### **INCIDENT ACTION PLAN**

Be brief and concise with your entries

Sink Hole       From 2/24/15       To 2/25/15         1.0 SITUATION       Disease, community, environment       AM Showers         PROMPTS:       Weather, disease trends, Resources, Hazards & safety       PREDICTION         REFERENCE:       Maps, weather reports, Sitreps, appreciation, warnings, alerts       PREDICTION         CURRENT (or MISSION)       CURRENT Objective 1 - Demonstrating sinkhole containment and determining additional sinkholes could form.         PROMPTS:       Objective 2 - Locating and mitigating the risk posed by the presence of shallow gas.	Location		Control Level	Operational Period			
Disease community, environment       AM Showers         PRCMPTS: Weather, disease trends, resources, Hazard's & safety       PREDICTION         Resources, Hazard's & safety       Rain showers early with some sunshine later in the day. 40% chance of precipitation. High Temperature near 55.         2.0 OBJECTIVES (or MISSION)       CURRENT         Disease trends, appreciation, warrings, alers       Objective 1 - Demonstrating sinkhole containment and determining additional sinkholes could form.         PROMPTS: Time & space       Objective 2 - Locating and mitigating the risk posed by the presence of shallow gas.         Objective 3 - Confirming the broader stability of the Napoleonville S: Dome.       Objective 3 - Confirming the broader stability of the Napoleonville S: Dome.         Current Actions: courses open to disease       Conduct daily well readings and flare maintenance - Monitor continuous deviating of ORAWs - Conduct depletion test at ORW-9 - Set up pump and generator at GOW-9-1 for enhanced gas flow test (test scheduled for tomorrow)         Conduct Daily berm inspections - Conduct Daily berm inspection - Conduct Daily bere	Bayou Corne Sink Hole		Company Supervisory	From 2/24/15	To 2/25/15		
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Weather, disease trends, Resources, Hazards & safety       Rain showers early with some sunshine later in the day. 40% chance of precipitation. High Temperature near 55.         REFERENCE:       Maps, weather reports, Sineps, appreciation, warnings, alers         2.0 OBJECTIVES (or MISSION)       CURRENT         PROMPTS:       Objective 1 - Demonstrating sinkhole containment and determining additional sinkholes could form.         PROMPTS:       Objective 2 - Locating and mitigating the risk posed by the presence of shallow gas.         REFERENCE:       Appreciation - control options.         Objective 3 - Confirming the broader stability of the Napoleonville Si Dome.       Current Actions:         (For planning purposes only, all activities are subject to change.)       ORW, MRAA, MW, and PVW wells         - Conduct daily well readings and flare maintenance       - Monitor continuous dewatering of ORWs         - Conduct daily well readings and flare maintenance       - Monitor continuous dewatering of ORWs         - Conduct daily well readings and flare maintenance       - Daily bern inspections         - Daily bern inspections       - Daily bern inspections         Tomorrow's Activities       - Conduct daily well readings and flare maintenance         - Conduct Daily bern inspection       - Conduct Daily bern inspection         - Conduct Daily bern inspection       - Conduct Daily bern inspection         - Conduct Daily bern inspection       - Conduct Dai	Disease, community,						
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Time & space       of shallow gas.         REFERENCE:       Appreciation - control options, courses open to disease         Objective 3 - Confirming the broader stability of the Napoleonville Si 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         - Conduct daily well readings and flare maintenance         - Monitor continuous dewatering of ORWs         - Conduct daily well readings and flare maintenance         - Monitor continuous dewatering of ORWs         - Conduct daily well readings and flare maintenance         - Monitor continuous dewatering of ORW-9         - Set up pump and generator at GOW-9-1 for enhanced gas flow test (test scheduled for tomorrow)         Containment/ Roads/ Sinkhole         - Daily bern inspections         Tomorrow's Activities         - Conduct Daily bern inspection         - Conduct depletion test at ORW-1 and ORW-2 (both zero confirmation; 6 month)         Sinkhole Activity – Code 3         3.0 EXECUTION         add safety information as appropriate         GENERAL OUTLINE       Safety Information: See Attached Safe Work Rules		<b>Objective 1 -</b> Demonstrating sinkhole containment and determining if					
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Generation       (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       - Conduct depletion test at ORW-9         - Conduct depletion test at ORW-9       - Conduct depletion test at ORW-9         - Set up pump and generator at GOW-9-1 for enhanced gas flow test (test scheduled for tomorrow)         Containment/ Roads/ Sinkhole         - Daily berm inspections         Tomorrow's Activities         - Conduct depletion test at ORW-4         - Conduct Phase 4 test at ORW-1 and ORW-2 (both zero confirmation; 6 month)         Sinkhole Activity – Code 3    GENERAL OUTLINE	Appreciation – control options,	<b>Objective 3 -</b> Confirming the broader stability of the Napoleonville Salt Dome.					
- Conduct daily well readings and flare maintenance         - Monitor continuous dewatering of ORWs         - Continue monthly sampling of MRAA wells (start at MRAA-6 today)         - Conduct depletion test at ORW-9         - Set up pump and generator at GOW-9-1 for enhanced gas flow test (test scheduled for tomorrow)         Containment/ Roads/ Sinkhole         - Daily berm inspections         Tomorrow's Activities         - Conduct daily well readings and flare maintenance         - Conduct daily berm inspection         - Conduct daily well readings and flare maintenance         - Conduct daily berm inspection         - Conduct daily berm inspection         - Conduct depletion test at ORW-4         - Conduct depletion test at ORW-4         - Conduct depletion test at ORW-1 and ORW-2 (both zero confirmation; 6 month)         Sinkhole Activity – Code 3         3.0 EXECUTION         add safety information as appropriate         GENERAL OUTLINE							
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Salety Information. See Attached Sale Work Rules	3.0 EXECUTION a	dd safety	r information as appropriate				
	GENERAL OUTLINE	Sat	-		es		

PROMPTS: Strategies & tactics (current/proposed/alternate)

# Additional to our Safe Work Rules for this project we are adding the awareness of insects, reptiles and animals.

REFERENCE: Appreciation, Control Options	Inspect location for flammability Daily Safety Meetings PPE Required on site: Respirator w/ VOC Cartridge, Gloves for sampling, eye protection, life preservers, hearing protection.
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.
4.0 ADMINISTRAT	ION (Logistics support)
PROMPTS: Unit names, locations stand by, enroute)	, contact names, phone no's, timings, duties/tasks, routes, suppliers, quantities, status (required, organised,
SUPPLY WHO, WHAT, WHERE, WHEN of resources not readily available	NA
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 – Scott Borne @texasbrine.com Joel Miller, PE – Consultant – Joel Miller, PE – Consultant – Bruce Martin – Operations/PR – Bruce Martin – Operations/PR – Mark Cartwright – Technical/Engineering – Mark Cartwright @unitedbrine.com

	Scott Whitelaw – Environmental/Safety – <b>Constant (Constant (Constant)</b> ) swhitelaw@tum.com		
STAGING AREA/ FCP Setting up, communications, staffing	Texas Brine Grand Bayou Facility 1301 Hwy 70 South, Belle Rose, La 70341		
5.0 ADMINISTRAT	ION (Logistics services)		
PROMPTS: Unit names, locations stand by, enroute)	, contact names, phone no's, timings, duties/tasks, routes, suppliers, quantities, status (required, organised,		
FACILITIES Security, waste, cleaning	ΝΑ		
CATERING	ΝΑ		
OH&S/MEDICAL Medical plan, first aid plan	Call 911		
FINANCE	ΝΑ		
TRAVEL	ΝΑ		
INDUCTION/ TRAINING	ΝΑ		
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 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: Tuesday, 24 Feb 2015			
55°F 43°F			
Sky Conditions: AM Showers Sunrise: 6:35 AM Sunset: 5:59 PM Wind: N (353°) @ 8Mph Precipitation Probability: 40%			
View your complete Local Weather »			

Extended Fo	recast	Full 10-Day Forecast »		
Wednesday 25 Feb 2015	<b>Thursday</b> 26 Feb 2015	<b>Friday</b> 27 Feb 2015	Saturday 28 Feb 2015	
100		*	-	
Rain	Cloudy	Mostly Sunny	PM Showers	
49°F 36°F	56°F 33°F	55°F 37°F	63°F 55°F	

#### **Detailed Forecast**

#### **Today:**

Rain showers early with some sunshine later in the day. High near 55F. Winds N at 5 to 10 mph. Chance of rain 40%.

### Tonight:

Partly cloudy skies early will give way to occasional showers later during the night. Low 43F. Winds NNE at 5 to 10 mph. Chance of rain 40%.

### **Tomorrow:**

Cloudy, periods of rain. Highs in the upper 40s and lows in the mid 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.