

# INCIDENT ACTION PLAN

Be brief and concise with your entries

<b>Location</b> Bayou Corne Sink Hole	<b>Control Level</b> Company Supervisory	<b>Operational Period</b> From 7/15/13 To 7/16/13
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<p><b>1.0 SITUATION</b> Disease, community, environment</p> <p>PROMPTS: Weather, disease trends, Resources, Hazards &amp; safety</p> <p>REFERENCE: Maps, weather reports, Sitreps, appreciation, warnings, alerts</p>	<p><b>CURRENT</b> Mostly sunny</p> <hr/> <p><b>PREDICTION</b> Partly cloudy in the morning followed by scattered thunderstorms in the afternoon. 40% chance of precipitation. High Temperature near 88.</p>
<p><b>2.0 OBJECTIVES (or MISSION)</b></p> <p>PROMPTS: Time &amp; space</p> <p>REFERENCE: Appreciation – control options, courses open to disease</p>	<p><b>CURRENT</b></p> <p><b>Objective 1</b> - Demonstrating sinkhole containment and determining if additional sinkholes could form.</p> <p><b>Objective 2</b> - Locating and mitigating the risk posed by the presence of shallow gas.</p> <p><b>Objective 3</b> - Confirming the broader stability of the Napoleonville Salt Dome.</p> <p><b>Current Actions:</b> <b>(For planning purposes only, all activities are subject to change.)</b></p> <p><b>ORW Wells/ROI Wells</b></p> <ul style="list-style-type: none"> <li>- Conduct daily well readings and flare maintenance</li> <li>- Continue ROI testing on ORW 5 and 9 pads</li> <li>- Dewater ORWs</li> <li>- Shut in and flare off ORW 12 in preparation for plugging on Wednesday.</li> <li>- Plug TBC-1 on pad 3</li> </ul> <p><b>Bubble Sites</b></p> <ul style="list-style-type: none"> <li>-Set up and begin dual phase vapor extraction (DPVE) investigation on GP-BS-26</li> </ul> <p><b>Air Monitoring</b></p> <ul style="list-style-type: none"> <li>- Under-slab pressure monitoring ongoing</li> <li>- Install in-home monitors in 116 Crawfish Stew</li> </ul> <p><b>CPT Well</b></p> <ul style="list-style-type: none"> <li>- Advance and complete CPT 50W located at ORW 18 on Maurice Road</li> <li>- Advance and Complete CPT 51 located on Jambalaya</li> </ul> <p><b>Containment Berm/Roads/Sinkhole</b></p> <ul style="list-style-type: none"> <li>- Complete building MRAA-05 pad</li> <li>- Continue clearing paths in swamp for access to bubble sites and proposed CPT locations</li> </ul> <p><b>Tomorrow's Activities</b></p> <ul style="list-style-type: none"> <li>- Continue ROI testing on ORW 5 and 9 pads</li> <li>- Dewater ORWs</li> <li>- Plug TBC-2</li> </ul>

	<ul style="list-style-type: none"> <li>- Continue DPVE investigation</li> <li>- Install under-slab probes at 108 Crawfish Stew Street</li> <li>- Continue CPT operations</li> <li>- Continue clearing paths in swamps</li> <li>- Place clay on south berm</li> <li>- Begin CPT operations in swamp</li> </ul>
<b>Sinkhole Activity – Code 1</b>	
<b>3.0 EXECUTION</b> add safety information as appropriate	
<b>GENERAL OUTLINE</b>  PROMPTS: Strategies & tactics (current/proposed/alternate)  REFERENCE: Appreciation, Control Options	<p style="text-align: center;"><b>Safety Information: See Attached Safe Work Rules Reference IAP dated 8/9/12</b></p> <p><b>Additional to our Safe Work Rules for this project we are adding the awareness of insects, reptiles and animals.</b></p> <p><b>Inspect location for flammability</b></p> <p><b>Daily Safety Meetings</b></p> <p><b>PPE Required on site: Respirator w/ VOC Cartridge, Gloves for sampling, eye protection, life preservers, hearing protection.</b></p>
<b>GROUPINGS</b>	<b>NA</b>
<b>TASKS</b> Including PR & Media	<b>Same as above</b>
<b>COORDINATING INSTRUCTIONS</b>  PROMPTS: Timings, routes, assembly areas, staging areas	<b>Texas Brine Grand Bayou Facility will be used as staging area.</b>
<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)	
<b>SUPPLY</b> WHO, WHAT, WHERE, WHEN of resources not readily available	<b>NA</b>

<b>GROUND SUPPORT</b> Transport of personnel, traffic mgt, refuelling, mechanical repair/maintenance	<b>NA</b>
<b>COMMUNICATIONS</b> Installation, maintenance, technical advice	<b>Cell Phone &amp; Landline Communications:</b> <b>Kenneth Blanchard – Area Manager – [REDACTED] ([REDACTED])</b> <b>kblanchard@texasbrine.com</b> <b>Scott Borne – Facility Manager – [REDACTED] ([REDACTED])</b> <b>sborne@texasbrine.com</b> <b>Joel Miller, PE – Consultant – [REDACTED] ([REDACTED]) joel.miller@cox-internet.com</b> <b>Bruce Martin – Operations/PR – [REDACTED] ([REDACTED])</b> <b>bmartin@texasbrine.com</b> <b>Mark Cartwright – Technical/Engineering – [REDACTED] ([REDACTED])</b> <b>mcartwright@unitedbrine.com</b> <b>Scott Whitelaw – Environmental/Safety – [REDACTED] ([REDACTED])</b> <b>swhitelaw@tum.com</b>
<b>STAGING AREA/ FCP</b> Setting up, communications, staffing	<b>Texas Brine Grand Bayou Facility</b> <b>1301 Hwy 70 South, Belle Rose, La 70341</b>
<b>5.0 ADMINISTRATION (Logistics services)</b>  PROMPTS: Unit names, locations, contact names, phone no's, timings, duties/tasks, routes, suppliers, quantities, status (required, organised, stand by, enroute)	
<b>FACILITIES</b> Security, waste, cleaning	<b>NA</b>
<b>CATERING</b>	<b>NA</b>
<b>OH&amp;S/MEDICAL</b> Medical plan, first aid plan	<b>Call 911</b>
<b>FINANCE</b>	<b>NA</b>
<b>TRAVEL</b>	<b>NA</b>
<b>INDUCTION/ TRAINING</b>	<b>NA</b>
<b>ACCOMMODATION</b>	<b>NA</b>

<b>6.0 CONTROL, COORDINATION &amp; COMMUNICATION</b>	
<b>CONTROL &amp; COORDINATION STRUCTURE</b>  REFERENCE Structural Chart	<b>Plant Management Supervision / Contractor Work</b>
<b>COORDINATION &amp; LIAISON</b>  Local knowledge, police, agency reps, emergency mgt reps	<b>NA</b>
<b>COMMUNICATIONS</b>  PROMPTS Communications structure, operational comms plan, information mgt	<b>Plant Management – Contractor Communication via Cell Phone</b>

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

**Belle Rose, Louisiana, United States**

**Today's Forecast:** Monday, 15 Jul 2013

**88°F**  
**74°F**

**Sky Conditions:** PM Thunderstorms  
**Sunrise:** 6:13 AM **Sunset:** 8:07 PM  
**Wind:** ESE (119°) @ 8Mph  
**Precipitation Probability:** 40%



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

<b>Tuesday</b> 16 Jul 2013	<b>Wednesday</b> 17 Jul 2013	<b>Thursday</b> 18 Jul 2013	<b>Friday</b> 19 Jul 2013
Scattered Thunderstorms	Scattered Thunderstorms	Isolated Thunderstorms	Scattered Thunderstorms
<b>87°F</b> <b>74°F</b>	<b>89°F</b> <b>74°F</b>	<b>91°F</b> <b>74°F</b>	<b>91°F</b> <b>73°F</b>

**Detailed Forecast**

**Today:**

Partly cloudy in the morning followed by scattered thunderstorms in the afternoon. High 88F. Winds ESE at 5 to 10 mph. Chance of rain 40%.

**Tonight:**

Variable clouds with thunderstorms, especially during the evening. Low 74F. Winds ENE at 5 to 10 mph. Chance of rain 40%.

**Tomorrow:**

Scattered thunderstorms. Highs in the upper 80s and lows in the mid 70s.

## Site Specific Safety Plan for Remediation of the Bayou Corne Sink Hole

The following plan is a site specific plan for the remediation of the Bayou Corne sink hole which will be achieved in two Phases. Phase one will include the construction of an access road to the sink hole which will allow the use of a long reach excavator. The excavator will be used to remove vegetation near the access road and place into roll off boxes. Phase two will consist of placing one or more airboats with attached rakes that will be used to push vegetation towards the access road where it will be removed and placed in roll off boxes. By removing the vegetation this allow us the use of skimmers and absorbent booms to aid in hydrocarbon removal.

### Site Setting

The Texas Brine facility is located at 1301 Hwy 70, Belle Rose, LA 70341. The facility is located South of 70. The site is located on raised pads and roads but the property is otherwise swamp. A site map is attached. The nearest hospital, Our Lady of the Lake is located in Napoleonville, LA. which is a 15 minute trip.

### Site Specific Hazards

The site is located in a swamp setting and potential dangers may be present. Personnel should be aware of:

- Alligators
- Wasps
- Snakes
- Spiders

### Emergency Contact

911 will used in any emergency.  
Cell phones on site

### Site Safety

#### Safety Meeting

Held at the beginning of each shift.

#### PPE Requirements

- Hard hat
- Safety Glasses
- Steel toe boots

#### Air Monitoring

A system of air monitoring devices have been placed across the property surrounding the sink hole. One air monitoring device is located next to the access road.

Airboats will have hand held monitors on there person at all times when on the sink hole.

#### Spotters and Warnings

A person or persons armed with an air horn will be placed on site looking for safety issues such as:

- Leaning trees
- Falling trees
- Ground Movement

Driver of the truck attached to the roll off box will remain in the truck at all times and will be ready to vacate the access road on signal.

#### Heavy Equipment

Long reach excavator

#### Environmental

Vegetation will be placed in lined roll off boxes and disposed of.  
Airboats will remain inside the containment boom once entered.  
Decon of airboats will take place on location pad next to access road.

TBC Oxy Grand Bayou Sinkhole Management Plan

Phase Two- Crude Oil/Vegetation/Debris Removal

10-12-2012

(THIS PLAN CAN BE ADJUSTED BY TBC FOR WEATHER RELATED ISSUES, OR SITE CONDITIONS)

This plan is being followed as an approach to sinkhole management. The primary focus for this plan is to:

1. Recover liquid hydrocarbons that are found on the surface of the sinkhole. By removing the free phase Hydrocarbons that are found on the surface of the sinkhole, off-site migration of these Hydrocarbons will be greatly reduced. Thus, limiting the impacts of the Hydrocarbons to the sinkhole surface and the immediate area. Additionally, the removal of the free phase Hydrocarbons will greatly reduce the "smell" associated with the sinkhole.
2. To further understand the dynamics of the sinkhole, through profiling and visual observation of the surface of the sinkhole.

Phase One focused on the removal of floating vegetation and debris within the sinkhole. To date, the vast majority of floating vegetation and debris has been cleaned and cleared off of the surface of the sinkhole area. On October 8, 2012, we began to bring on site equipment and staffing to move into Phase Two of the Sinkhole Management, Crude Oil Removal.

Crude Oil removal will take place on near the mat road that was constructed on September 24, 2012. Texas Brine began reconstruction of the mat road at well pad #3, going toward the sinkhole. This road has been constructed of river sand, filter fabric and wooden mats. The mat road has been constructed in the previous footprint, to the outside and on the eastern side of the sinkhole.

As discussed in the Phase One Plan for Sinkhole Management, the mat road will play a vital part in our recovery of oiled vegetation and crude oil removal. Texas Brine plans to collect crude oil via physical means with skimmers, and vacuums. We will also use Air Boats to sweep the surface of the sinkhole. Texas Brine has fabricated an oil collection box that will be placed at the end of the mat road, in the water, that will assist in the collection of crude oil.

Product that is recovered will be placed into a frac tank and stored for disposal. These Frac tanks are stored near the sinkhole in an orderly fashion. The vacuum trucks that are used are inspected for leaks and drips prior to leaving the facility for disposal. Occasionally, the Long-reach boom and operator may have to go back out on the mat road to sweep in additional debris that has been swept in by the air boats. The additional debris will be handled as discussed in Phase One. As a safety precaution, the truck driver will be instructed to remain in his vehicle with on ready should any movement be observed on the sinkhole. The truck driver will remain at/in his vehicle during the loading process. A spotter will be placed in a stationary location on Well Pad # 3 to watch for any movement of trees or debris in the sinkhole. Additionally, there will be supervision of the project entire project by TBC Employees.

Texas Brine is following the advice offered by LA DNR and pursuing the use of Oil Gator, as an in-situ remediation of crude oil in hard to reach places or in marginal places where oil may have escaped the containment boom. Texas Brine will not proceed with the use of this material or other materials until approval has been issued by the lead agency on this incident. The use of any such absorbent material will be used to augment the traditional physical oil removal procedures. The proposed use of Oil Gator will not replace the use of traditional physical oil spill removal.

If any personnel or contractors are allowed onto the sinkhole, then personal air monitoring devices will be used to monitor air quality/exposure while on the sinkhole.

The safe execution of this activity is the goal of TBC. This is why every person entering the property, must wear proper PPE (Hard Hat, Long Pants, Steel Toed Boots, and Safety Glasses).

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