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February 5, 2009

Mr. Jim Gwyn, Jr.  
City of High Point  
211 S. Hamilton Street  
High Point, NC 27261  
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**Re: Proposed Treatability Test - Photo-Cat Pretreatment Process  
Ground Water Remediation Project  
Seaboard Chemical Corp./Riverdale Drive Landfill Site  
High Point, North Carolina**

*Via Email*

Dear Jim:

On behalf of the Seaboard Group II and the City of High Point (the Parties), ERM is providing this overview of the proposed treatability test of the Photo-Cat pretreatment system at the referenced site.

The NCDENR-approved remediation plan for the former Seaboard Chemical/Riverdale Drive Landfill site includes a ground water pump and treat system. In accordance with an administrative agreement with the NCDENR, extracted ground water and landfill leachate will be pre-treated by an advanced oxidation process (AOP) technology to remove contaminants, primarily chlorinated VOCs, prior to discharge by permit to the POTW. An AOP technology being considered for the pre-treatment system is the Photo-Cat treatment process by Purifics ES Inc. An on-site pilot test program is planned using a mobile Photo-Cat treatment system in order to validate and optimize its performance and obtain the necessary test data for full-scale design. The on-site pilot test will be conducted for a 1-month period. Mobilization to the site is tentatively scheduled to begin on or about February 23, 2009.

The pilot test plan consists of pumping ground water from existing on-site recovery well PW-DR1 at a rate of approximately 10 gpm. A small amount (<1 gpm) of landfill leachate from an existing leachate collection tank may also be mixed with the ground water for the treatment test. The extracted ground water and leachate will be conveyed to the mobile Photo-Cat system through underground HDPE

pipings that was previously installed at the site as part of the remediation system. The pretreated effluent from the mobile system will be conveyed via existing underground HPDE piping to the City's Riverdale Pump Station and then to the East Side Wastewater Treatment Plant for treatment prior to discharge.

The Photo-Cat treatment is a photocatalytic oxidation process that utilizes ultraviolet light and a titanium dioxide catalyst to generate hydroxyl radicals for oxidation of the contaminants. The mobile Photo-Cat treatment system will be integrated with an air stripper and proprietary non-chemical iron removal module.

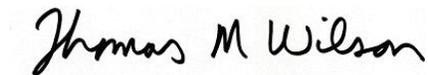
The mobile Photo-Cat system is contained in a trailer that will be set-up in the vicinity of the maintenance garage at the landfill site. Set-up consists of assembling the air stripper/metals removal module and necessary controls to the base Photo-Cat unit, making the necessary electrical connections, and running influent and discharge piping to the appropriate locations to connect with the existing underground HDPE piping.

Purifics staff personnel will conduct the pilot system set-up procedure and the initial start-up and monitoring of the system operation. The mobile Photo-Cat system is equipped to operate autonomously (with remote monitoring capability). It is equipped with PLC controls to regulate pressure and flow. Purifics will prepare a test plan and provide training in operating procedures and safety related data. ERM personnel will support Purifics with part-time monitoring of the pilot system during the 1-month operating period. Monitoring will include observation of operational parameters (i.e. flow rates), general inspection of equipment and piping runs, and collection of influent and effluent samples for chemical analyses for performance monitoring. A test report will be prepared by Purifics to present the results of the pilot testing and recommendations for the full-scale system. If the Photo-Cat technology is selected for the remediation system, the test report will be included with the final engineering design documents in the pre-construction report for submittal to the NCDWM.

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Please contact Jim LaRue (281-431-3571) or me by February 12<sup>th</sup> if there are any questions or concerns or if you need additional information regarding the planned pilot test. The tentative start-up date for the test is the week of February 23<sup>rd</sup>.

Sincerely,

A handwritten signature in black ink that reads "Thomas M. Wilson". The signature is written in a cursive style with a light blue shadow effect behind the text.

Thomas M. Wilson, P.G.

Cc: Chris Thompson - City  
John Hodges - City  
Vance Jackson - NCDWM  
Jackie Drummond - NCDWM  
Jim LaRue - Southwestern Env.  
Gary Babb - Babb & Assoc.