

# ADEQ

ARKANSAS  
Department of Environmental Quality

**JAN 07 2019**

John M. Carver  
Vice President Safety & Environmental Compliance  
El Dorado Chemical Company  
P.O. Box 1373  
Oklahoma City, Oklahoma 73101

RE: AFIN: 70-00040; CAO LIS 06-153; former permit no. 0177-W  
2015 Annual Groundwater Report for El Dorado Chemical Company  
El Dorado, Union County

Dear Mr. Carver:

A review of our records revealed that the Department did not have a copy of the response letter for the March 28, 2016 El Dorado Chemical Company (EDCC) 2015 Annual Ground Water Report (Report). We are sending this letter in order to ensure that all reports have been addressed by the Department and that all records are complete.

This report was reviewed in April 2016 along with additional information submitted April 18 and 20, 2016 in accordance with Consent Administrative Order (CAO) LIS 06-153 Condition 4 and in accordance with letters regarding sampling requirements dated October 2005, June 2007, September 2009, and July 2011. This report and additional information summarized the groundwater sampling events conducted in May and June of 2015 with the exception of well EDCC-14, which was covered in water at that time. EDCC-14 was sampled in September 2015 once it was accessible.

The Department reviewed the Report and agreed that the mid-gradient and down-gradient wells that were sampled during these sampling events showed contaminant levels similar or within the same order of magnitude as previously-collected background well data. Over time contaminant levels in these wells have shown a decreasing trend. The highest concentrations at the wells nearest the recovery wells had significantly increasing trends over time, (approximately one order of magnitude greater than the down gradient well values within the production area). This indicated that the recovery wells were controlling the production area ground water and keeping these contaminants from migrating out of the production area. However, some of the down-gradient wells showed ammonia levels greater than 0.55 mg/L (as listed in the Remedial Action Work Plan) in recent years. Since several of the downgradient wells were not sampled in 2015, at the time of this report no final determination could be made as to the effectiveness of the remedial wells in the downgradient area of the facility. Shutting off the recovery wells could likely result in the down-gradient movement of contaminants.

EDCC should continue operating the recovery wells and should continue the current sampling and analysis schedule in accordance with the conditions and requirements of the sampling protocol outlined in Consent Administrative Order (CAO) LIS 06-153 and the subsequent sampling requirement letters listed above.

Please note that all EDCC's groundwater remediation reports should be sent to:

Linda Hanson, P. G.  
Office of Water Quality-Permits  
5301 Northshore Drive  
North Little Rock, AR 72218-5317

Also please include the following information in the regards section of your report cover letters and any other correspondence to the Office of Water Quality:

AFIN: 70-00040; CAO LIS 06-153; former permit no. 0177-W

This information helps the Department track documents and expedite responses to submittals.

Please note that in the event additional information becomes available, the Department reserves the right to change the monitoring requirements.

Please contact Linda Hanson, P.G. at 501.682.0646 or at [hanson@adeq.state.ar.us](mailto:hanson@adeq.state.ar.us) if you have any questions pertaining to this letter.

Sincerely,



Bryan Leamons, Senior Operations Manager  
Office of Water Quality

BL:lh

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File (CAO LIS 06-153; AFIN: 70-00040)