DIVEX RESPONSE AND REMOVAL

WIS Cannel 6 News Anchorman Ed Carter: A deadly explosion tonight at a chemical company forces residents to evacuate their homes. Good Evening, Susan has the night off. At this hour Richland County authorities are working cautiously to clear the scene of a violent explosion. The blast took the life of a Richland County man who worked with explosives and other hazardous materials. It also forced folks in and around the DIVEX Company to flee their homes.

Unidentified News Anchorman :…Richland County company that was rocked late Monday afternoon by an explosion that killed its owner, had filed for Bankruptcy in June, but knows that John Southerland is dead; the company faces an uncertain future. The blast killed Southerland…

Chief George Mick, Columbia / Richland Fire Service: When we were dispatched to this location, once the emergency units uh, started their response I directed them not to commit to the location and bring engines and equipment in as we considered this a hazardous materials site though we had no specific information on what it contained. The dispatch informed us there had been an explosion, possibly a victim. At that point I ordered an evacuation of the neighborhoods in this area and declared the incident a star incident which is a local reporting procedure for a major incident. That brings in hazardous material units and additional units.

Narrator: The explosion is believed to have occurred as the owner of DIVEX Incorporated was mixing a batch of high explosives known as lead stiff mate. The blast tore open the company's main building and in so doing scattered components of the shock-sensitive mix throughout the structure, making any entry onto the site extremely hazardous.

With the roughly 20-acre facility closed and sealed off, South Carolina state officials began working with a court appointed bankruptcy attorney and a DIVEX employee to gain control of the site. After some time and with the growing fear that conditions would only worsen, Senator Strom Thurmond's office became involved, enlisting support from the EPA and the ATF.

Matthew Taylor, On Scene Coordinator, EPA: Well our first involvement uh came in late October. We received a phone call from the, one of the senators' office and asking about the site and then uh, we called up the uh, state and local government, uh, to try to figure out what the situation was at the DIVEX site. And after talking with them, uh, we uh, dispatched R1, our first respondent. Once she was able to gather up enough information, uh, we convened the uh Regional Response Team about a day or 2 later and uh requested assistance from uh the ATF and the Department of Defense to handle the uh military ordinances, and also try to get any other type of support that uh, we needed to respond to this incident.

Reynold Hoover, Special Agent, Bureau of Alcohol, Tobacco and Firearms: We had uh no idea of what we were coming on. We knew that there was

explosives, a large quantity of explosives down here. We knew that Mr. Southerland had uh died in an explosion here on site Labor Day weekend. Uh, but beyond that we really had no idea other than assisting the EPA uh, when we got down here. I'm not sure anybody really knew exactly all what was out here at the time.

Narrator: As EPA and other agencies set about the tasks of investigating and eventually cleaning up the site, their biggest fear was of the unknown.

The DIVEX Corporation was owned and operated by Jack Southerland, a self-taught explosives expert and chemist, who had been manufacturing small amounts of explosives for nearly 2 decades. In that time, DIVEX was inspected periodically by the ATF and for the most part was found to be in compliance with federal regulations. But at the time of the explosion, the conditions at the facility were dangerously sloppy. Previous ATF violations had gone uncorrected and hundreds of different containers were haphazardly stored on site, including poisonous gases, corrosives, flammable liquids and solids, oxidizers, detonators, TNT, landmines, and even rocket fuel.

To try to ascertain exactly what the teams would be coming up against, company files dating back to 1971 were sent to EPA investigators. At that time a second site was identified in a nearby residential community where Mr. Southerland kept a small laboratory. As more and more information became available, it was apparent that this site was unique due to the combination of explosives and

chemical hazards present, and that it would require the cooperation of a number of different agencies and expertise.

Chris Miltscher, Lead On Scene Coordinator, EPA: Currently EPA is conducting an emergency response and time critical removal action here. Uh, what we're doing is trying to uh take out approximately 40,000 lbs of high explosives and military ordinance and also cleaning up numerous reactive and explosive chemicals that were associated with the facility. Uh, we have several inter-agency agreements with other federal agencies that will be working with us in this effort including the US Coastguard Strike Team, the Bureau of Alcohol, Tobacco, and Firearms, and also the Corps of Engineers and their contractor.

Mike Lester, Petty Officer, First Class U.S. Coast Guard Strike Team: Initially when we first got here we had to, we had to generate a site safety plan, before any work could be done really we got the site safety plan going. After we got that uh approved by the on-scene coordinator, uh, we fell into a site safety role m-, uh, to monitor the whole site. And then uh we had entry teams going in all day long, identifying and uh inventorying all the chemicals on site.

Ray Willis, Response manager, EPA ERC's Contactor: Well basically when it came to the entry of, of the uh magazines, the magazines were actually entered by the ATF and UXB International and the Corps of Engineers, and the Army EOD people out of Fort Jackson. When it came to the trailers that uh had a mixture of items in them or uh just chemicals and gas cylinders, there was a lot of anxiety on my part to uh get them to perform that task without knowing what they

might run into and also uh, uh, I'm sure there was a lot of anxiety on their part having to do the entry.

Chris Miltscher, Lead On Scene Coordinator, EPA: To date we have removed approximately 29,000 lbs of high explosives, 150 lbs of a highly sensitive military ordnance, and high explosives, and they were detonated at Fort Jackson. Uh, subsequent to that we also removed several more items, in fact, just recently, at Fort Jackson had them detonated, which include [Gator] mines, other types of fuses and detonators, and that totaled over 200 lbs of materials.

Slowly we're getting to all the chemicals, explosive chemicals, reactive materials, we're taking them out uh, in chemical inventories and explosive inventories that are being updated on a regular basis, we're treating them or, and/or detonating them depending on what the material is. We can expect this process to continue for at least several more weeks to several months depending on how much we continue to find and how many problems we continue to have.

Narrator: An isolated tract of land on the DIVEX property was configured to handle the treatment and neutralization of certain hazardous chemicals on site. Containers were first segregated according to like materials and then a treatment scheme for that given group was tested and acted upon. Any solids or sludges that resulted were burned off with the remainder of the material being safely transported off site for disposal. In this way approximately 30 55-gal. Drums were treated and neutralized on site. As trailers were first being inspected and plans made for the cleanup of the primary site, EPA, its contractors, and other officials

were equally busy with the threat of explosives and unknowns at the Lewond Road site located in a commercial and residential area near downtown Columbia. Here, 4 cooler loads of explosive chemicals were removed including nearly 300 vials of 98 to 99% nitroglycerin and roughly 150 lbs of lead stiffnate and lead azide, the very same compounds thought to have caused the explosion which killed Jack Southerland.

Once removed, the materials were transported via a Richland County, state, and EPA convoy to the DIVEX property located immediately adjacent to the Richland County Landfill where they were safely detonated.

Back at the Montgomery Road site efforts to categorize, remove, and treat materials from throughout the site continued, but there still remained the formidable task of safely removing the many potentially volatile containers from the main building.

Frank Washington, Petty Officer First Class, U.S. Coast Guard Strike Team: When the Coast Guard was requested to go in the main building, prior to that there, it was swept by a robot from the local law enforcement team because there was concern of explosive crystals on the floor. When they did go in they, inventoried what they could without really disturbing the building much because it was uh, an unknown, unknown hazard.

Ray Willis, Response manager, EPA ERC's Contactor: The morning of the first entry, there was much practiced; I call it practice gagging or whatever. Uh, I had a pretty, pretty good case of anxiety. I'm sure uh, the 2 chemists did. We

went ahead, suited up, got ready to go in. Once the entry started then none of that was even in our minds. It was just a matter of the task that was at hand. There was really no time to think about what you were doing or what could potentially result from what you were doing as much as just trying to uh get it done, and get it done safely. Uh, and like I say there was uh, the thought that potentially we could get a small, you know a small detonation in there from maybe twisting our feet wrong or not wetting the floor properly, uh […] some uh you know, crystal material that could be on the floor. Uh, but primarily uh, the mind was just on the task that was at hand.

The first 2 days in the building was really to try and get rid of some of the trash and debris, pull the cylinders out of there before we got any further, and then uh remove all small containers, especially known small containers. Uh, we did that as remotely as possible. Uh in some cases we did bring in the heavy equipment to help us drag a few things out of the building.

After that we went to the other side of the building and basically pulled down the pieces of the metal and started reaching in with the [grapplers]. At that time we split our forces, started cleaning up both the corner of the main building for uh, for the bigger drums and larger items, and also started cleaning up around the flask outside the building and the drums and containers that were present at that work station.

Mike Lester, Petty Officer, First Class U.S. Coast Guard Strike Team: Out of my 4 years on the strike team, this is by far the most ser-, I think serious site

we've had uh, you know there's so many chemicals there and then with the explosives we've also had to deal with, so its been uh, its been a big, you know, it's a big site. I rank among the most exciting I've had to work. It's definitely an adrenalin rush every day.

Narrator: With as many containers carefully removed from the main building as possible, and all other personnel assembled a safe distance away, the stage was set to deal with the explosively contaminated structure in the only way that remained.

"Fire in the hole. Fire in the hole. Fire in the hole!"

Chris Miltscher, Lead On Scene Coordinator, EPA: One of the things I learned in this particular instance in this site is that we did not, EPA did not have the direct expertise to handle explosive and military ordnance. We have found that through these interagency agreements with the Alcohol, Tobacco, and Firearms, and the Corps of Engineers, they do have that expertise. And one thing I did learn is having them brought on board to this removal action, through Superfund has greatly aided in the process and has helped us clean this site up or move very quickly to remove a lot of the immediate threats from these explosive items, very, very quickly.

Reynold Hoover, Special Agent, Bureau of Alcohol, Tobacco and Firearms: I think uh, we all got along uh, very well out here. Uh, the relationship between uh ATF and, and EPA was outstanding. Uh, we, we took the position and the, with

the OSCs that we were basically here as their technical advisor when it comes to explosive matters and uh we were involved from the very beginning.

Narrator: Firemen from Richland County remained on hand to supervise the smoldering fire as it slowly burned itself out eliminating any further risk from the once deadly structure. But the site still poses a threat in that some 400 pressurized gas cylinders suspected to contain deadly toxics, highly reactive compounds, and pyroforics, have yet to be fully identified and treated. To accomplish this a special structure was brought in to house the cylinders and equipment necessary to handle it. Working on 1 cylinder at a time, the technicians carefully sampled each container and then safely discharged their contents through the appropriate treatment scheme.

Despite the seemingly extraordinary character of the DIVEX site and the circumstances surrounding it, the problem is nothing new. Three similar events have occurred in as many years in this area of South Carolina alone. And the outcome is often the same. Federal, state, and local governments find themselves saddled with the problems of industries that have either moved out or gone out of business.

What is unique about the DIVEX site however, was the extent of the problem and consequently the successful coordination of the numerous agencies and their contractors which came together to mitigate it. Perhaps the legacy of the DIVEX site will be to serve as a model for future sites. Not if, but when, they occur.

Chief George Mick, Columbia / Richland Fire Service: To find a tractor-trailer body with high explosives, with poison As, poison Bs, corrosives, and primers laying on the floor amongst all this, I mean, its hard to fathom that this site could exist in its nature, and having been inspected by various agencies, is totally, I mean its amazing.

Reynold Hoover, Special Agent, Bureau of Alcohol, Tobacco and Firearms: Well I guess if there was one thing that uh, I would bring back, and of course, the law enforcement side that I'm involved in is uh, is separate from the regulatory people, the inspectors that come out and do these type of inspections. But what I would bring back to them is that we should become more aware of the activities of these smaller uh, licensed high explosive manufacturers, uh, to be more cognizant of the, uh their environmental impact and then work closely with EPA in trying to get these people closer into compliance.