



MARYLAND DEPARTMENT OF THE ENVIRONMENT
Oil Control Program, Suite 620, 1800 Washington Blvd., Baltimore MD 21230-1719
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Larry Hogan
Governor

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Lieutenant Governor

July 22, 2015

Mr. Kenneth D. Kozel
President and CEO
Shore Regional Health
219 South Washington Street
Easton MD 21601

RE: APPROVAL FOR REVISED 2015 ACTION PLAN
Case No. 1987-2534-KE
Chester River Hospital Center
100 Brown Street, Chestertown
Kent County, Maryland
Facility I.D. No. 3168

Dear Mr. Kozel:

The Maryland Department of the Environment's Oil Control Program, in consultation with the Underground Injection Control Program and the Water Supply Program, has completed a review of the *Groundwater Remediation Proposed 2015 Action Plan – Response Letter* – April 24, 2015, which outlines the revised proposal to implement a full scale surfactant assisted liquid phase hydrocarbons (LPH) recovery plan. The letter also provides clarifications and other requested information as a response to the Department's March 27, 2015, letter.

In the response letter, Shore Regional Health (the Hospital), through its consultants, responded to the Department's concerns regarding the proposed full scale plan by clarifying and/or revising the original plan. The major points are as follows:

- The current treatment system will remain on during the entirety of the remediation plan implementation. This will ensure that the current hydraulic controls remain in place as a backup to the aggressive "Pull" events.
- The current treatment system, including the contaminant removal filtration process (i.e. the Mycelx filters), has been evaluated by both your professional engineer charged with running the system and the manufacturer of the filters to ensure the system can handle both the additional volume of impacted water and the mixture of surfactant and oil contaminants. While the current setup was sufficient to handle the additional volume, the treatment system will be upgraded with additional filter media per the manufacturer's recommendations to ensure that the treated effluent meets the current National Pollution Discharge Elimination System (NPDES) permit requirements.

- It is also noted that due to the additional proposed discharge volume, the effluent from the treatment system will need to be sampled twice per month per the current NPDES permit requirements.
- The revised plan does not include treatment at any of the previously proposed wells south of Brown Street except for MW-20. In that particular location only a 24-hour residence time will be allowed between the "Push" and the "Pull" events.
- Because total petroleum hydrocarbons in the gasoline range (TPH-GRO) have been infrequently detected and when they are detected, there are volatile organic compound detections (e.g. xylenes), the Department agrees that TPH-GRO can be omitted from the sampling requirements.

The Department hereby approves the proposed plan as revised in the April 24, 2015, letter from the Hospital, through its consultants, for immediate implementation, with the following modifications:

- Upon completion of each priority zone and before moving to the next priority zone, the Hospital must receive the Department's agreement to begin the injection process in the next zone.
- If there are contaminant detections of concern to the Department south of Brown Street during any phase of the injection process, the plan implementation must cease immediately and pumps will be placed in down gradient monitoring wells as directed by the Department to control contaminant migration. In the event that this contingency is necessary, additional engineering evaluation and discussions will take place to determine the next prudent steps.
- During quarterly sampling of the monitoring wells, analysis for surfactants (EPA Method 5540D) must be included. The surfactant analysis is to be included in quarterly sampling events once the injections have ceased and continue until the surfactant is no longer detected by laboratory analysis.
- Following implementation of the entire plan, the Department will require a minimum of one year post-remedial monitoring prior to discussing case closure. The post-remediation monitoring may not begin until, at a minimum, it has been analytically demonstrated that all surfactant has been purged from the formation (i.e. through the quarterly sample analysis using EPA Method 5540D). Further, the pump and treat system will be required to remain on until the Department issues written approval that the system may be turned off. The post-remedial monitoring may be extended pending review of data.
- The Wastewater Permits Program, which implements the Underground Injection Control Program, has determined the proposed injection wells will be permitted by rule under its delegated authority from the Environmental Protection Agency. This approval letter serves as documentation of the rule authorization.

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Please provide the Department five working days advance notice of the beginning of field activities. As proposed, provide ongoing updates and progress reports to the Department. If you have any questions, please contact me at 410-537-3470 (email: chris.ralston@maryland.gov) or the case manager, Ms. Susan Bull, at 410-537-3499 (email: susan.bull@maryland.gov).

Sincerely,



Christopher H. Ralston, Administrator
Oil Control Program

cc: Mayor Chris Cerino (Town of Chestertown)
Mr. Bill Ingersoll (Town of Chestertown)
Mr. Bob Sipes (Town of Chestertown)
Mr. Michael Forlini, Esquire (Funk & Bolton, PA)
Mr. John Beskid (Kent County Health Dept.)
Mr. Dane Bauer (H&B Solutions, LLC)
Mr. James Sines (EBA Engineering, Inc.)
Mr. Michael Powell, Esquire (Gordon-Feinblatt, LLC)
Mr. Horacio Tablada
Ms. Virginia Kearney
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Mr. Michael Eisner
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CHR/srb