Regulators grant relief well permits

Workers prepare a platform Monday for an observational well that will bore into a salt cavern approximately 300 feet from the recently emerged sinkhole near Texas Brine’s facility near Bayou Corne. Once operational, the observational well will test for the presence of natural gas and use sonar to survey the cavern’s internal structure.

Texas Brine to look for cause of sinkhole

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GONZALES — State and federal regulators have granted Texas Brine Co. LLC key permits to start drilling a relief well to see if the company’s abandoned underground salt cavern is the cause of a large sinkhole in northern Assumption Parish, officials said Monday.

The Louisiana Department of Natural Resources Office of Conservation approved Texas Brine’s application to drill Monday, a day after the U.S. Army Corps of Engineers granted the Houston-based company emergency authorization to set up the well pad in swampland, spokesmen for the agencies said.

Texas Brine officials said in a written update Monday that contractor Riceland Drilling Co. of Lafayette is disassembling a rig near Scott north of Interstate 10 and the equipment will be delivered by truck in pieces starting on Wednesday morning.

Company officials said they expect the rig to be assembled at Texas Brine’s 40-acre site south of La. 70 South by late Friday. The sinkhole is also on the property.

Sonny Cranch, Texas Brine spokesman, and other company officials said they plan to directionally drill into the cavern from a stable point a distance away from the sinkhole.

Cranch said the company is building a well pad with dirt, then placing wooden, pallet-like mats on top, upon which the drilling rig will be erected.

Commissioner of Conservation Jim Welsh had given Texas Brine until the end of the day Monday to submit a completed permit for the well or face a fine of $5,000 per day until the permit was submitted. Texas Brine’s update Monday says the permit application was filed late Sunday.

“Texas Brine has met the requirement set for the com-
pany to have that permit submitted, but that is not the end of their responsibility," DNR Secretary Stephen Chustz said in a news release.

Welsh's emergency order also requires Texas Brine to inform DNR of the method the company plans to use to determine the cavern's status and to file regular reports with DNR on the progress of the drilling operation, Chustz said.

"We will hold them to that requirement and ensure that we maintain transparency in these operations for the public throughout," Chustz said in the statement.

Welsh said his staff and scientists from a team pulled together from inside and outside the state have identified the abandoned cavern in the 1-by-3-mile Napoleonville Dome as the most likely cause of the sinkhole.

The cavern was used in the production of brine but was abandoned and plugged in June 2011 after an effort to expand production ran into problems. The cavern starts 3,400 feet under the earth and is about 310 feet at its widest at the bottom at about 5,650 feet deep.

The sinkhole, which swallowed up forested swamps, was discovered approximately 200 feet from the site of that cavern on Aug. 3. A mandatory evacuation of about 150 homes followed the same evening and remains in place.

The discovery followed two months of natural gas releases bubbling up from Bayou Corne and Grand Bayou and tremors in the area. The DNR experts have also said the cavern may be linked to the natural gas bubbles.

The new Texas Brine relief well will be used to determine "the structural status of the cavern and determine what pressures, gas or brine, it currently contains," DNR officials said.

Cranich said environmental services contractor Clean Harbors of Norwell, Mass., continued on Monday to clean up the sinkhole's surface, removing floating vegetative debris with air boats. The company is ultimately trying to vacuum diesel from the sinkhole's surface.

More details have also emerged about the sinkhole's dimensions.

The surface of the sinkhole remains 375 feet across, according to the latest measurements, but, DNR officials confirmed, that diameter means the surface area is closer 2.5 acres, larger than earlier reports.

Also, while measurements of the sinkhole's depth have reached 422 feet, Louisiana Department of Environmental Quality officials said Monday that recent water sampling may point to the hole being far shallower except for a few small areas.

Chris Piehl, DEQ Inspection Division administrator, said most places that a water sampler was dropped for testing recently reached just 50 feet deep. He said that in one small area, he was able to reel out the 300-foot long rope attached to the sampler.

But Piehl added that at that deepest location, the sampler would get held up by something a few times and he would have to stop unfurling the rope, bounce the sampler and then send it down farther.

Piehl said the deeper points may be "rabbit holes" or cracks that reach deeper into the earth than the rest of the sinkhole. He noted that the deepest point was also near where some of the bubbling in the sinkhole is occurring.