

NIEHS Response to the Gulf Oil Spill

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**May 5, 2011
DWH Lessons Learned Workshop
Mobile, AL**



Worker Education and Training Program (WETP) was created in 1986 by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Section 126(g).

SARA authorizes a competitive grants program for training in hazardous waste removal, containment, and emergency response to events involving toxic substances.

WETP Emergency Support Activation Plan (ESAP) is built on the protocols of the Worker Safety and Health Annex of the National Response Framework (NRF).



In remembrance of the eleven Deepwater Horizon drilling rig workers who died at MC252. May they not be forgotten.



Key worker safety and health training issues:

- **How were training decisions made during the oil spill?**
- **How should training decisions get made in future disasters? (protocols, MOU, contract language)**
- **What was the basis for training being done the way it was?**
- **Why does preparedness training happen after the fact?**
- **Are there minimum federal training requirements for disaster site cleanup workers (topics to be covered)?**
 - **Experienced cleanup workers vs. local residents with no prior experience**
- **How does quality control of worker training happen during an incident response?**

Findings Related To Safety Training:

- The “maritime safety net” system failed to prevent this disaster.
- The investigation revealed that DEEPWATER HORIZON and its owner, Transocean, had serious safety management system failures and a poor safety culture.
- Transocean failed to ensure that its onboard management team and crew had sufficient training and knowledge to take full responsibility for the safety of the vessel.
- The master acknowledged that the training he received on the Safety Management System consisted of viewing a PowerPoint presentation, the content and whereabouts of which he was unable to recall.



UNITED STATES COAST GUARD

Report of Investigation into the Circumstances Surrounding the
Explosion, Fire, Sinking and Loss of Eleven Crew Members

Aboard the
MOBILE OFFSHORE DRILLING UNIT

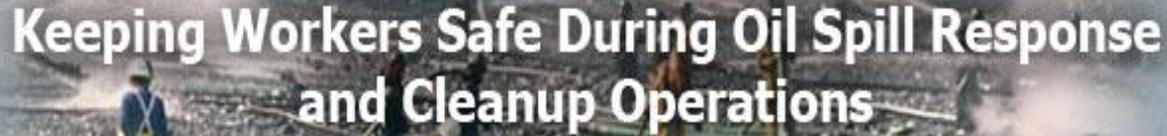
DEEPWATER HORIZON

In the GULF OF MEXICO
April 20 – 22, 2010

Findings Related To Safety Training:

- **A September 2009 BP audit of DEEPWATER HORIZON revealed training and knowledge deficiencies on emergency response systems that could impact safety.**
- **During Transocean's own internal ISM audit conducted in March 2010, Transocean observed that "in reviewing the roles of the Emergency Response team it was identified that personnel assigned a role within the team have not been provided with training regarding their duties."**
- **As a result, this team failed to have a full understanding of the emergency procedures and resource providers already in place to assist in these types of emergencies, and it ended up providing conflicting tasking to those on scene.**
- **By permitting safety systems to be bypassed and failing to have a robust emergency response team, Transocean revealed a lack of emphasis on safety that limited its ability to avoid or mitigate the impact of the casualty.**

Keeping Workers Safe During Oil Spill Response and Cleanup Operations



 **Chip Hughes** 
May 3 6:56a

Admiral Landry stresses #oilspill #workersafety with #OSHA head Michaels. <http://twitpic.com/1kml8>
via web

Write a Comment... 999

Admiral Mary Landry, USCG Incident Commander meets with OSHA Assistant Secretary David Michaels and the hazard assessment team at 6 AM on Monday, May 3, 2010 in Roberts, LA.

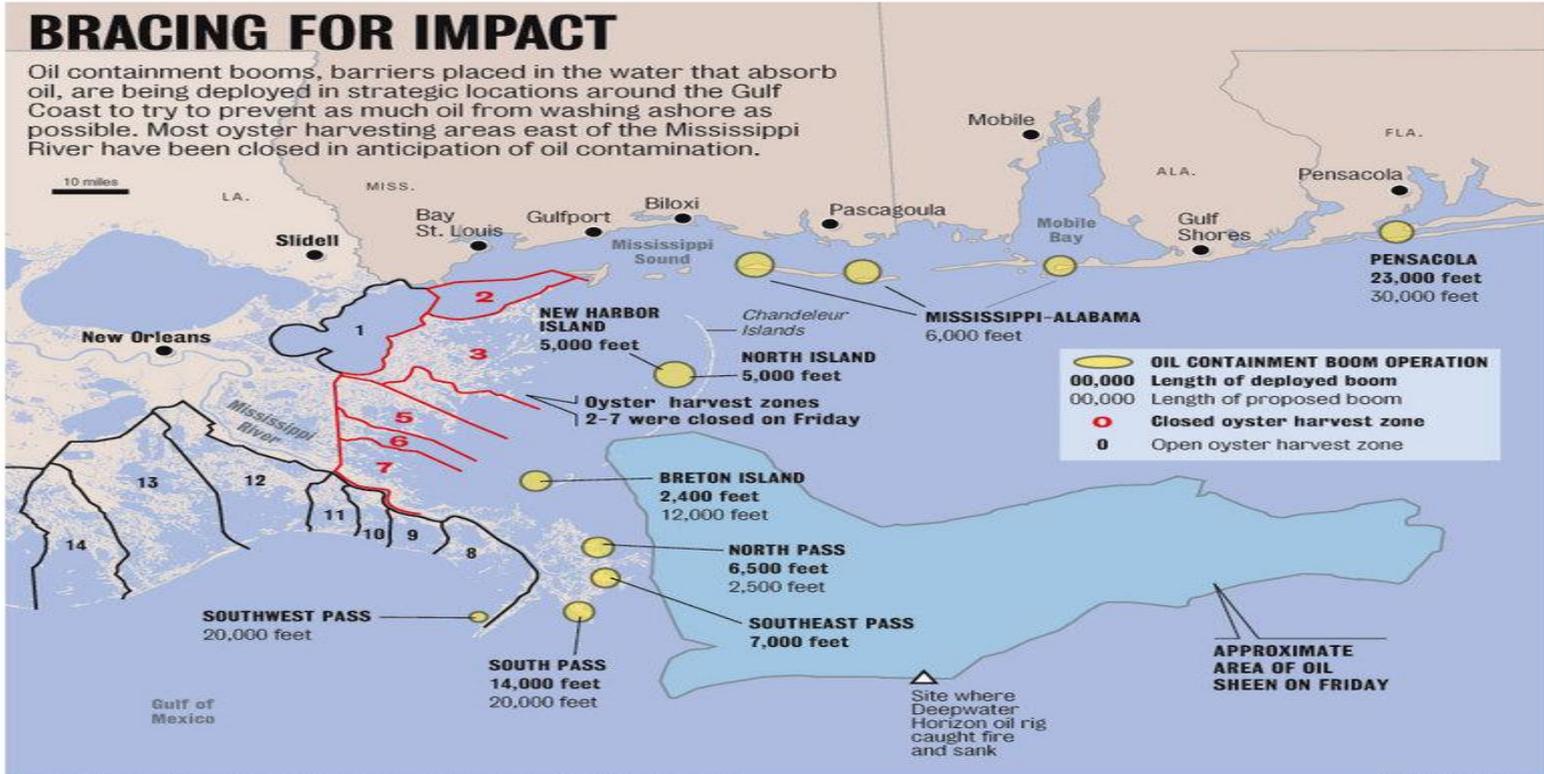
Email sent from Unified Command on Mon 5/3/2010 9:31 AM

- **“Amazing day so far. HQ brief @ 6 am. Meeting w Admiral Landry -- - amazing spirit as our federal mother-- she electrified the room w her 6 am vision of a long war ahead to avert catastrophe -- and then to BP VP Doug Suttles– a little more wary and reserved .**

Lots of family collaborative vibe among all the federal agencies w all the tough issues lurking around the response bubble.

Lots of talk on community mental health and resilience although not formally dealing with. Asked about getting more federal involvement.

Asking health exposure, decontamination, worker registry, safety training questions to all that we meet with. Admiral very positive about more fed Health agency involvement.



Source: The Response Group; www.deepwaterhorizonresponse.com; The New York Times; staff research

THE TIMES-PICAYUNE

WILDLIFE AT RISK

The oil spill from a deepwater well is threatening various birds and marine mammals along the Louisiana coast. The National Audubon Society has identified some of the most vulnerable birds.



BROWN PELICAN
 The state bird of Louisiana was recently removed from endangered species list. Just began breeding in the area.



REDDISH EGRET
 A strictly coastal bird with a dwindling population. Has nowhere to go if their feeding and nesting grounds are fouled by oil.



MOTTLED DUCK
 Live in coastal salt marshes. Recovery efforts for marsh birds would be nearly impossible if oil accumulates in the marshes.



ROYAL TERN
 Aerial birds that plunge into the water to catch fish. Have begun nesting on barrier islands and beaches.



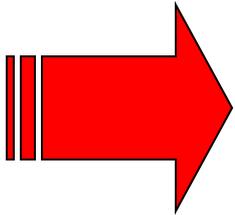
SNOWY PLOVER
 Feeds on small invertebrates or oysters. At risk if oil comes ashore or affects their food sources.

St. Bernard Parish fishers begin training to assist in fight against Gulf of Mexico oil spill

- By [Bob Warren, The Times-Picayune](#)
- **May 01, 2010, 9:43AM**
- St. Bernard Parish officials have announced the first phase of fisherman training to assist in efforts to contain a massive oil spill in the Gulf of Mexico will begin today.
- With landfall of the oil projected to affect St. Bernard's marsh by Sunday, officials said those fishermen who had signed up since Thursday's planning meeting in Chalmette have been contacted to attend a training session Saturday. During the training session they will become certified to work alongside BP contractors to help protect the fragile and intricate St. Bernard coastline.
- Frank Campo, owner of Campo Marina at Shell Beach, pauses as he discusses the threats to the region and his livelihood from the looming oil spill from the collapse and spill of the Deepwater Horizon
- [St. Bernard's efforts to enlist the fishing community in the fight comes at a time when local, state and national officials are growing frustrated with the pace of the cleanup efforts.](#)
- The oil has been spewing from the damaged pipe of the Deepwater Horizon rig, which exploded 11 days ago 50 miles off the mouth of the Mississippi River in 5,000 feet of water. Eleven people aboard the rig are still missing and presumed dead. The damaged rig sunk into the Gulf of Mexico.
- Because commercial fishing has been suspended in most of the local waters, St. Bernard Parish is trying to link the fishermen with BP's "Vessel of Opportunity" program so they can help while being compensated by BP, the parish said in a news release.

Keeping Workers Safe During Oil Spill Response and Cleanup Operations

Rescue



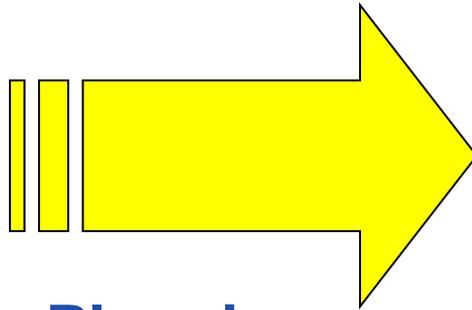
Chaotic

Risk-taking

Short

Frenetic

Recovery



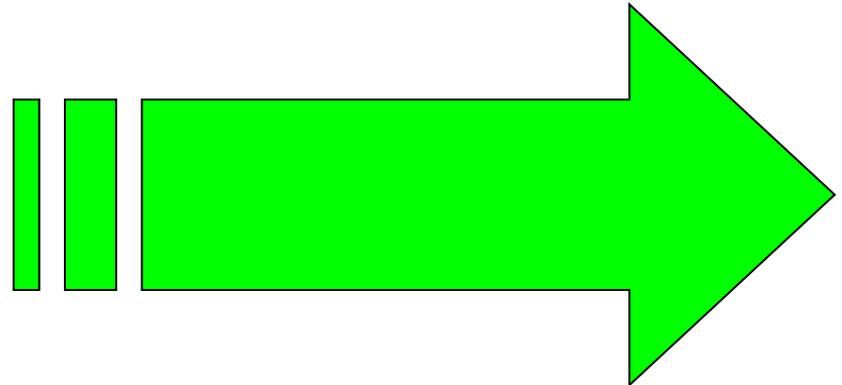
Planning

No risking lives

Longer than rescue

Paced

Clean-up



Normal cleanup

Risks assessed and understood

- **NIEHS developed oil spill response training tool on April 27, 2010 as the spill expands in the Gulf of Mexico.**
- **NIEHS begins work with OSHA and NIOSH as part of the Unified Command assessing worker safety issues on May 1st.**
- **NIEHS deployed staff, subject matter experts and awardees for instructor training and worker protection outreach.**



BP, USCG, OSHA, NIEHS, and NIOSH meet to assess worker protection issues in the BP Incident Command Center in Houma, LA on Tuesday, May 3, 2010.

- **NIEHS, together with OSHA, BP and the Coast Guard, developed short training courses.**
 - Training includes: safe work practices, personal protective equipment, decontamination, heat stress, and other common hazards for cleanup work.
 - As of August 29th, per BP, approximately 150,000 people had completed these courses.
- **Hazardous Waste Operations & Emergency Response (HAZWOPER) training:**
 - 40-hour training for those who will likely have direct contact with oil spill products.
 - More than 1,000 have completed the HAZWOPER training from NIEHS grantees.

Module 2

NIEHS Oil Spill Cleanup Training Tool

OSHA

Module 2

Oil Spill Cleanup and Health Concerns



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WORKER EDUCATION & TRAINING PROGRAM

National Institute of Environmental Health Sciences
Oil Spill Cleanup Initiative

Safety and Health Awareness for Oil Spill Cleanup Workers



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health



NIEHS Oil Spill Responder Training Tool: Key Health and Safety Messages

- Proper training is a key component of a safe response and cleanup.
- The oil and hazardous materials associated with the cleanup can be hazardous to human health.
- The hazards and issues covered in this training tool are dynamic and require vigilance and flexibility.
- The key to a safe response is attention to the safety issues of your work environment.



How Can You Protect Yourself from Hazardous Chemicals?

When dealing with health and safety hazards try to control them by using the hierarchy of controls



NIEHS/BP Field Training for Vessels of Opportunity (VOO) workers in Venice, LA



Over 25,000 guides distributed

Front-line responders,
instructors, and safety officials

English, Spanish, & Vietnamese

National Institute of Environmental Health Sciences
Oil Spill Cleanup Initiative

Safety and Health Awareness for Oil Spill Cleanup Workers



National Institute of Environmental Health Sciences
Iniciativa de Limpieza del Derrame de Petróleo

Seguridad y Concienciación de Salud para Trabajadores de Limpieza de Derrames de Petróleo



Mayo 2010, v5

1-800-321-OSHA (6742)

OSHA 3391-052010

PROGRAMA DE EDUCACIÓN Y DE CAPACITACIÓN DE LOS TRABAJADORES



NIEHS Oil Spill Cleanup Training Tool



HOẠT ĐỘNG TÍCH CỰC ĐỂ DỌN SẠCH THẢM HỌA TRẦN DẦU

Kiến Thức Về Sự An Toàn và Sức Khỏe cho
Nhân Viên Dọn Sạch Hiện Trường Trần Dầu



Tháng Năm 2010, v4.1

WORKER EDUCATION & TRAINING PROGRAM

OSHA 3388-052010

- **NIEHS worker training mission will include:**
 - **Conducting a training quality assessment process to assure that cleanup workers receive proper training to prepare them for oil spill response;**
 - **Create additional curricula and modules and provide Hazmat trainers to cover essential health and safety hazards for oil spill cleanup workers;**
 - **Develop training to support personal protection equipment for oil spill responders;**
 - **Provide advanced Hazwoper training to subcontractor employees for specialized response activities**
 - **Integrate safety and health training into an overall responder protection program in conjunction with BP, USCG, OSHA, NIOSH and others.**

Dirty boom cleaning off the coast of Louisiana



- **National Contingency Plan (NCP) vs. National Response Framework (NRF) – Clarifying worker safety and health protection procedures and protocols in conjunction with ICS safety officer.**
- **All oil spill response training should grow out of the 1910.120 HAZWOPER training framework.**
- **Appropriate subject matter experts must be assembled to create training materials based on best professional judgments and expertise.**
- **Job hazard analyses (JHA's), site health and safety plan (HASP), and exposure assessments must be created to assure adequacy of training components and curricula modules.**
- **Training assessment process must be carried out for characterizing target populations in terms of prior knowledge, literacy levels and expected job tasks.**
- **Quality assurance process must be built-in to assure the “right to understand” and assure training responds as conditions change.**

NIEHS Hazmat Preparedness Initiatives:

Awareness for Radiological Dispersion Device (RDD) Preparedness

Protecting Yourself During a Dirty Bomb Response

An Awareness Level Training Tool for Skilled Support Personnel



National Institute of Environmental Health Sciences
Flood Response Orientation

Safety Awareness for Responders to Floods:

Protecting Yourself While Helping Others



June 2008

WORKER EDUCATION & TRAINING

NIEHS Wildfire Response Training Tool

Protecting Yourself While Responding to Wildfires

Safety and Health Awareness for Responders to Wildfires



V8 December 2007

WORKER EDUCATION & TRAINING PROGRAM



National Institute of Environmental Health Sciences
Hurricane Response Orientation

Safety Awareness for Responders to Hurricanes
Protecting Yourself While Helping Others



National Institute of Environmental Health Sciences
Avian Influenza: Worker Safety & Awareness

Protecting Yourself from Avian Influenza



WORKER EDUCATION & TRAINING PROGRAM



OSHA Deputy Assistant Secretary Jordan Barab in Venice, LA with his raincoat maker and HHS partners

