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## Central Valley Regional Water Quality Control Board

June 9, 2016

Mr. Kevin Garon, Senior Project Director  
The Chemours Company FC, LLC  
6324 Fairview Road, Suite 200  
Charlotte, NC 28210

***NOTICE OF TERMINATION FOR GENERAL ORDER NO. R5-2008-0149-052,  
PLUME 1 IN-SITU REMEDIATION PILOT TEST, CHEMOURS OAKLEY SITE, 6000  
BRIDGEHEAD ROAD, OAKLEY, CONTRA COSTA COUNTY***

On September 2, 2014, the Executive Officer of the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) issued a Notice of Applicability under Order No. R5-2008-0149, *In-Situ Groundwater Remediation at Sites with Volatile Organic Compounds, Nitrogen Compounds, Perchlorate, Pesticides, Semi-Volatile Compounds, Hexavalent Chromium and/or Petroleum Hydrocarbons* to E.I. du Pont de Nemours and Company for its Oakley facility. In the Notice of Applicability, the project was assigned site-specific Order No. R5-2008-0149-052. A revised Notice of Applicability was issued on January 27, 2015 to reflect a change of name of DuPont's performance chemical business to The Chemours Company FC, LLC, which became an independent company with no ties to DuPont in July 2015.

The Plume 1 pilot test began in September 2014 and consisted of a recirculation system with two treatment cells designed to extract groundwater through zero-valent iron and sand in one cell, amend the groundwater with sodium lactate, and then re-inject it into a second cell for enhanced biodegradation. Target pollutants included carbon tetrachloride, chloroform, dichloromethane, tetrachloroethene, CFC-113, and CFC-11. Over the course of the pilot test, a total of approximately 5,200 gallons of groundwater amended with approximately 120 kilograms of sodium lactate was injected into the second cell at flow rates ranging from 23 to 65 milliliters per minute. Commercially available microbial cultures were also added into the treatment cell after anaerobic conditions were established. The pilot test was shut down in October of 2015. The May 2, 2016 *Plume 1 Pilot Test Quarterly Monitoring Report* prepared by Parsons on behalf of Chemours requested that Order No. R5-2008-0149-052 be rescinded since the pilot test had concluded and no further operation of the recirculation system is planned.

Central Valley Water Board staff reviewed the remediation data provided in the *Plume 1 Pilot Test Quarterly Monitoring Report*. Over the course of the pilot test, methane, dissolved organic carbon, ferrous iron, manganese, carbon dioxide, alkalinity, and electrical conductivity increased in the monitoring well located immediately downgradient of the injection treatment cell (EAB-MW-3). Approximately 6 months after completing the pilot test, monitoring well EAB-MW-3 sampling results demonstrated methane, dissolved organic carbon, electrical conductivity, oxidation reduction potential and dissolved oxygen returning to background conditions. Given the low amount of groundwater amended during the course of the pilot test and the recent sample results showing a return to background geochemical conditions, Central Valley Water Board staff concur with Chemour's request to terminate enrollment.

General Order No. R5-2008-0149-052 is hereby terminated as of the date of this letter. If you have any questions, please contact Nathan Casebeer by telephone at (916) 464-4665, or by email at [Nathan.Casebeer@waterboards.ca.gov](mailto:Nathan.Casebeer@waterboards.ca.gov).

**ORIGINAL SIGNED BY ANDREW ALTEVOGT FOR**

PAMELA C. CREEDON  
Executive Officer

cc: Ms. Della Kramer, Regional Water Quality Control Board, Rancho Cordova  
Ms. Carolyn Tatoian-Cain, Department of Toxic Substances Control, Sacramento  
Ms. Linda McGlochlin Wolff, Parsons, Walnut Creek