Primer/Intermediate Coat: Series 66 HS HiBuild Epoxoline Finish Coat: Series 1095 Endurashield	Tnemec 6800 Corporate Drive Kansas City, MO 64120 <a href="http://www.tnemec.com">www.tnemec.com</a>
E-4	Bypass Port Connection – Cam and Groove Quick Disconnect	Kamlok Coupling, Type 316 Stainless Steel Metal	OPW Engineered Systems 2726 Henkle Drive Lebanon, Ohio 45036 800-547-9393 <a href="http://www.opwglobal.com">www.opwglobal.com</a>
E-4	Pig Launching Cap-Grooved Coupling	AGS Flexible Coupling	Victaulic 4901 Kesslersville Road Easton, PA 18040 610-559-3300 <a href="http://www.victaulic.com">www.victaulic.com</a>
E-5: VALVES			
E-5	Air Valves	Wastewater Air/Vacuum Valves (SS D-20)	A.R.I. Optimal Flow Solutions MINA Southwest (Contact) <a href="mailto:cristi@simasw.com">cristi@simasw.com</a> (Arizona) 480-226-6480 877-536-6201 <a href="http://www.ariusa.com/">http://www.ariusa.com/</a>
E-5	Check Valves	7800 Swing Check Valve	Val-Matic Valve & Manufacturing Corporation 905 Riverside Dr. Elmhurst, IL 60126 630-941-7600 <a href="http://www.valmatic.com">www.valmatic.com</a>
E-5	Check Valves	APCO Rubber Flapper Swing Check Valves (CRF), APCO Swing Check Valves (CVS)	DeZURIK 250 Riverside Avenue North Sartell, MN 56377 320-259-2000 <a href="http://www.dezurik.com">www.dezurik.com</a>
E-5	Isolation Valves	DeZURIK 100% Port Eccentric Plug Valves (PEF)	DeZURIK 250 Riverside Avenue North Sartell, MN 56377 320-259-2000 <a href="http://www.dezurik.com">www.dezurik.com</a>
E-5	Isolation Valves	DeZURIK GKU Unidirectional Knife Gate Valves	DeZURIK 250 Riverside Avenue North Sartell, MN 56377 320-259-2000

**List of Approved Products for  
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			<a href="http://www.dezurik.com">www.dezurik.com</a>
E-6: INSTRUMENTS AND CONTROLS			
E-6	Magnetic Flow Meters	ProcessMaster FEP300	ABB 4050 East Cotton Center Blvd Phoenix, AZ 85040 800-435-7365 <a href="http://www.new.abb.com">www.new.abb.com</a>
E-6	Pressure Gauges	Solfrunt® 4.5" Model 1980, Liquid Filled	Ametek U.S. Gauge 205 Keith Valley Road Horsham, PA 19044 215-674-1234 <a href="http://www.ametekusg.com">www.ametekusg.com</a>
E-6	Pressure Gauges	Duragage Pressure Gauges – 4.5" Diameter	Ashcroft Inc. 250 East Main Street Stratford, CT 06614-5145 800-328-8258 <a href="http://www.ashcroft.com">www.ashcroft.com</a>
E-6	Pressure Gauges	4.5" Diameter Analog Gauge	Perma-Cal Industries, Inc. 1742 Orbit Way Minden, NV 89423-4114 800-991-1357 <a href="http://www.perma-cal.com">www.perma-cal.com</a>
E-6	Pressure Gauges/Annular Seal	Red Valve Series 40, 0-100 psi, Buna-N sleeve	Red Valve Company 600 N. Bell Ave. Bldg. 2 Carnegie, PA 15106 412-279-0044 <a href="http://www.redvalve.com">www.redvalve.com</a>
E-6	Pump Station Control Panel Box	NEMA Type 4X	Norberg 4237 S. 74th Ave Tulsa, OK 74145 800-739-9145 <a href="http://www.nema7.com">www.nema7.com</a>
E-6	Pump Station Control Panel Box	NEMA Type 4X	Hoffman 2700 Boradvent Parkway NE Albuquerque, NM 87107 505-343-9580 <a href="http://www.hoffmanonline.com">www.hoffmanonline.com</a>

F – Cured-In-Place Pipe (CIPP)			
	Product Description	Model	Manufacturer
F-1: CIPP			
F-1	Cured-in-Place Pipe (CIPP)	Insituform® CIPP	Insituform® 645 W. 24 <sup>th</sup> Street, Suite 200 Tempe, AZ 85282 480-446-0620 <a href="http://www.insituform.com">www.insituform.com</a>
F-1	Cured-in-Place Pipe (CIPP)	CIPP	SAK Construction, LLC. 864 Hoff Road

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Sanitary Sewer Conveyance Facilities**

			O'Fallon, MO 63366 636-385-1000 <a href="http://www.sakcon.com">www.sakcon.com</a>
F-1	Cured-in-Place Pipe (CIPP)	CIPP (UV-Cured) (42-inch Diameter Host pipe maximum)	Reline America 116 Battleground Ave. Avenue Saltville, VA 24370 866-998-0808 <a href="http://www.relineamerica.com">www.relineamerica.com</a>