

BOBBY JINDAL GOVERNOR

State of Louisiana department of natural resources Office of Conservation

STEPHEN CHUSTZ
INTERIM SECRETARY

JAMES H. WELSH
COMMISSIONER OF CONSERVATION

November 14, 2012

Mr. Mark Cartwright Texas Brine Company, L.L.C. 4800 San Felipe Houston, TX 77056

Re: November 9, 2012 Alluvial Aquifer Monitoring and Evaluation Plan

October 11, 2012 Third Amendment to Declaration of Emergency and Directive, Directive No. 7

November 14, 2012 Shaw Environmental & Infrastructure, Inc. Aguifer Chloride Migration Evaluation Report

Dear Mr. Cartwright:

On November 13, 2012, Office of Conservation and Shaw Environmental & Infrastructure, Inc. completed review of the referenced Texas Brine Company, L.L.C. (TBC) alluvial aquifer monitoring and evaluation plan and provided email notification stating results of review which is provided in italics below.

The Agency agrees with and approves of the locations of aquifer monitoring wells depicted in Figure 1 of the November 9, 2012 work plan. The wells shall be installed in a manner meeting all applicable regulatory requirements and shall function to provide acceptable data meeting the directive "to evaluate alluvial aquifer water production, groundwater flow, sinkhole chlorides, TDS and hydrocarbon migration." Accordingly, Texas Brine Company shall take the necessary actions to install monitoring wells at the locations depicted in Figure 1 of the November 9, 2012 work plan to provide as soon as possible data for agency evaluation with regard to the directive "to evaluate alluvial aquifer water production, groundwater flow, sinkhole chlorides, TDS and hydrocarbon migration." All other aspects of the November 9, 2012 work plan shall remain under review until data from these monitoring wells has been evaluated.

On November 14, 2012, Shaw provided results and recommendations on aquifer usage and sinkhole produced water and crude oil contaminant migration modeling in their report titled "Bayou Corne Evaluation of Chloride Migration from Bayou Corne Sinkhole in Mississippi River Alluvial Aquifer (MRAA)" (Shaw Report). A copy of the Shaw Report is enclosed.

Shaw Report Section 4.0, Recommendations, states "It is uncertain how the TPH contamination is distributed in the MRAA in the vicinity of WW#3. Furthermore, the aquifer characteristics of the MRAA for modeling TPH transport in the vicinity of WW#3 are not available." To address this uncertainty and data deficiency, recommendations are provided in Section 4.0 to "support TPH modeling to thereby allow for a final determination that operation of WW#3 can be done in a manner that will not further exacerbate the contamination associated with the sinkhole." "Once these data are available, the chloride model can readily be updated with the new information, TPH modeling performed, and an operational configuration/monitoring program designed to allow WW#3 to be operated while protecting the environment." Therefore, TBC shall take the necessary actions to ensure that the recommendations listed in Section 4.0 of the Shaw Report are met in compliance with the directive "to evaluate alluvial aquifer water production, groundwater flow, sinkhole chlorides, TDS and hydrocarbon migration" in addition to those actions approved on November 13, 2012 and restated in italics herein.

Installation of aquifer monitoring wells pursuant to this approval shall commence as soon as possible but not later than Wednesday, November 28, 2012 else additional orders demanding compliance and civil penalties may be issued.

With kind regards,

James H. Welsh Commissioner of Conservation