

CRIME SCENE RECONSTRUCTION

Instructor: Charlotte Braziel, Guest Lecturer: Richard Marx

Hi, my name is Richard Marx. I'm an evidence response team leader from the Philadelphia division of the FBI. What I'm going to do today is talk you through the process of the debris recovery and the forensic examination of material recovered from ground zero at the twin towers here at the Fresh Kills landfill in Staten Island.

Behind me right now you see the barge loading facility. What happens is downtown, the barges are loaded with debris from the Trade Center. It's brought here and offloaded by the large crane you see behind me and placed into the large dump trucks, where it's transported to the top of the hill.

After the trucks are loaded from the barges down below, they're brought to the top of hill, where the debris is deposited in a stockpile. We have sets of grapplers, the large backhoes that have mechanical claws on the end. Those go through under supervised teams and pick out the heavy steel.

Once the steel has been examined in terms of human remains, or any airplane parts, or personal effects are on the heavy steel, the heavy steel is removed and taken to a recycler. The rest of the remaining material, basically what we've dubbed the fine and medium material, is basically in a large stockpile. This stockpile is fed into machines that are called shakers. The shakers separate the fines and the mediums according to size.

The mediums are then taken out into the field in a front end loader or a grappler and spread out into the field, so that the teams can walk through, look through it the debris, and recover any items that they deem are of forensic value. The teams walking the fields consist of NYPD detectives and evidence response teams from the FBI. The fine material is taken in a front end loader, placed into what we call a screening machine.

And that screening machine separates the fine material into different sizes. In other words, we have very fine, fine dirt and then some rocks or gravel. And those are examined on conveyor belts by teams of police officers and agents looking for human remains. The site we're on, the 175 acres that we're on is actually on top of 40 years' worth of household debris and waste. That waste is under about two inches of dirt below us.

Initially, the problem we dealt with was how much weight, how much tonnage we were putting on top of the landfill. The machinery, the debris, all that counted into weight. That forced the methane to be squeezed out faster than the methane processing plant down below could handle it. So everything we built, every structure that we put up, every command post, every piece of machinery brought up the hill, weight was an issue.

On top of the landfill, we have facilities set aside for searching of the debris, processing, cataloging of the debris. We have a temporary morgue facility set up for recovery of any of the human

remains. We have a separate area set aside for processing of damaged or destroyed vehicles recovered from ground zero.

At Christmastime 2001, almost three months into the operation, we have processed about 800,000 tons of debris. We've recovered approximately 2,700 human remains, and thousands of personal effects from the debris from the Trade Center. At the height of the operation, we were running 24 hours a day, seven days a week. We had approximately 400 people per shift, two shifts a day, handling the debris on top of the landfill.

We became very efficient with the processing and handling of material. We made a determination to cut back to a 15-hour day, seven days a week. This allowed us to come back and manpower to about 300 people a day. We were still able to effectively process the material that was coming in from ground zero. On top of the landfill, we have 24 federal, state, and local law enforcement agencies working together in a joint effort to recover the debris.

These agencies have a task to do different specific jobs and have been working together very effectively and efficiently. These vehicles have been brought up here for cataloging and inventory. Many of the vehicle such as this police vehicle and fire engine are being maintained for a possible memorial at a future date.

This is one of two command posts that we have here on site, because we're dealing with such a large facility. This command post was set up as a separate area for other governmental agencies that were tasked with recovering their property that was lost during the Trade Center attacks. Primarily we're dealing with customs, Secret Service and the CIA.

We started planning from day one for the impending cold weather. We built structures around the conveyor belts. These structures are lighted and also provide heat for men and women to work during the night hours. As the process was honed, the corps of engineers was brought in by FEMA to assist in the process.

The corps of engineers hired a private contractor whose job was to supervise over the three small subcontractors on site. Among the many things that we had to address in an operation this size was where to store our equipment for the personnel in the field. We acquired several of these trailers to house the Tyvek suits, the respirators, and the goggles to be distributed to the men and women prior to them departing out into the field.

Among the many logistical things that we had to take into consideration was how to feed the workers while they were on site. Amongst the things we had to consider was how to feed them. And we had food provided by many local vendors, as well as the American Red Cross, the Salvation Army.

All the food was brought in and we had to plan for what to do with that food, how to house it, how to store it, and how to distribute it to the people in the facility. We erected this large structure,

which we house now a temporary kitchen where they could feed the troops. They can now heat the food as well as serve the food to them before they proceed into the mess hall.

Behind me is the Environmental Protection Agency and the United States Coast Guard command post. They were tasked with monitoring air samples among the workers and out in the work fields. They were also tasked with preparing a decontamination plan for the landfill.

Once the men and women get out of the Tyvek, they go into a decon facility. They have their boots decontaminated with scrub brushes and cleaning solution. Once the boots are cleaned, the searchers can hang up their hard hats, respirators, and goggles in anticipation of going to the lunch hall or going home. The Environmental Protection Agency constructed a trailer to house numerous sinks with hot and cold running water.

These sinks are plumbed to a large tanker outside, where the workers can come in and have clean, running water to wash and decontaminate after being out in the field during work. The EPA and the Coast Guard formulated a plan for decontaminating the vehicles that left the landfill area. This consisted of a washdown station at the exit of the landfill.

What you see between the FBI and NYPD regarding the recovery of forensic evidence took about two to three weeks to hone to the level it is today. We tried different techniques. We were willing to adapt to change those ideas if it wasn't working to suit our needs. And every time we would try something new, we found a better way to tweak the system.

In other words, if this didn't work, we dropped and immediately tried something new. We were willing to change on the fly, so to speak. We were sent here as part of the evidence response team on September 12, 2001 to help assist the New York City Police Department and recovery efforts of forensic remains from the Trade Centers. I'm joined by Deputy Inspector James Luongo of the New York City Police Department.

Thanks, Richard. You know, the work that we've done together is unbelievable. The cooperative effort between my department and the FBI is one for the textbooks. This job could not have been done, could not have been done by either one of us if we did not cooperate fully with meeting a common goal, the common goal of trying to gain some type of closure for all the families that are involved, trying to come up with as much personal property to return to the families and come up with whatever evidence we could come up with.

This is the crime scene trailer. This is where the detectives and agents, when they come in off the field, will bring in anything that they may believe is human remains. What we turn around and do is we have a system where they'll come, and at this table here-- now the weather is still a little decent-- at this table here they'll examine the bones or the tissue to try to make a determination by the crime scene unit or a forensic anthropologist that it's human or non-human. There were a lot of restaurants inside the Trade Center, so we have a lot of bones there, from the restaurants.

We've made provisions for the wintertime in that we have a dirty crime scene trailer and we have a clean crime scene trailer in that we'll bring this operation inside for the examination of the human remains. After the detectives will examine the human remains and make a determination whether or not they're human or non-human, we'll place those human remains inside a refrigerated trailer that's located over here.

The morgue will come up a couple times a day to take the body parts back to the morgue in Manhattan for DNA testing. Whenever we have a big piece, though, we'll send that down right away via ambulance to try and give the family some type of closure. Otherwise, they'll be stored in a refrigerated trailer.

This is a supply tent and muster area. This is when the police officers come in in the morning. We'll suit them up over here. We'll give them instructions as to where their post is going to be. And we'll outfit them with necessary safety equipment. We have a questionnaire here from the police department pertaining to any respiratory problems that they may have. We form-fit them.

We have a physician on hand. We make sure that the respirators are working properly and the investigators and detectives and agents all know how they work. They walk down the line. And as they walk down the line, they'll get their personal protective equipment. They'll get their respirators.

They'll get their goggles, their Tyvek suits, their gloves, their helmets, their ear plugs, and all the things that are necessary. We have different things for the morale of the officers. We have signs from local schools and thank yous. We have-- NYPD Blue sent us up some pictures of the cast members with well wishes for everybody. So we just try and make it as nice as we possibly can for them.

We go every-- from respirators to female products. We have everything that's here that they may need. The sergeants will sit here. The safety briefing is given at that microphone. The mustering of the officers and the roll call procedure as far as the posting's also done here.

You also have posted health information in this area, as far as the air quality, what the air quality is, let everybody know that this is a safe working environment. And we even have, during the day, we'll have massage therapists come in and give the detectives and the agents massages and relieve some stress. This area here is monitored because of conditions of what we have. It's monitored with a alarm system that's set below the standard for methane. We are on top of a landfill.

Methane is a consideration. We're standing on asphalt that was poured here, but we still have to be careful of the methane that may seep up. The major concerns at the World Trade Center site pertain to asbestos and the levels in the air, lead in the air. So we monitor that and we look to make sure that we are within guidelines to ensure the safety of our people.

The work that's been done here, the spirit of brotherhood is tremendous, because we know the job that we can do when we set our minds to do it and to do it together. And we've forged friendships and bonds that will last us our lifetimes. And there's no doubt in my mind that when the history books are written, the history books will show that here on top of this hill in Staten Island, we made history.