



North Carolina Department of Environment and Natural Resources  
Division of Waste Management

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Director

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Secretary

UST SECTION  
January 28, 2011

Charles A. Frey, Jr.  
Highland Tank & Manufacturing Company  
4535 Elizabethtown Road  
Manheim, PA 17545

**Subject:** Highland Double-Wall Titan (Steel Jacketed), ACT-100 U and Highguard (Steel/Polyurethane) Tanks (550 to 20,000 gallon capacities)

Dear Mr. Frey:

Pursuant to your request, The North Carolina Department of Environment and Natural Resources (NCDENR) – Underground Storage Tank (UST) Section has reviewed the proposed interstitial monitoring that was submitted on January 11, 2011 (received 01/13/11). Based on the submitted information, it appears that the subject tanks will comply with the electronic liquid detecting sensor requirements in 15A NCAC 02N.0901 and .0903, providing that the following conditions are maintained:

1. The Veeder Root Position-Sensitive #794380-323 sensor must be installed in accordance with the Highland Tank “Interstitial Leak detection Sensor Installation” instructions, dated 11/11/2010. These instructions must be provided to all customers/contractors that install the subject tanks in North Carolina. Additionally, a standard tank cross-section detail must be submitted with UST-6A (Pre-Installation) applications for review of installation plans for the subject tanks. Tank owners or operators must test the sensor and maintain written records in accordance with the manufacturer’s guidelines and 15A NCAC 02N.0901. The Post-Installation and annual operability checks must also include documentation of the “Sensor Out” alarm and “normal” conditions for this sensor.
2. Periodic integrity testing of the tank interstitial space must be conducted, in accordance with the “Evaluation of the Highland Tank Periodic Interstitial Vacuum Test Procedure for Double-Wall Underground Tanks”, prepared for Highland Tank and Manufacturing Company, Inc., by Ken Wilcox Associates, Inc (KWA) on 12/20/2010 and written records maintained, as required by 15A NCAC 02N.0903. Periodic integrity testing must be conducted before UST system start-up, between six months and the first anniversary of start-up and every three years thereafter. Testing must be done in accordance with the procedures and test durations specified in Table 1 of the submitted Highland Tank “Periodic Interstitial Test Procedure”, based on specific tank sizes listed in the aforementioned KWA Report. These procedures must be provided to all customers/contractors that install the subject tanks in North Carolina. Note that the test method is NOT approved for tanks containing biodiesel fuels (biodiesel content greater than 20%) or alcohol/gasoline blends greater than 10%, or for tank volumes greater than 20,000 gallons, or for sti-P3 tanks.

Be advised that any tanks, monitoring equipment or testing procedures that are not specifically listed herein must be separately evaluated by this Department for compliance with the applicable regulations prior to its use. Feel free to contact me if you have any questions regarding this letter.

Sincerely,

Robert E. Johns, P.E.  
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