

Case Study – Spill Response June 2023, Natchez, Mississippi



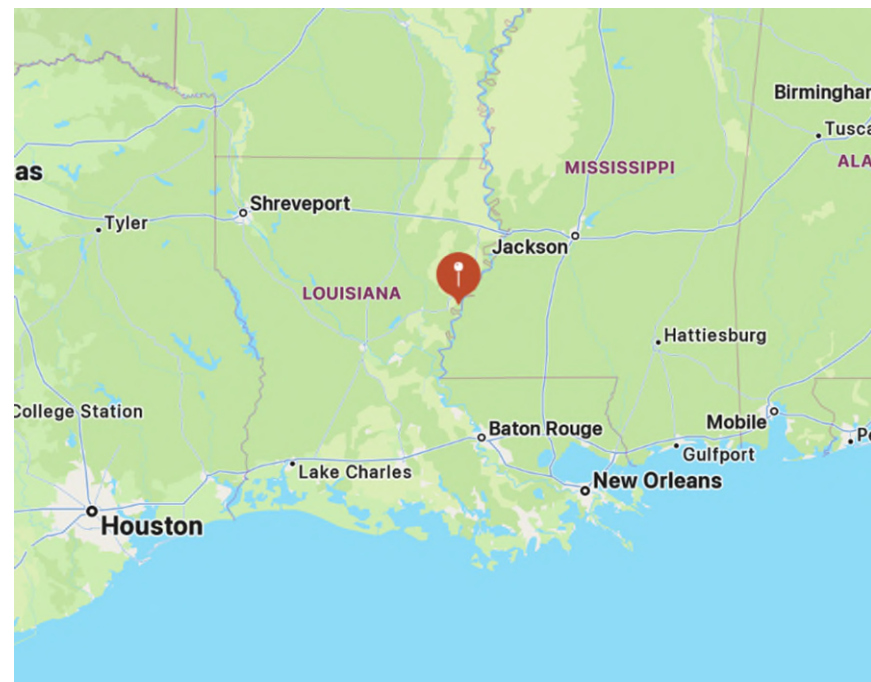
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Scenario



- Tow was southbound on Lower Mississippi River, approximately 20 miles south of Natchez, MS.
- Around 8 pm on June 10, 2023, while making periodic rounds on tow, crew noticed cargo escaping from #2 starboard cargo tank.
- Escaping cargo (heavy black oil) rapidly increased in flow.
- Approximately 100 bbls escaped with roughly 50 bbls making it to water.



Challenges



- Heavy & persistent oil product
- Impacted shorelines of TWO states (MS and LA)
- Remote/rural region with limited facilities
- Summer weather (100+ degree temps, thunderstorms)
- Dynamic river conditions



Initial actions



- Secure source
- Activate VRP
- Make notifications
- Deploy spill response supplies
- Establish Incident Command Post
- Stand up Unified Command





Operational challenges...



Summertime in southern Mississippi

- Cleanup effort primarily “manual labor” (shovels & bags)
- Heat indexes 110+ degrees
- Daily “pop up” thunderstorms

 94 °F	A 30 percent chance of showers and thunderstorms, mainly between 1pm and 4pm. Sunny, with a high near 93. Heat index values as high as 102. Southwest wind 5 to 10 mph. Chance of Precipitation(%): 30% Wind: SSE at 1 mph
 96 °F	Sunny, with a high near 95. Heat index values as high as 109. Southwest wind 5 to 10 mph. Chance of Precipitation(%): 0% Wind: SSW at 9 mph

Mitigation measures

- Adjusted work hours in the field
- Registered nurse/EMT in the field
- Real-time weather radar constantly displayed in ICP
- Ice...ice...and more ice!

What are we cleaning? And to what extent?

- Iron oxide “sheens”
- Bi-lingual “picture guide book”



- No oil larger than 2 centimeters (~3/4 of an inch) in diameter (a pinky fingernail) and at more than 1-5% coverage within the oiled band
- No oiled wrack. Wrack that is NOT oiled should NOT be removed.



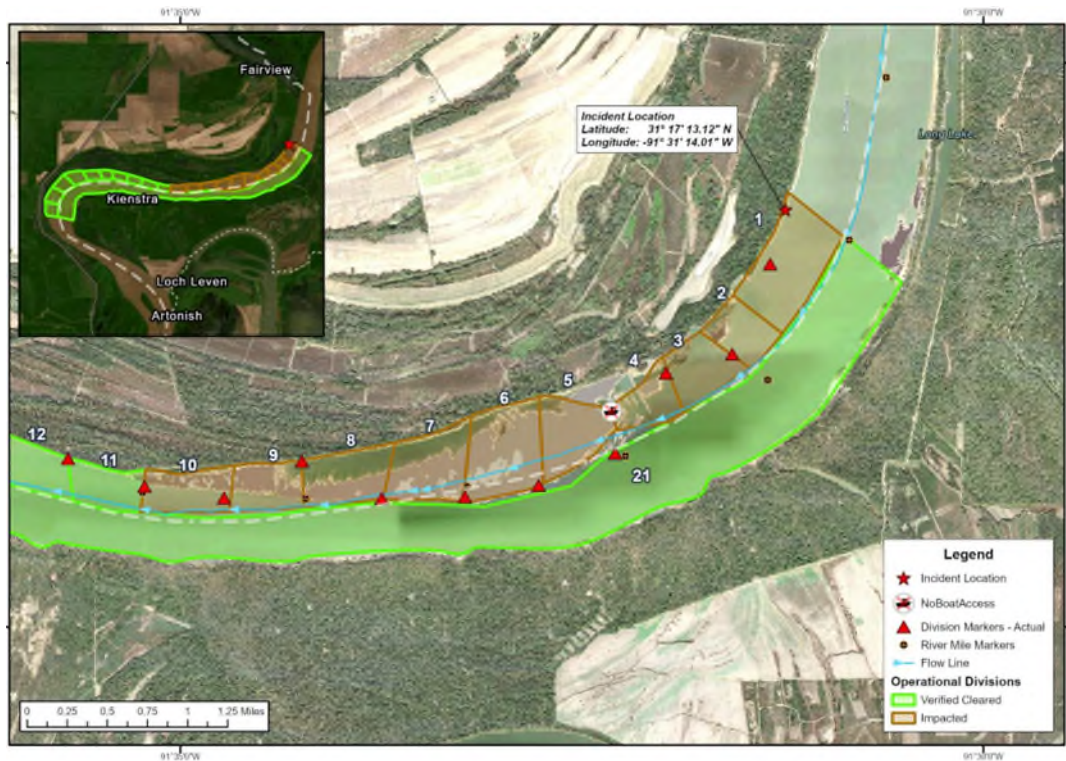
Clay

Operational challenges...



What are we cleaning? And to what extent?

- 1/2 mile grids w/UC “sign offs” for endpoints



Shoreline Inspection/Sign-off Form – MM339 Barge 27722 ITV Leviticus

1. GENERAL INFORMATION	Date (dd mm/yy)	Time (24 h standard daylight)	Feet from Water's Edge:
Division: 19	06/19/2023	1348 hrs to 1403 hrs	approx 10 ft
Segment (if applicable):			
Inspection By: Foot (boat)			
2. INSPECTION TEAM	Name	Organization	
	Stephanie Healey	SWCA	
	Rebecca Liff	SWCA	
	Jane Mendoza	LOSCO	
	Lauren Upton	LOSCO	
	Gina Sartan	LOSCO	
3. SEGMENT	Description of Shoreline Surveyed: A	Entire Division	Segment as specified below
	Start Latitude	Longitude	
	End Latitude	Longitude	
4. PRIMARY SHORELINE TYPES			
<input checked="" type="checkbox"/> Sand Point Bar	Other:		
<input checked="" type="checkbox"/> Rip Rap Gravel			
<input type="checkbox"/> Soft Muddy Banks			
5. CLEANUP ENDPOINTS	REFER TO ENDPOINTS LISTED IN INSPECTION/SIGN-OFF PLAN		
<input type="checkbox"/> Yes, clean up endpoints are met for the shoreline division identified above and signoff signatures are below.			
<input type="checkbox"/> No, clean up endpoints are not met. Oiling conditions and treatment recommendations are described below.			
<input type="checkbox"/> Sand <input type="checkbox"/> Rip Rap <input type="checkbox"/> Soft Mud <input type="checkbox"/> Woody Material <input type="checkbox"/> Vegetation/Wrack <input type="checkbox"/> Debris			
<input type="checkbox"/> Yes <input type="checkbox"/> No Buried oil observed in heel scrape? If present, describe:			
Describe conditions using SCAT Definitions: T/CT/IC on rock re-ventment, isolated rocks			
Other conditions or observations: Great Blue Heron, raccoon tracks – using rock escarpment			
6. TREATMENT RECOMMENDATIONS			
No Action Required			
Photo Numbers and Notes:			
Attachments: Sketch map on back: Yes (19) Additional comments on back: Yes (20)			
Signatures:			
Agency (Sign & Print): Lauren Upton			
Date: 06/19/2023			
RP (Sign & Print): Stephanie Healey			
Date: 6/19/2023			

Asphalt Barge MM339_SCAT Inspection Plan_DRAFT_061823

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Logistical challenges...



- Snow/beach shovels in Northeast Louisiana...in June?
- 150+ workers in field....restrooms?
- Cellular signals....can you hear me now?
- Meal delivery in the field...
- Ice....ice....ice!
- “We need a drone...”
- Only accept CASH?



Respect the local community...

- Annual Fishing Tournament
- Caution before wiping out donut and ice inventories
- Congestion & “dirty” foot traffic at ICP (i.e. Hampton Inn)
- Need security? Hire local...
- Need food? Buy local...

Establish cooperative rapport with FOOSC & SOOSC...

- USCG required precise “spill numbers/volumes”
- Build plans together (Transit Plan, Site Safety, Demob)
- Achieve consensus on “end points” (how clean is clean?)

If all else fails...

