Emergency Management Committee Report
August 17, 2010

On April 20, 2010, the explosion and fire at the Deepwater Horizon oil rig focused the world’s attention on what a major oil spill could do to the Gulf of Mexico and the surrounding shorelines. On April 30th, Florida Governor Charlie Crist issued Executive Order No. 10-99, which activated the Florida Emergency Operations Center. The coastal counties of Florida began preparing for oil and tar balls on the beaches and in the estuaries along the Gulf Coast of Florida. Area Contingency Plans were being pulled down from the shelves and dusted off. Most of these plans were written based on oil spills from ships with a defined volume of oil onboard. They did not anticipate the volume of oil that a runaway oil well could discharge into the Gulf of Mexico.

In late June, I was asked to go to the panhandle counties and review cleanup procedures and compare the Sarasota Area Contingency Plan to what was actually happening in northwest Florida. I made contact with some of our friends in APWA. And with the help of Pat Overton and Kim Kirby, I was able to meet with a number of people actively working on the cleanup effort. I had some candid conversations with County Administrators, Public Works Directors and EOC Directors.

I started my travels with five questions about the cleanup effort:

1. What equipment and strategies work or don’t work when dealing with the oil spill?
2. How is the relationship between the Unified Command and the local government?
3. What can the local government do to serve their citizens? Either by more efficiently communicating with Unified Command, and/or on the ground cleanup efforts?
4. How would claims for reimbursement be handled?
5. What training is needed for cleanup crews?
**Equipment and Strategies:**

As the oil rises up the 5,000 feet from the broken well head to the water’s surface, the natural gas separates from the crude oil. Some of the crude is heavy and does not make it to the surface. This resulted in crude oil being suspended throughout the water column and out of reach of vessels on the surface.

As time goes on, the consistency of the oil changes as it ages. The oil starts out a fresh crude oil from the well and deteriorates into a mousse or pudding like substance suspended just below the surface. The mousse later thickens into tar patties. With wind and wave action, the tar patties break up into smaller and smaller tar balls. This means that the cleanup strategies have to change as the material ages. There is no one solution to the problem.

In the open Gulf, the oil that can be gathered by booms is either skimmed or burnt off. As the oil moves closer to shore the option of burning the oil is not used. Calm seas were needed for booming of the oil. Heavy waves force the oil over and under the booms.

Booming near beaches does not work well because of the constant wave action. Most of the booming efforts in north Florida were in the passes, the bays and the estuaries. The typical booming in estuaries is a combination of three layers of both hard booms and sorbent booms. The hard boom stops the surface oil so that the sorbent boom can pick it up oil. The layers are set 20 to 30 feet apart so that second and third layers can catch what is missed by the pervious layer(s). The sorbent booms need to be changed out periodically in order to remove the oil from the environment. Strong currents over 4 knots will carry the oil under the booms.

The maintenance of the booms is very important. Wind, waves and boaters can damage the boom. The boom systems in the passes need to be opened and closed during the changing tides. Booms near boat harbors need to be opened and closed for boat traffic.

Many skimming devices were tried. The addition of dispersants to the oil-water mix made the drum type skimmers ineffective. In the bays, a vacuum skimmer became the skimmer of choice. Two sister ships pulling either end of a hard boom would encircle the oil sheen and the vacuum skimmer would draw the oil up out of the water. The drawback to this system was the limited storage capacity of the vacuum tank. Adding a barge to the working group with tanks for off-loading of the oil saves multiple trips back to the dock to unload.

Once the oil has aged into a tar patties or tar balls, booms and skimmers are not effective. The tar patties and tar ball are suspended through the water column. Everything from pitch forks to tennis racquets have been used to remove tar patties and tar balls from the water where they can be reached. The tar patties and tar balls that make it to the beaches can be cleanup either manually or by beach cleaning machines. Tar patties and tar balls in the estuary system are more difficult to manage. Sorbent booms and snare booms offer the most hope of success.
Unified Command:

This incident is not a natural disaster covered by the Stafford Act and FEMA is not involved in the cleanup. The U.S. Coast Guard is the first responder to oil spills in the coastal waters of the United States. The Coast Guard resources are set for responding to oil spills from ships, not oil wells. The Coast Guard is the lead Federal agency in this incident. Since British Petroleum is the responsible party and has the technical resources to repair the well, they are a member of the Unified Command. As the oil began coming ashore each of the four coastal states entered the Unified Command. The Florida Department of Environmental Protection became the lead Florida agency and thus part of the Unified Command. The Unified Command is based in Mobile, Alabama.

As the event continued into its second month, it became apparent that the Florida counties were not receiving the attention they needed from the Unified Command. Even though the Florida EOC was activated, the response time was still lacking. County EOCs made requests through the State EOC to the Unified Command. BP would review the request and send a response back through the chain of command. Sometimes the responses took weeks to get through the system. This was very frustrating to some of the professional emergency managers in the region. On July 7th, a branch office of the Unified Command was opened in Pensacola, which improved communication and response for Escambia and Santa Rosa Counties. However, the counties farther east were still experiencing slow response times. Later, a branch office was opened for Okaloosa and Walton Counties. Another was opened for Bay County. And a fourth branch office was opened for Gulf, Franklin, Wakulla and Jefferson Counties.

The decision making process of the Unified Command was slow and cumbersome because the Coast Guard representative was the only member of the Unified Command thoroughly trained in the Incident Command Structure. While everyone had the same goals of stop the flow of oil and cleaning up the shoreline, the common terminology and the rapid response to changing conditions was not there.

Reimbursement:

The reimbursement to local government followed the same chain of command to the State EOC and then the Unified Command in Mobile. In the first 80 days of the event, the reimbursement process was changed by BP seven times. The financial managers in the local EOCs were very concerned about their cash flow during the event.

Training:

As stated above, the oil changes as it ages and the toxic nature of the oil changes as well. Depending of the type of material the workers were to cleanup, different training was provided. Hazardous Waste Operations and Emergency Response (HAZWOPER) training has three levels of training. There are 40-hour, 24-hour and 8-hours training classes. If a worker did not already have a HAZWOPER certificate, BP provided training at the staging area and supervised the worker in the field.
Summary:
At the end of my travels, I revisited my five questions about the cleanup effort and I offer a few answers below:

1. What equipment and strategies work or don’t work when dealing with the oil spill? Answers:
   a. Where the water is calm enough to allow the booms to function, liquid oil and oil sheen at the surface can be picked up by skimmers and sorbent booms.
   b. Dispersants make skimming more difficult.
   c. Mother Nature will control your strategies.
   d. Tar patties and tar balls on the beach are easier to clean up than in the grass flats and wetland areas.
   e. Pick up the tar balls as soon as they hit the beach. If you do not, they will be buried under the sand. This makes the cleanup more difficult and will take longer to complete.

2. How is the relationship between the Unified Command and the local government? Answers:
   a. Because the communications between the local governments and the Unified Command are directed through the State EOC, the relationship is strained by time and distance.
   b. In some cases, requests for resources were denied by the Unified Command with no explanation for the denial. This leaves the local government not knowing what to do next.
   c. The opening of the branch offices has helped to resolve some of these issues.

3. What can the local government do to serve their citizens? Either by more efficiently communicating with Unified Command, and/or on the ground cleanup efforts? Answers:
   a. All disasters are local. The public want the cleanup to start immediately. Having the right personnel, whether they are staff or a contractor, ready to deploy is highly recommended.
   b. If a local agency starts the cleanup ahead of the Unified Command authorization, be prepared to pay your own way.
   c. Coordinate with the Unified Command early in the event to establish the lines of communication.

4. How would claims for reimbursement be handled? Answers:
   a. FEMA Reimbursement is difficult enough. A corporation reimbursing a local agency is even more difficult and slow.
b. Early establishment of the reimbursement process may be helpful in moving the paperwork. However, in this case, the process changes many times.

5. What training is needed for cleanup crews?

Answers:

a. HAZWOPER training is needed anytime you are working with hazardous materials.

b. First aid and heat stress training should also be part of the training package.

There will be many others who will write reports and stories about this oil spill. This was only one person’s observation.

Thousands of people have been involved to date. And, this event is not over yet. It will be with us for many years.

Respectfully submitted,

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