

**Ben A. Stephenson, P.E.**  
Section Manager  
Wastewater Design Section  
Dallas Water Utilities  
City of Dallas, Texas



November 2, 2009

Mr. Joseph R. Cherry  
Sales Manager  
ConShield Technologies, Inc.  
541 Tenth Street NW #233  
Atlanta, GA 30318-5713

Ref: ConShield Concrete Additive

Dear Mr. Cherry

The following letter concerns the recent request you and your company made to the City of Dallas Water Utilities Department regarding the use of the ConShield Biotech Armor for Concrete.

On Thursday, October 8, 2009, this product was presented to the DWU Wastewater Materials Review Committee by Mr. Steve Henning, MS Env Sc, Manager Technical Development, ConShield Technologies, Inc.

We offer the following comments:

1. DWU Wastewater Collections group is interested in this product.
2. Because of the recent introduction of the ConShield Product, we are concerned about the product's longevity and will be taking a cautious stance on final approval of the product.

However, after a review of the literature provided and doing our own research, DWU is prepared to take the following actions:

1. The Materials Review Committee is willing to allow the ConShield product, used as an additive to concrete in the production of precast manholes, to be installed in lieu of the usual requirement of lining sanitary sewer manholes, for a period of up to two (2) years or a maximum of 50 manholes, whichever comes first. At the end of a two-year period, or when 50 separate manholes have been installed, the product will again be evaluated in terms of installation and performance. If the product is deemed acceptable, the *ConShield* product will be placed on the Approved Materials List for Wastewater products.

2. There are a few conditions regarding the acceptance of this product:
  - a. The manhole sections are stamped with some type of seal indicating to our inspectors that the ConShield product has been included at the plant and are an integral part of the concrete.
  - b. We will require certified paper work from the manufacturing plant indicating that the ConShield product has been included in the manufacture of the precast manholes. This paper work must be included with the usual material delivered with the product.
  - c. We strongly suggest that an additive be included that will cause the concrete to turn a distinctive color so our inspectors will be able to tell at a glance that the additive is present.

Although the Dallas Water Utilities is willing to authorize the use of the ConShield product under the conditions mentioned above, as an approved equal (subject to the above considerations), to the Raven Lining System 405, neither the City of Dallas nor the Dallas Water Utilities will take an active roll in requesting that a contractor use this material. It is the responsibility of the Supplier, Vendor, Manufacturer, or other interested parties to approach existing Contractors and obtain agreements for the use and installation of this product. All existing, applicable contract requirements must be met, including warranty periods.

Congratulations, Dallas Water Utilities is looking forward to working with you regarding this product.

Should you have any questions, please feel free to call.

Sincerely



Ben A. Stephenson, P.E.  
Senior Engineer / Section Manager  
Wastewater Design Section.

CC: Steve Henning, MS Env SC, ConShield Technologies, Inc.  
Hugh Martin, P.E., Hanson Pipe and Precast.  
Rodney Newman, DWU Wastewater Collections  
Jimmy Partain, P.E., DWU Distribution  
Zach Peoples, DWU Wastewater Collections  
Michael Hines, P.E., DWU Capital Improvements