

October 23, 2012

Mr. Gary Snellgrove
Louisiana Department of Natural Resources
617 North Third Street
Baton Rouge, LA 70802-5431

Dear Mr. Snellgrove:

RE: Work Plan in Response to Directive Item #5 in Third Amendment to Declaration of Emergency and Directive, Dated October 11, 2012, Assumption Parish Sinkhole, Texas Brine Company, L.L.C.

RESPEC has been retained by Texas Brine Company, L.L.C. (TBC) to provide a Work Plan in response to Directive Item #5 in the Third Amendment to Declaration of Emergency and Directive issued to TBC by the Louisiana Department of Natural Resources (LDNR) Office of Conservation on October 11, 2012.

Directive #5 states:

Install a permanent continuous water level monitoring station near the edge of the sinkhole. This station shall include a sensor and recording system for monitoring and recording the water levels and a staff gage for visual observation of water level elevation or depth. The data from this station shall be downloaded weekly and forwarded to Conservation on a weekly basis. On or before Friday, October 19, 2012, provide Conservation with a plan to implement this seismic [sic] monitoring and notification system.

BACKGROUND

Directive #5 focuses on water level changes in the sinkhole that have been documented to change on an occasional basis. The causes of the water level changes are unknown specifically but are likely related to mobilization of sediment and/or gas in the subsurface. Such movements are an important aspect of the sinkhole behavior to document and to understand. The continuous water level monitoring system is intended to collect data that will permit detection of such events and will compile information on magnitude and duration of these anomalies that could be used to further evaluate their cause and significance.

SCOPE OF WORK FOR INSTALLATION OF THE CONTINUOUS WATER LEVEL MONITORING SYSTEM

RESPEC is installing a vented Aquistar CT2X salinity, temperature, and level sensor in a manually slotted, polyvinyl chloride (PVC) pipe. The PVC pipe will be attached to a fence post

driven into the swamp bottom. The sensor will be programmed to collect and store readings every 15 minutes. This particular sensor was selected because it (1) satisfies the purpose and goals of the Directive and (2) is compatible with the existing communications system used for the IPI-tiltmeter system at the site. The sensor's pressure transducer is calibrated to read from 0 to 10 feet and is vented so that atmospheric pressure changes will not affect the data. The sensor's conductivity cell calibration will be checked on a monthly basis and calibrated when necessary or as recommended by the manufacturer's specifications, whichever comes first. The sensor will be paired with a standard ceramic 3.33-foot staff gauge. The staff gauge will also be attached to a fence post. The monitoring system will be installed at a position near the southeastern margin of sinkhole where it will not be disturbed by construction equipment. Access to the sensor will be by foot travel (no airboat will be necessary). The sensor data will be downloaded weekly and forwarded to the Office of Conservation.

SCHEDULE

Components for the continuous monitoring system are scheduled to arrive within the next few business days. Construction of the system should be completed within 1 week of receipt of all the components at the site.

Please contact us if you have any questions.

Sincerely,



William M. Goodman, Ph.D.
Manager, Mine & Geological Services

WMG:llf

cc: Project Central File 2153 — Category A