

INCIDENT ACTION PLAN

Be brief and concise with your entries

Location Bayou Corne Sink Hole	Control Level Company Supervisory	Operational Period From 3/16/14 To 3/17/14
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<p>1.0 SITUATION Disease, community, environment</p> <p>PROMPTS: Weather, disease trends, Resources, Hazards & safety</p> <p>REFERENCE: Maps, weather reports, Sitreps, appreciation, warnings, alerts</p>	<p>CURRENT Rain</p> <hr/> <p>PREDICTION Variable clouds with thunderstorms, especially in the morning. A few storms may be severe 40% chance of precipitation. High Temperature near 74.</p>
<p>2.0 OBJECTIVES (or MISSION)</p> <p>PROMPTS: Time & space</p> <p>REFERENCE: Appreciation – control options, courses open to disease</p>	<p>CURRENT</p> <p>Objective 1 - Demonstrating sinkhole containment and determining if additional sinkholes could form.</p> <p>Objective 2 - Locating and mitigating the risk posed by the presence of shallow gas.</p> <p>Objective 3 - Confirming the broader stability of the Napoleonville Salt Dome.</p> <p>Current Actions: (For planning purposes only, all activities are subject to change.)</p> <p><u>ORW, MRAA, CPT and PVW wells</u></p> <ul style="list-style-type: none"> - Conduct daily well readings and flare maintenance - Monitor Bubble site 56 - Continue pump test at ORW-21; Water storage tank will be emptied as necessary via truck - Continuous dewatering of ORWs 4, 14, and OGRW-1 (currently no pressure and shut-in; still pumping water) - Continue 5-day pump test at ORW 30 - Replace pump and restart 5-day pump test at ORW 26 <p><u>Air Monitoring/Under-slab Ventilation</u></p> <ul style="list-style-type: none"> - Conduct ventilation system inspections <p><u>Containment/ Roads/ Sinkhole</u></p> <ul style="list-style-type: none"> - No berm construction due to weather conditions <p><u>Tomorrow's Activities</u></p> <ul style="list-style-type: none"> - Continue ventilation system inspections - Conduct daily well readings and flare maintenance - Conduct daily berm inspection - Monitor Bubble site 56 - Continue ORW-21 pump test - Continue ORW dewatering tests - Continue placement of GCL/geotextile/clay on new south berm (contingent on weather and soil conditions) - Complete redevelopment of ORW 15 and begin 6-hour pump test - Begin plugging and abandoning PVWs <hr/> <p>Sinkhole Activity – Code 1</p>

Installation, maintenance, technical advice	kblanchard@texasbrine.com Scott Borne – Facility Manager – [REDACTED] sborne@texasbrine.com Joel Miller, PE – Consultant – [REDACTED] joel.miller@cox-internet.com Bruce Martin – Operations/PR – [REDACTED] bmartin@texasbrine.com Mark Cartwright – Technical/Engineering – [REDACTED] mcartwright@unitedbrine.com Scott Whitelaw – Environmental/Safety – [REDACTED] swhitelaw@tum.com
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STAGING AREA/ FCP Setting up, communications, staffing	Texas Brine Grand Bayou Facility 1301 Hwy 70 South, Belle Rose, La 70341
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5.0 ADMINISTRATION (Logistics services)

PROMPTS: Unit names, locations, contact names, phone no's, timings, duties/tasks, routes, suppliers, quantities, status (required, organised, stand by, enroute)

FACILITIES Security, waste, cleaning	NA
CATERING	NA
OH&S/MEDICAL Medical plan, first aid plan	Call 911
FINANCE	NA
TRAVEL	NA
INDUCTION/ TRAINING	NA
ACCOMMODATION	NA

6.0 CONTROL, COORDINATION & COMMUNICATION

CONTROL &	Plant Management Supervision / Contractor Work
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COORDINATION STRUCTURE REFERENCE Structural Chart	
COORDINATION & LIAISON Local knowledge, police, agency reps, emergency mgt reps	NA
COMMUNICATIONS PROMPTS Communications structure, operational comms plan, information mgt	Plant Management – Contractor Communication via Cell Phone

EXTRAS	
Attachments PROMPTS:: maps, weather, organisational charts, resources, comms diagram	Current Weather Safe Work Rules
Plan developers PROMPTS PO, Logs Mgr, Controller	NA
Approval Controller, Ops Director	TBC Company Rep: William Booher FOSC: SOSC: POSC:

Belle Rose, Louisiana, United States

Today's Forecast: Sunday, 16 Mar 2014

76°F
49°F

Sky Conditions: Scattered Thunderstorms
Sunrise: 7:13 AM **Sunset:** 7:13 PM
Wind: WSW (255°) @ 12Mph
Precipitation Probability: 40%



[View your complete Local Weather »](#)

Extended Forecast [Full 10-Day Forecast »](#)

Monday 17 Mar 2014	Tuesday 18 Mar 2014	Wednesday 19 Mar 2014	Thursday 20 Mar 2014
Partly Cloudy 57°F 42°F	Mostly Sunny 68°F 47°F	Mostly Sunny 73°F 49°F	Partly Cloudy 73°F 50°F

Detailed Forecast

Today:

Variable clouds with thunderstorms, especially in the morning. A few storms may be severe. High 76F. Winds WSW at 10 to 15 mph. Chance of rain 40%.

Tonight:

Partly cloudy with isolated thunderstorms possible. Low 49F. Winds NW at 10 to 15 mph. Chance of rain 30%.

Tomorrow:

Mix of sun and clouds. Highs in the upper 50s and lows in the low 40s.

Site Safety Plan for Sinkhole and Surrounding Area

Seismic Code	Seismic Activity	Sinkhole Access	Berm Road Access	Work Allowed
1	Minimal to no seismic activity around/below sinkhole; 10 or fewer of the sharp seismic signals associated with rock movement, called mini-earthquakes (MEQs) or the longer signals associated with gas or liquid movement, called Very Long Periods (VLPs) within 24-hour period; allows work on sinkhole and inside berm area to continue	<ul style="list-style-type: none"> Approved¹ work allowed only in designated areas of sinkhole. Some areas may be restricted due to unsafe conditions (e.g., leaning trees). Sinkhole grid system shown in Figure 1 will be used to define restricted areas for individual work activities. All vessels must have at least 2 persons. Workers must wear approved PFDs. No work allowed after sunset. Safety boat on standby. 	Access allowed on all berms and roads unless an area is physically barricaded.	Approved work allowed in unrestricted areas. Work area must be cleared of hazards and a Work Permit issued before start.
2	Indicates some increased seismic activity around/below sinkhole but not at a level that indicates imminent threat of sloughing or movement below sinkhole (10 to 50 MEQs or VLPs in 24 hours)	<p>Code 1 requirements plus:</p> <ul style="list-style-type: none"> Each vessel inside designated sinkhole area (see Figure 2) must have a designated shoreline watch who is in constant radio communication with vessel. 	Access allowed on all berms and roads unless an area is physically barricaded.	<p>Code 1 requirements plus:</p> <ul style="list-style-type: none"> Each work activity must have a designated person with means to warn all workers of unusual activity on sinkhole.
3	Indicates seismic activity has elevated to a point similar to what has been seen in past monitoring prior to a sloughing on the shore or movement beneath sinkhole (More than 50 MEQs or VLPs in 24 hours)	<p>Code 1 requirements plus:</p> <ul style="list-style-type: none"> Each vessel inside the defined containment berm (see Figure 2) must have a designated shoreline watch who is in constant radio communication with vessel. 	All berm roads are closed except the north berm from the TBC Access road to Rig Road (unless restricted for non-seismic reasons). All other berms open only to UTVs for personnel doing approved work. Anyone on a UTV must have a radio, air horn, and approved PFD.	<p>Code 1 and 2 requirements plus:</p> <ul style="list-style-type: none"> Work is allowed on a case by case basis as determined by TBC Operations:

1. All site work must be approved by TBC Response Operations.
2. The Texas Brine access road from Highway 70 to Pad 10 is not considered part of the designated containment berm for purposes of this document.
3. Codes are set by Assumption Parish Office of Emergency Management

Site Safety for Sinkhole and Surrounding Area

In an effort to provide for a safe work environment in and around the Sink Hole, this procedure has been put in place to inform workers of their allowed Work Areas. This procedure is only guidance and should not exclude any other observation or safety precautions in place that may cause any danger to anyone. All workers entering the Texas Brine facility should be informed of the risks that are posed by this ongoing event.

This system has been developed using a Code System and is defined as follows:

Code 1:

Is an all clear, with restriction to OXY pad 3 and the North pad area as indicated in the map below due to the concerns raised by Itaska.



Code 2:

Restrict all activity from inside the Berm, but not the Berm itself or outside; recommend that all operations in the immediate vicinity of the sinkhole be halted immediately. The Inside Berm is defined as indicated on the map below in red.



Code 3:

Restrict activity from inside and on the Berm, no work activity shall occur until Code level has been changed to allow. Continued monitoring of the berm for cracks and venting wells located adjacent to the berm. At this code level immediate notification shall be made of any changes that occur on sinkhole, swamp around sinkhole, or any changes to berm area. The Berm is defined as indicated in yellow on the map below.



Communication:

All workers working in conjunction with this ongoing event shall be informed of these codes and communication protocol developed to inform everyone when codes may change at any time.