

Beth: My name is Beth Totman and I'm the Press Officer for Region 2's Superfund Program. I'm here with Rich Puvogel who is a Remedial Project Manager in the New Jersey Superfund Remediation Branch. So Rich, first of all, what's a Superfund site?

Rich: They are the worst or most hazardous sites in the country. They're complex by their nature and quite large.

Beth: Can you give me an example of a Superfund site that you've worked on?

Rich: I worked on quite a few, Beth, in the last few years but one of the larger sites I've worked on most recently is called Federal Creosote Site. It's a site located in Central Jersey. It's an old creosoting facility that was abandoned in the mid-50's and later on in the early 60's about 137 residential homes were built on top of it. Also including a fifteen acre shopping mall that was built on top of this facility. And the facility was not cleaned up before these structures were built. And creosote is a compound used to treat wood, such as railroad ties and telephone poles to keep insects and fungus from rotting out the wood. You'll see it on railroad ties today. It's the black material that you see on railroad ties and the black material you see on the poles. It's a tarlike substance. When they treat this wood, it's not so tarry, it's more of a liquid, more like the consistency of water. And after the treatment the wood comes out of these pressurized cylinders and the creosote that's inside the wood, it reverses pressure, and a lot of the creosote in the liquid form turns to liquid again, like water, at the time of treatment. It drips out onto the ground and that was one of the problems here we had at Federal Creosote. Also after this process of treating the wood with creosote, a lot of the liquid is left over and, in this case, the liquid was conveyed down to two waste canals and into two waste lagoons that, unfortunately, this residential community was built on top of. We started investigating the site back in 1998 when we first found out about it from the state of New Jersey and we just completed it, ten years later, just early 2008 in January. We finished all the digging, we cleaned about 93 homes that required it, we dug the soils out around the homes and we had to take down, unfortunately, a number of houses to get at this contamination in the development. We're hopefully putting that community back on its feet again.

Beth: And what's the best part of your job?

Rich: Working with the communities. Educating them on what we're about and what we're going to do to help them out.

Beth: Right.

Rich: When you first come to some communities there's a lot of mistrust, or no trust at all, and you have to establish that. And I think one of the biggest challenges that I enjoy is working with the communities and communicating to the folks what's happening, what has happened. They have a lot of misconceptions put out there by whatever sources they get their information from, either the press, or others in the neighborhood that are telling just, maybe inaccurate, information. And they're a little scared because they don't know what exactly is going on and expect us to give them answers that are clear and concise

and that they can move ahead and be informed with and make decisions about their lives and how these sites effect them. A lot of times, the news that we got to tell them isn't good, but all the times, even though the news might not be the best news to them, they're thankful that we're giving it to them and giving it straight up. At one particular site, myself and the community involvement coordinator from EPA, were working on a site to tell the community what was going on. We tried different avenues to reach them, we established this frequent flyer program where we'd write up fliers, one page fliers and distribute them around the community real quick just to let them know that we'd be doing sampling on one day in this part of the community so when they saw people out there with specialized equipment, they'd know what it was before they'd show up. People are a lot more comfortable with things if they know what's going to happen before it happens.

Beth: Right. So it would be fair to say that EPA most certainly values community involvement?

Rich: In every aspect of it. Even after those proposed plans and the record of decision, that's the document we write when we decide which remedy to implement, after that we stick with the community and once we get out and implement the remedy. We kind of, on one particular site, we twisted our public outreach a little bit we went from these community advisory group meetings and the newsletters and fliers and we started one-on-one meetings at the people's homes every night. Just meet with a group of people, three or four neighbors would get together at one house at a time, we'd meet with them and that started a good rapport with the folks. They could ask us anything, everything was out on the table. And often they did. That was a twist to this particular site at Federal Creosote that helped us a lot it helped us to win the trust of the people. This is stuff you're not faced with everyday. How 'bout a bulldozer showing up to take out your front yard?

Beth: And along that vein, how do we go in and actually protect the community from these contaminants?

Rich: The first thing we do is, again like I said, we communicate with them. Let them know what's going on through the flyers and all. Second form of communication is, well we put up a lot of barriers, fencing this. A lot of barriers in this one particular community we worked in, it was residential so we had to set up a lot of barriers just fencing, road barriers to keep cars from going through areas, and people from walking through areas that we were cleaning up. On those fences we all posted signs to let them know what's going on. We used a lot of dust control, water and foam to hold down dust. When we excavate areas to move contaminated soil out it would be placed in trucks. Those trucks would be immediately covered and removed out of the residential area. Also when the holes are open, on the ground, next to the houses we'd cover them with either plastic tarp or foam to protect that from blowing off, you know, from high winds. In rain events we have to protect these same areas with silt fencing to keep the contaminated soil from running off into the roads and down to the sewer systems and contaminating the river. So

there are an awful lot of controls we use to protect the residents from the short term risks while the remediation, or the cleanup, is on-going.

Beth: And what kind of contaminants have you come across at the sites that you've worked on?

Rich: An awful lot of different contaminants from PCBs, metals, such as chromium, arsenic, and this particular site, where Federal Creosoting Company was involved, we dealt with contaminants that are called polycyclic aromatic hydrocarbons, basically they're just anything you find in either a asphalt-type mixture, or in this particular case, coal tar.

Beth: Well Rich it seems that you have a background where you have to identify these contaminants, you have to know how to deal with them you have to go into the history of these sites to see what facilities were there, what factories were there, what chemicals they were working with. What kind of background do you have?

Rich: I have a background in environmental sciences. I have a background on, also, forestry from College of Environmental Science and Forestry at Syracuse and use that background quite a bit to help me with my job here. And one of the first things we look at when, getting back to your question of, "hey, when you first get a hold of a site what do you do to figure out what's going on?" One of the first things we grab for is we knock on doors to say, "hey, you've owned this property for a little while, what do you know what's going on here? Again, it's the communication issue. Another tool we reach for are some of these aerial photographs that are historical in nature that date back to the 1940's. And we go to the contractors and ask for them to provide those aerial photographs to us and we look at those aerial photographs so we can see through the years what has happened on this site, where the areas were where contamination may have occurred, where burial areas were, where spills happened through the years.

Beth: So Rich, you were saying that EPA took the lead on Federal Creosote in 1998 and the cleanup was completed in 2008. That's ten years. How did you stay motivated?

Rich: Well I was incredibly busy, Beth. That's how I stayed motivated, that's one thing after another. Especially on a site like this where you have over 300 people living on the place you're trying to investigate and remediate. Some days you'd get out there and there'd just be a mountain of work there for you to do and I was fortunate to have one of the best teams assembled between our contractor, the Army Corps of Engineers and the folks here at EPA to work on this job.

Beth: So once a remediation is determined complete, how do you know it's complete and where do you go from there?

Rich: Well, as opposed to the beginning, when it's hard to say "hey, the job started this day," the end is a little bit clearer because it's the day when the last truck leaves the site and in this particular case at Federal Creosote we were digging up the waste in this

community and moving it offsite for offsite treatment and disposal at landfills. So the last day, the last truck moved offsite with the last load, that was a big hurrah day for us. You could see. Other sites it's not so clear when you're treating the contamination in site, or in the soil, or in the groundwater. You know these are very much longer term cleanups that take tens of years to get the cleanup done and you don't really know. It's not as clear cut when you get to the end. Also if there are residual amounts of contamination left at the site, the EPA, under Superfund program, will do a five year review. And we'll return every five years and revisit the remedy and make sure it was done and it's still working as was written in the record of decision. In this case, for Federal Creosote, we will be revisiting about every five years because we left residual contaminations way down deep in the soil over fourteen feet deep in some cases.

Beth: Rich, thanks for talking to us today about the Superfund program

Rich: You're welcome, Beth.

Beth: For more information on Superfund, visit epa.gov/region2/superfund.