



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

Pat McCrory  
Governor

Dexter R. Matthews  
Director

John E. Skvarla III  
Secretary

Carl Greer  
Service Welding & Machine Company, Inc  
700 E. Main Street  
Louisville, KY 40202

January 15, 2014

**Subject:** Service Welding Double-Wall Steel Jacketed Permatanks (550 to 20,000 gallons)

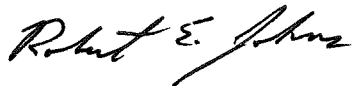
Dear Mr. Greer:

Pursuant to your request, The North Carolina Department of Environment and Natural Resources (NCDENR) – Underground Storage Tank (UST) Section has reviewed the revised test data that was submitted on January 13, 2014. It is our understanding that this report was revised to include test volumes for a 15,000 gallons, 96” diameter tank and 3” monitoring tubes for all listed tanks. Based on the submitted information, as well as interstitial monitoring instructions previously submitted by Veeder-Root and Franklin Fueling, 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 #794380-323 or Franklin Fueling TSP-DMS-12 Position-Sensitive sensors are installed in accordance with the respective manufacturer’s written instructions. A standard tank cross-section detail (or a notation on the design plans) shall also be submitted with the UST-6 Pre-Installation application, which indicates the appropriate monitoring tube diameter for these sensors. Tank owners or operators will need to test the sensors and maintain written records in accordance with the manufacturer’s guidelines and 15A NCAC 02N.0901. The annual operability check shall also include documentation of the respective “Sensor Out” (or “Installation Error”) alarm and “normal” (or “OK”) conditions for these sensors.
2. Periodic integrity testing of the tank interstitial space is conducted, in accordance with the “Evaluation of the Permatank Interstitial Monitor for Detection of Liquid Leaks”, prepared for the Steel Tank Institute, as revised by Ken Wilcox Associates, Inc (KWA) on 11/22/2013 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. This testing must be done in accordance with the Specific Test Procedure on Page 15 of the KWA Report and for the longest duration specified for the specific tank size on Table 1 of the KWA Report.

The aforementioned instructions and procedures should be provided to all customers/contractors that install/test the subject tanks in North Carolina. Note that the KWA revised test method included the larger monitoring tube volume calculations for listed 550-20,000 gallons tanks. Therefore, this evaluation does NOT include other tanks not specifically listed in the KWA Evaluation, tanks containing biodiesel fuels (biodiesel content greater than 20%) or alcohol/gasoline blends greater than 10%. 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,

A handwritten signature in black ink that reads "Robert E. Johns". The signature is written in a cursive style with a long, sweeping underline.

Robert E. Johns, P.E.  
Underground Storage Tank Section  
Phone & Fax: 919 707-8162  
E-mail: [Robert.Johns@ncdenr.gov](mailto:Robert.Johns@ncdenr.gov)

cc: Lorri Grainawi, STI  
Ken Wilcox, KWA