



**State of Louisiana**  
Department of Health and Hospitals  
Office of Public Health

October 18, 2012

Mr. Martin S. Triche  
4554 Highway 1  
Napoleonville, LA 70390

Dear Mr. Triche,

The Louisiana Department of Health and Hospitals/Office of Public Health (DHH) is reviewing environmental data collected in the vicinity of Bayou Corne to determine the potential for the general public's exposure to contaminants.

The DHH has received and reviewed the following data related to the Bayou Corne event:

DATE (S) SAMPLED	DESC.	# of SAMPLES/ READINGS	SAMPLED BY	PARAMETERS ANALYZED	DATE(S) REVIEWED BY OPH
09/26/2012	Water from Wells (industrial) 007-73, 007-98,007-89, ,007-80,007-81,007-72,007-131	7	LDEQ	VOCs	10/16/2012
		7		Chloride, Total Dissolved Solids	
	Water from Wells (industrial) 007-95, 007-98,007-89, ,007-80,007-81,007-72,007-131	7		Dissolved Hydrogen Sulfide, Sulfide	
		7		Butane, Ethane, Ethene, Propane, Methane*	

\*See attachment

There are several types of risk to human health related to the chemicals sampled:

- 1) Risk of illness (short-term, long term) due to exposure to a chemical at levels that could cause illness
- 2) Risk of fire/ explosion
- 3) Risk of injury

Of the chemicals reviewed, only methane, detected in the industrial water wells, presents a potential health risk (Type 2, risk of fire/explosion) for the time period sampled. DHH is asked to evaluate human health risk. The focus of DHH's recommendations is on the Type 1 risk of illness (exposure to a chemical with a pathway to the population at doses expected to cause an illness). High levels of methane pose a risk of fire and explosion that are beyond Type 1 risk. DHH does not ignore this type of risk and has the duty to call attention to that type of risk. Of course, for this Type 2 risk, many physical conditions should be considered.

DHH's letter dated September 13, 2012 cautions, "The guidance from the U.S Department of Interior, Office of Surface Mining in Technical Measures for the Investigation and Mitigation of Fugitive Methane Hazards in Areas of Coal Mining (Sept 2001), that was provided to the Louisiana Department of Health and Hospital by the Center for Disease Control/Agency for Toxic Substances and Disease Registry (CDC/ATSDR), states on page 34 that there is an immediate action level of 28 mg/L (28,000 ug/L). See weblink <http://arblast.osmre.gov/downloads/Mine%20Gases%20and%20Dust/FINAL-Methane.pdf>. The remedial action called for is located on page 106 of the document. With levels as high as 22,400, 26,600, and 27,700 ug/L it would appear that immediate remediation is warranted." Consistent with this recommendation and based on these industrial well sample reviews, DHH recommends immediate remediation of water wells with high levels of methane. DHH understands that physical conditions may cause environmental regulatory scientists to modify their recommendations according to local circumstances and risk to health.

DHH encourages local residents to heed evacuation orders issued, avoid restricted areas, and discuss any health concerns they may have with their physician. DHH will continue to monitor the situation for possible impacts on public health and review environmental data as it is made available to the agency. If you have any questions, please call me at 504-458-5428.

Sincerely,



Raoult Ratard, MD, MS, MPH, FACPM  
State Epidemiologist  
LDHH/Office of Public Health

**METHANE CONCENTRATIONS FROM INDUSTRIAL WATER WELLS COLLECTED****September 26, 2012**

<b>DATE (S) SAMPLED</b>	<b>STATE REGISTRATION #</b>	<b>SAMPLED BY</b>	<b>METHANE CONCENTRATION (ug/L)</b>	<b>DATE(S) REVIEWED BY OPH</b>
09/26/2012	007-89	LDEQ	18,600	10/16/2012
9/26/2012	007-95	LDEQ	23,800	10/16/2012
9/26/2012	007-98	LDEQ	22,600	10/16/2012
9/26/2012	007-80	LDEQ	17,700	10/16/2012
9/26/2012	007-81	LDEQ	24,800	10/16/2012
9/26/2012	007-72	LDEQ	15,100	10/16/2012
9/26/2012	007-131	LDEQ	27,200	10/16/2012