### **INCIDENT ACTION PLAN**

Be brief and concise with your entries

Location		Control Level	Operational Period		
Bayou Corne Sink Hole		Company Supervisory	From 2/22/15	To 2/23/15	
<b>1.0 SITUATION</b> Disease, community, environment PROMPTS: Weather, disease trends, Resources, Hazards & safety REFERENCE: Maps, weather reports, Sitreps, appreciation, warnings, alerts	CURRENT         Cloudy         PREDICTION         Considerable cloudiness with occasional rain showers. Thunder         possible. 50% chance of precipitation. High Temperature near 78.				
2.0 OBJECTIVES (or MISSION)	<b>CURRENT</b> <b>Objective 1 -</b> Demonstrating sinkhole containment and determining if additional sinkholes could form.				
PROMPTS: Time & space REFERENCE: Appreciation – control options, courses open to disease	Objective 2 - Locating and mitigating the risk posed by the presence of shallow gas.         Objective 3 - Confirming the broader stability of the Napoleonville Salt Dome.         Current Actions:         (For planning purposes only, all activities are subject to change.)         ORW, MRAA, PMW, and PVW wells         - Conduct daily well readings and flare maintenance         - Monitor continuous dewatering of ORWs         Containment/ Roads/ Sinkhole         - Daily berm inspections         Tomorrow's Activities         - Conduct daily well readings and flare maintenance         - Daily berm inspections				
	- Begin monthly sampling of MRAA wells Sinkhole Activity – Code 3				
3.0 EXECUTION at		•			
GENERAL OUTLINE PROMPTS: Strategies & tactics (current/proposed/alternate) REFERENCE: Appreciation, Control Options	Ad the Ins Da PP	fety Information: See Attache Reference I/ ditional to our Safe Work Rul awareness of insects, reptiles pect location for flammability ily Safety Meetings E Required on site: Respirato ppling, eye protection, life pre	AP dated 8/9/12 es for this projec s and animals. / or w/ VOC Cartric	ct we are adding dge, Gloves for	

GROUPINGS	ΝΑ		
TASKS Including PR & Media	Same as above		
COORDINATING INSTRUCTIONS PROMPTS: Timings, routes, assembly areas, staging areas	Texas Brine Grand Bayou Facility will be used as staging area.		
<b>4.0 ADMINISTRATION</b> (Logistics support) PROMPTS: Unit names, locations, contact names, phone no's, timings, duties/tasks, routes, suppliers, quantities, status (required, organised, stand by, enroute)			
SUPPLY WHO, WHAT, WHERE, WHEN of resources not readily available	ΝΑ		
GROUND SUPPORT Transport of personnel, traffic mgt, refuelling, mechanical repair/maintenance	ΝΑ		
COMMUNICATIONS Installation, maintenance, technical advice	Cell Phone & Landline Communications: Chad Morales – Area Manager – Scott Borne – Facility Manager – () sborne@texasbrine.com Joel Miller, PE – Consultant – () Joel Miller, PE – Consultant – () Mark Cartwright – Technical/Engineering – () Mark Cartwright – Technical/Engineering – () Mark Cartwright – () Scott Whitelaw – Environmental/Safety – () Mark Cartwright () Swhitelaw@tum.com		
STAGING AREA/ FCP Setting up, communications,	Texas Brine Grand Bayou Facility 1301 Hwy 70 South, Belle Rose, La 70341		

staffing

### 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)

stand by, enroute)			
FACILITIES Security, waste, cleaning	ΝΑ		
CATERING	ΝΑ		
OH&S/MEDICAL Medical plan, first aid plan	Call 911		
FINANCE	ΝΑ		
TRAVEL	NA		
INDUCTION/ TRAINING	NA		
ACCOMMODATION	ΝΑ		
6.0 CONTROL, COORDINATION & COMMUNICATION			
CONTROL & COORDINATION STRUCTURE	Plant Management Supervision / Contractor Work		
REFERENCE Structural Chart			
COORDINATION & LIAISON	ΝΑ		
Local knowledge, police, agency reps, emergency mgt reps			
COMMUNICATIONS	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, 22 Feb 2015		
<b>78°F</b> 46°F		
Sky Conditions: Showers Sunrise: 6:37 AM Sunset: 5:58 PM Wind: SW (221°) @ 9Mph Precipitation Probability: 50%		
View your complete Local Weather »		

Extended Fo	orecast	<u>Full 10-D</u>	Day Forecast »		
Monday 23 Feb 2015	<b>Tuesday</b> 24 Feb 2015	Wednesday 25 Feb 2015	<b>Thursday</b> 26 Feb 2015		
		Con land			
PM Showers 49°F	Showers 52°F	Rain <b>48°F</b>	Mostly Cloudy 57°F		
37°F	<b>41°F</b>	34°F	36°F		

### **Detailed Forecast**

#### **Today:**

Considerable cloudiness with occasional rain showers. Thunder possible. High 78F. Winds SW at 5 to 10 mph. Chance of rain 50%.

### Tonight:

A few showers early with overcast skies late. Thunder possible. Low 46F. Winds N at 10 to 15 mph. Chance of rain 30%.

### Tomorrow:

Afternoon showers. Highs in the upper 40s and lows in the upper 30s.

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> <li>Approved<sup>1</sup> 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.</li> <li>All vessels must have at least 2 persons. Workers must wear approved PFDs. No work allowed after sunset. Safety boat on standby.</li> </ul>	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)	<ul> <li>Code 1 requirements plus:</li> <li>Each vessel inside designated sinkhole area (see Figure 2) must have a designated shoreline watch who is in constant radio communication with vessel.</li> </ul>	Access allowed on all berms and roads unless an area is physically barricaded.	<ul> <li>Code 1 requirements plus:</li> <li>Each work activity must have a designated person with means to warn all workers of unusual activity on sinkhole.</li> </ul>
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)	<ul> <li>Code 1 requirements plus:</li> <li>Each vessel inside the defined containment berm (see Figure 2) must have a designated shoreline watch who is in constant radio communication with vessel.</li> </ul>	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.	<ul> <li>Code 1 and 2 requirements plus:</li> <li>Work is allowed on a case by case basis as determined by TBC Operations:</li> </ul>

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

Page 14-A, Texas Brine Company, LLC, Health and Safety Plan, Bayou Corne, Belle Rose, Louisiana, Sept 2013

## 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.