

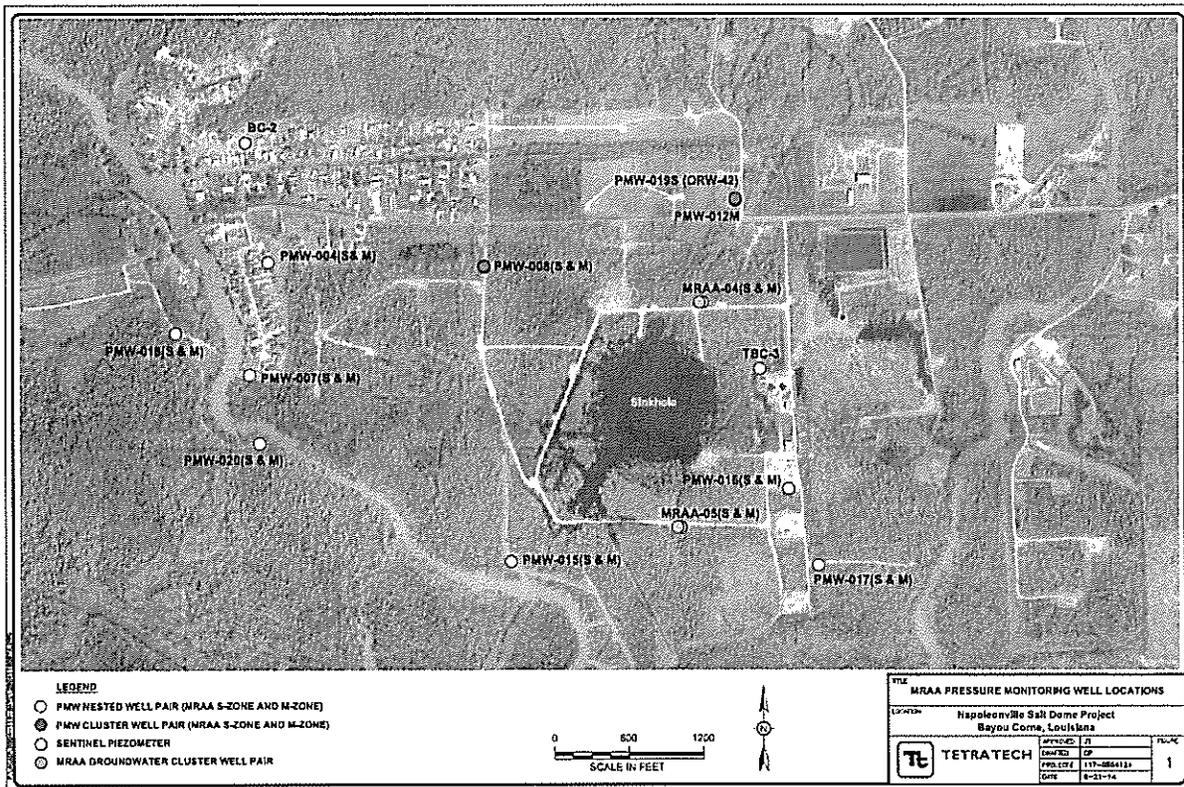
**Response to Request for Additional Information by LDNROC to Support a
No Further Action Determination for Inhabited Receptor Areas of Bayou Corne**

In a letter to Texas Brine Company (TBC) on June 28, 2016, the Office of Conservation of the Louisiana Department of Natural Resources (LDNROC) addressed TBC's requests for changes to required actions relating to the Declaration of Emergency associated with the appearance of the sinkhole at the surface near the Oxy-Geismar No. 3 Cavern. In this letter LDNROC states that it will consider issuance of a No Further Action at This Time (NFA-ATT) determination for the areas with inhabited receptors (privately-owned residential structure areas) upon receipt of additional information to support the argument that any serious threat to life or safety has been satisfactorily mitigated and/or eliminated. This response addresses the four items for which LDNROC requested additional information.

1. Proof that subsurface gas pressure in these areas has been reduced to hydrostatic pressure.

Texas Brine monitors a comprehensive pressure monitoring well (PMW) network of 24 wells that were installed by TBC in response to the Ninth Amendment to the Declaration of Emergency and Directive. The monitoring results have been reported in monthly and quarterly reports submitted to LDNROC. This series of reports provides data which substantiates that subsurface gas pressure has been reduced to hydrostatic pressure.

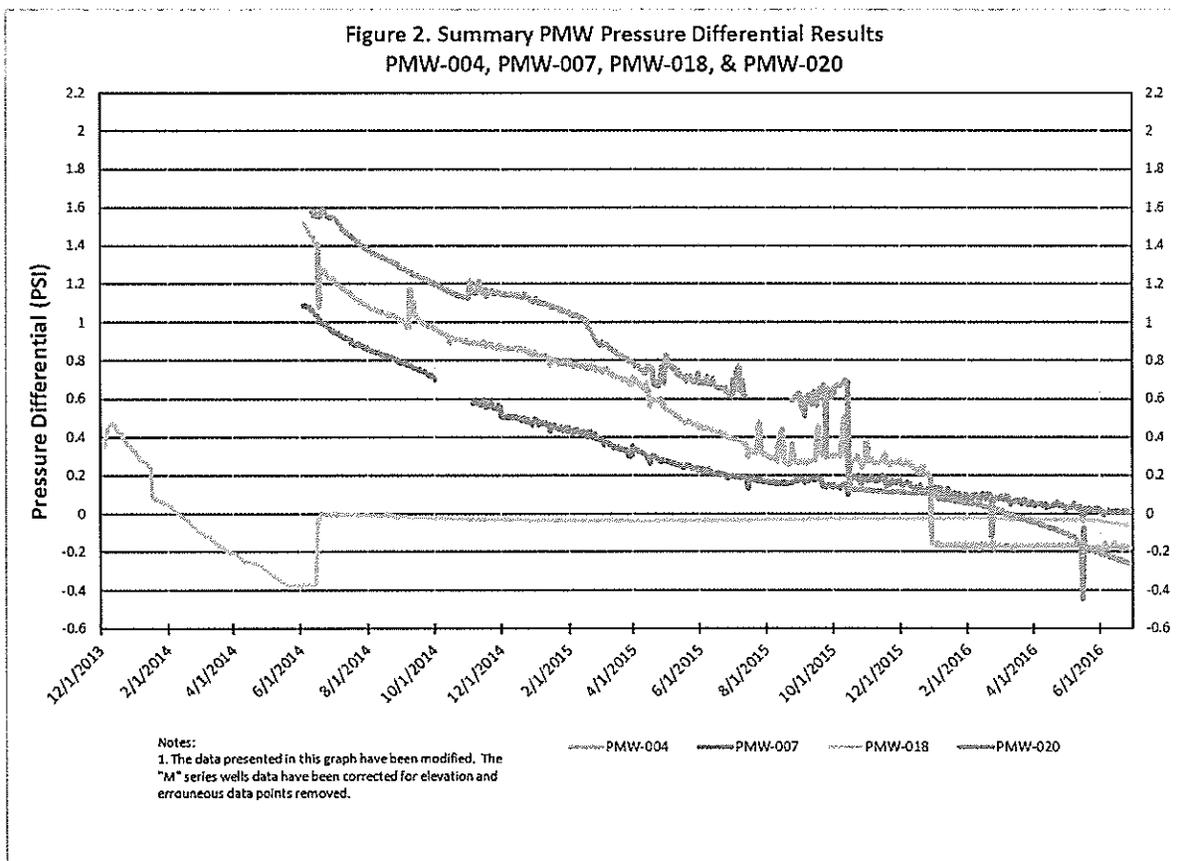
Four PMW well pairs (PMW-04S&M, PMW-07S&M, PMW-18S&M and PMW-20S&M) monitor the gas pressure in the residential area along with pressure monitoring well BC-2 as shown on Figure 1.



The following Figure 2 shows the calculated differential pressure plotted for the four PMW well pairs over the last 2 years including the latest data from the June 2016 monitoring event. Differential pressure is calculated based on the difference between the recorded pressure in a gas zone well and the pressure in a water zone well at the same location referenced to the same depth and calculated using water density in the well. A pressure differential at or near zero indicates that gas pressure is at hydrostatic pressure.

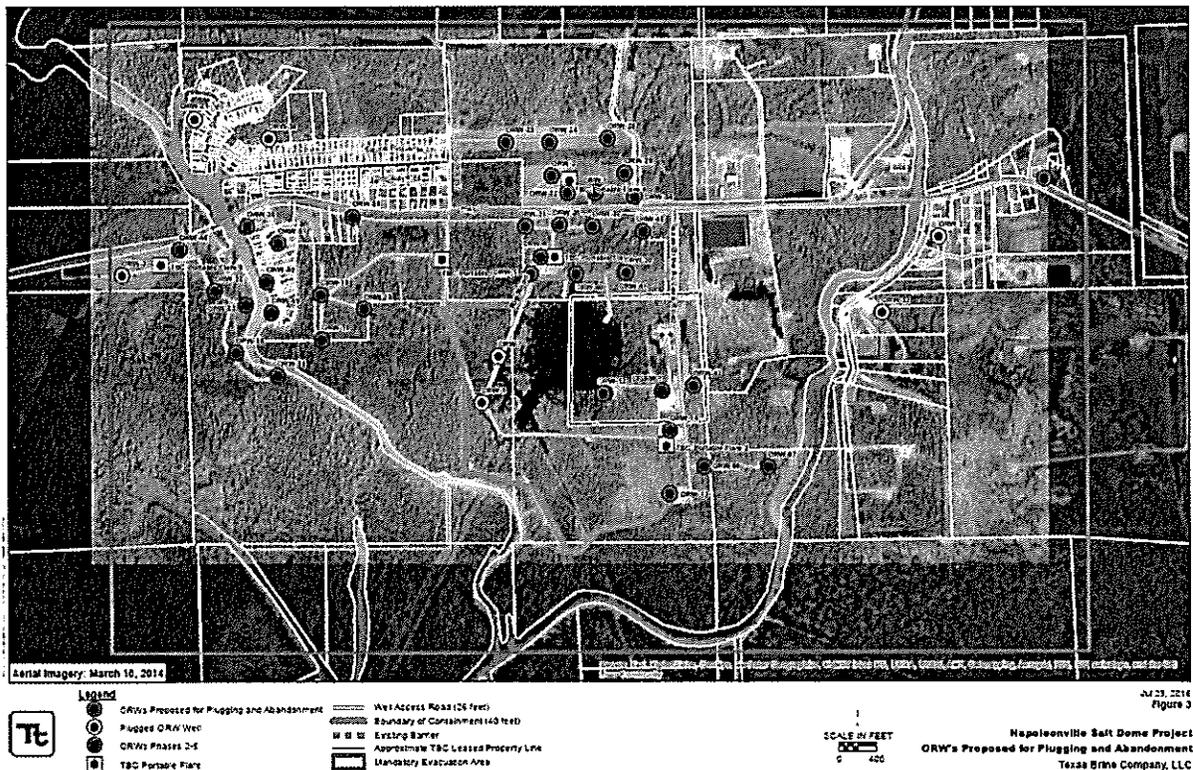
All four of these PMW locations presently have measured pressure differentials that are essentially zero. This demonstrates that subsurface gas has been reduced to hydrostatic pressure in this area of privately owned residential properties to the south of LA Highway 70.

Additionally, the differential pressure between the gas zone and the corresponding hydrostatic pressure is significantly less than the minimum air entry pressure (7.8 psi) needed for gas to penetrate the aquitard's silt and clay strata. Air entry pressures were determined from laboratory analysis of 22 samples of aquitard clay and silt. In its guidance, the Blue Ribbon Commission noted that the differential pressure criteria could be based on the required differential pressure (between gas and groundwater) that would allow gas from the MRAA to penetrate the aquitard. The results of the tests conducted in accordance with LDNR directions show that a minimum air entry (gas) pressure of 7.8 psi is required for gas to penetrate the aquitard.



For the area north of LA Highway 70 the wellhead pressure at pressure monitoring well BC-2 has been recorded at approximately 3 psi since March 2016 and has not exceeded approximately 6 psi since February 2014. The theoretical hydrostatic pressure for this well location is approximately 54 psi. The most recent gas bleed down (vent) test conducted on February 17, 2016 recorded no gas flow at this well. Additionally in this area the CPT-38W results, which is the CPT nearest to the one occupied residential property (owned by Harley Brown), showed that no gas was identified in the subsurface. Please refer to the map and CPT results included in the *Recommendation for No Further Action Determination-Area 3*.

Production data from the 20 wells defined as Community ORWs show that gas has been recovered from all of the wells to below the 200 standard cubic feet (scf) per day limit of practicability. This data further substantiates that the gas pressure in the subsurface has been reduced to hydrostatic pressure. These wells are shown on the following Figure 3.



Please refer to the following reports for additional information.

- *PMW Monitoring Report, March, April & May 2016 Results, Napoleonville Salt Dome Project, Bayou Corne, Louisiana, June 22, 2016*
- Series of PMW Monitoring reports submitted monthly and most recently quarterly starting in September 2014
- *Daily TBC Project Dashboard, TBC-Dashboard Summary and Vent Well Flare Data reports*
- *Current Subsurface Gas Conditions & Remediation at Bayou Corne, Comparison to BRC Criteria Recommended to LDNR in Order to Lift the Mandatory Evacuation Order, February 12, 2016.*

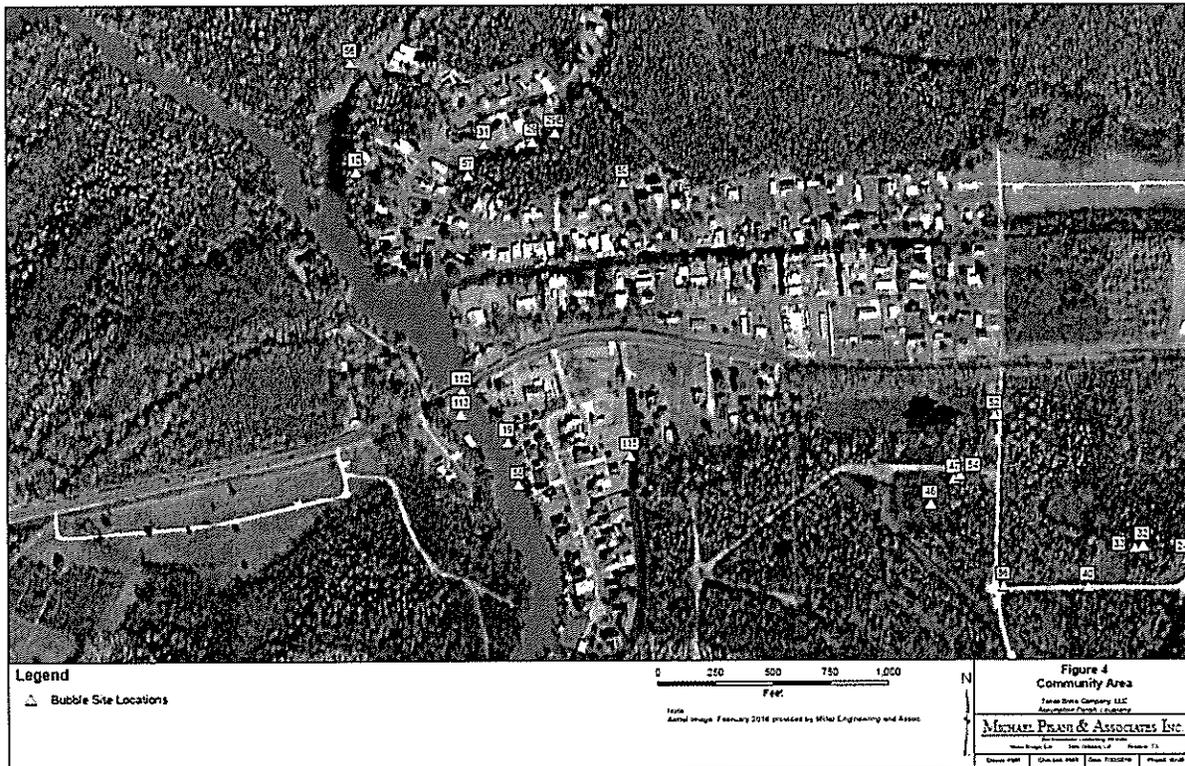
- *Recommended Requirements Document, MRAA Gas Pressure Monitoring, RRD-GAS-09, Blue Ribbon Commission, June 18, 2013.*

2. Proof that the threat posed to the public (in general and the residents in particular) by the existing subsurface gas is equal or less than the threat posed by “swamp gas” (pre-2012 gas bubbling).

The latest bubble site monitoring event conducted in June 2016 shows that of the 18 bubble sites identified near the residential areas only 7 of the sites were active and all were categorized as Level 1- Intermittent sites. Eleven bubble sites were Level 0-Inactive. No bubble sites are presently in the Level 2-Active or Level 3-Robust categories. Figure 4 shows the location of the bubble sites in the community area.

No formal bubble site monitoring was performed prior to the appearance of the sinkhole; however, it is commonly acknowledged that bubble sites existed and were observed in and along Bayou Corne and Grand Bayou historically. Although bubble sites were observed to have increased in number and intensity prior to and after the sinkhole, it is probable that Level 1 and 2 bubble sites would be representative and comparable to pre-2012 bubble site activity.

Furthermore, LDNR approved the elimination of any future bubble site monitoring in a July 12, 2016 communication from Jamie Love in response to TBC’s petition to cease monitoring based on minimal risk posed by the bubble sites.



Please refer to the following reports for additional information.

- *December 2015-January 2016 Data Analysis and Interpretations Report for Gas Bubble Sites, Napoleonville Salt Dome, RESPEC, January 29, 2016* along with series of prior reports.

3. Evidence illustrating the implementation of a plan to ensure that buildings and built structures located within these areas are no longer capable of accumulating gases.

TBC provides and operates sets of LEL (methane) and H₂S monitors at every residential structure for which the owner has requested monitoring. These detectors have been in place for more than three years and none have shown evidence of accumulating gases. As shown on Figure 2 subsurface gas pressures are significantly lower than any time since measurements were made after appearance of the sinkhole and that coupled with the fact that gas pressures greater than 7.8 psi are required for gas to enter and move through the clay aquitard makes the probability of gas intrusion below the remaining inhabited structures remote and as such does not pose a serious risk to public safety.

As additional precaution all of the unoccupied structures in the Sportsman's Paradise residential area are monitored on a monthly basis with a multi-gas detector to confirm that methane gas is not accumulating in the structures. This survey is conducted in all rooms, closets and other closed spaces. Like the in home monitors, these tests have never detected accumulating gases in any of the residences tested.

For the occupied residence (Harley Brown camp) in the north Bayou Corne area as an additional precaution the structures immediately adjacent to this property have enhanced passive ventilation. For these structures, all interior doors have been removed to eliminate the potential for areas within the structures to become closed and thus creating a space where fugitive emissions could concentrate. Also, windows on opposite sides of the houses have been nailed open.

Please refer to the following reports for additional information.

- *Evaluation of Potential Risk to Human Health and the Environment, Area 3, January 17, 2016*
- *Recommendation for No Further Action Determination-Area 3, July 27, 2015*
- *Evaluation of Potential Risk to Human Health and the Environment & NFA Recommendation for Area 6, March 30, 2016*
- *Recommendation for No Further Action Determination-Area 6, March 30, 2016*
- *Quarterly Air Monitoring Report – 2nd Quarter 2016, July 2016*

4. Any other proposal which sufficiently mitigates or eliminates the threat of gas accumulation in or under the buildings or other built structures located in these areas.

Texas Brine installed and operated LEL (methane) and H₂S monitor pairs for over three years in residences and buildings for which the owners requested monitoring. During this time of indoor monitoring with LEL/H₂S detectors, not one confirmed positive detection of LEL or H₂S above action levels occurred.

Texas Brine will provide the owners of the remaining residential properties within the Voluntary Evacuation area with monitor pairs and one spare set that they will be responsible for operating and maintaining in the future should they elect to continue monitoring.

As an additional mitigation measure, LDNR issued a state-wide notice letter dated September 10, 2012 warning licensed drillers of potential risks to methane in the Bayou Corne Area and advising that all measures necessary to minimize health and safety hazards be taken. The letter also attached the May 20, 2010 guidance (ENV-GS-06) previously distributed to licensed drillers informing them of the proper procedure to report the observance of naturally occurring methane or natural gas during well construction. This notification will reduce the risk to drillers associated with encountering gas in the subsurface through awareness, training and procedures employed by the drillers.

Please refer to the following report for additional information.

- *Presence of Natural Gas in the Mississippi River Alluvial Aquifer, Bayou Corne Area, Assumption Parish, Louisiana, LDNROC, September 10, 2012*