

US EPA ARCHIVE DOCUMENT

STEVE LUFTIG

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Former EPA Director of the Office of Emergency and Remedial Response

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EPA Interviewer: This is an interview with Stephen [Steve] Luftig. Steve retired from EPA in 2004 after some 32 years. He currently consults on a variety of environmental and land revitalization issues. We're conducting this interview on November 4, 2005, for an oral history project in conjunction with the 25th anniversary of Superfund. Good morning Steve.

Luftig: Good morning. Thank you.

EPA Interviewer: Tell us what you've been doing since you retired. I know you just got back from a European vacation, but give us a particular focus on any Superfund specific activities that you have been involved with.

Luftig: Oh, thanks. I left EPA in January of 2004. I started with EPA in 1972, and in Region 2, and left from Headquarters in '04, and I've been doing a little teaching. One of the schools in New York at City University of New York, Baruch College, has the Steven Newman Real Estate Institute, and I've taught a course there on contaminated lands for real estate professionals. I've also been doing some consulting, and have been working with some Superfund contractors, such as Camp, Dresser & McKee consulting on cleanup approaches and helping them pull together contract documents. [I'm] helping also a couple of nonprofit organizations located in the Northeast who have been buying Superfund sites, or had the land donated to them, and have been trying to restore them. I've been helping a nonprofit called The Wildlife Habitat Council restore contaminated sites for habitat use throughout the country, and it's been pretty interesting working in the field, especially in dealing with EPA and some states from this side of the fence.

EPA Interviewer: Sounds like you haven't retired at all.

Luftig: I've been keeping pretty busy working two or three days a week, not violating any ethics regulations.

EPA Interviewer: Sounds good. I understand you just told us that you started working in EPA's Region 2 office in 1972. Could you give us just a brief summary of what you did in Region 2 up until 1980?

Luftig: I started in 1972 with my brand new Master's degree in what at the time was called sanitary engineering, and is now, I think, more commonly called environmental engineering. I have a Bachelor's degree in chemical engineering, magna cum laude, from City College of New York. I have an awful New York accent...

EPA Interviewer: No, it's gone.

Luftig: ...and a cold. And I got my Master's from New York University in sanitary or a branch of civil engineering. I studied water pollution control under a grant from EPA's predecessor agency, the Federal Water Pollution Control Agency, and then was hired at EPA in 1972 working in the new Water Pollution Discharge Permit Program. The National Pollutant Discharge Elimination System was set up under the Clean Water Act that had just been enacted, and we issued some of the first discharge permits for municipal waste treatment plants in Region 2.

After that I worked in Region 2's budget and planning organization. I was a Branch Chief in the region developing the annual regional budget, both for people and for dollars, in all the EPA programs as they affect Region 2. So I had worked in the wastewater field, in the budget and planning field, and was looking to move back from the management area there into one of the programs just before 1980 when the new Superfund law was enacted.

EPA Interviewer: And that's a good segue, because my next question was going to be... Let's go to the date of enactment, December 11, 1980, and tell us about what you were doing when the law was passed and your awareness of Superfund and what impact it might have on what you were doing.

Luftig: Well, you know, at that time a small group was set up within the region to start implementing that law, a waste group, because Love Canal had happened in the late 1970s, and in addition to Love Canal, other similar sites—not as severe, perhaps—had to be addressed, and I was not part of that initial group of five or six people that were pulled together to try to implement essentially the Superfund program in the region. I didn't get involved with Superfund until 1984, but I had some peripheral involvement with some of the predecessor attempts under the Clean Water Act to try to control the loop, to try to control the gap that Superfund closed in the loop, in the environmental loop.

Before Superfund, you had the Clean Water Act and the Clean Air Act and the Safe Drinking Water Act, but nothing to address the mistakes of the past, the land contamination, the groundwater contamination, and the surface water contamination from old landfills and such, from abandoned sites, and so the Clean Water Act was used. Unfortunately, its enforcement tools were limited, and so for situations in Niagara Falls, for instance, near Love Canal, where there was a terrible leachate contamination from old disposal sites, environmental enforcement had to take the form of going to court, getting a consent decree, and literally going back to the judge for each sample that needed to be taken and renegotiating for each iteration of what has now become the remedial investigation under Superfund. So it was a long, drawn out, endless process of negotiations, judicial decisions, and delay. The other thing I recall pre-Superfund was the idea that you couldn't respond to hazardous substances, just oil, under the Clean Water Act, and so the legend was that when there were chemicals spills, somebody surreptitiously would spill oil on them in order to let EPA respond, but I don't think that ever really happened.

EPA Interviewer: So at some point in time—1984—you did become involved with Superfund. Tell us about your early role, whether you were representing a particular office,

or you were out in the field, or you were reviewing settlement efforts, or what were you doing in 1984?

Luftig: Well, in 1984 I became the Deputy Division Director in Region 2, working for the late Bill Librizzi, who was the first Superfund Division Director in our region and a real pioneer in the Superfund program. Bill and I managed a small division that was trying to do all the parts of Superfund, and then, as now, when you think of Superfund, you have to think of a program of many parts. You are involved with some of the legal aspects of Superfund, and there's a large enforcement component, of course. Within the program, there's the site assessment piece and the hazard ranking piece. There're laboratory analytical needs, there are design needs, and construction—a huge number of parts, as well as the entire removal program. Now, all of that comprises Superfund, and so this division pulled all of that together working in concert with the regional counsel's office for the enforcement stuff. In the mid-1980s, then, I started in Superfund and was immediately involved with issues in Niagara Falls. By then I became the third generation of project managers at Love Canal.

At Love Canal, you know, we evacuated about 950 families—relocated about 950 families—and by the time I got involved, [EPA] had already capped the landfill. The state had designed that remedy and was managing the little pollution control plant that would catch the leachate, clean it and discharge it, and manage the operation of the landfill. But we had an ongoing public meeting schedule between EPA and the state. We had long ago agreed that for that site, Love Canal, the state and EPA would not meet in private at all, but would have all our meetings in public. So every month my counterpart from New York in Albany and I would get on stage along with a representative from the Health Department in New York and others, and we would, in front of an audience, discuss each next step at Love Canal.

EPA Interviewer: Who was your counterpart in the state?

Luftig: Michael O'Toole was the Division Director at the New York State Department of Environmental Conservation, and prior to him it was a fellow named Norm Nosenchuck, and the Department of Health representatives were Bill Stasiuk and Anita Gabalski.

EPA Interviewer: Oh, that name, Mr. Nosenchuck, I'm familiar with.

Luftig: And so first Norm and then Mike and we at EPA tried to work cooperatively, always in a public forum. I think by then state and federal issues at Love Canal had been resolved. Tom Jorling was the state Commissioner.¹ What our task was at this time with so many people evacuated, and the canal capped, was to determine what parts of the area that had been evacuated could be resettled and for what purposes. And so we conducted a habitability study, the first of its kind in the area, to try to compare the contamination around Love Canal in residential areas and commercial areas that had been put out of use, to see whether people or other uses could be made of the land. And we compared soil and groundwater contamination determinations there with those of other residential-industrial areas throughout the country to determine whether it was habitable or not, and established a big peer-review system using university professors and a variety of experienced people from around the

¹ Tom Jorling was also the Assistant Administrator of the Environmental Protection Agency's Office of Water and Hazardous Materials from June 1977 through December 1979.

country who would review our documents, both for the set up of the study and the analysis of the data, and eventually with the state's help, made determinations as to what could and couldn't be reused there. I remember briefing Bill Reilly and Tom Jorling on the decision to resettle parts of Love Canal, declaring that some areas could indeed be used for residential purposes and some that shouldn't be used for residential purposes near the canal.

EPA Interviewer: Give us a sense of the year that might have taken place.

Luftig: That was now in the later 1980s, between '84, I think, and '87 or so. And that was quite a controversial decision. Bill Reilly could easily have just ignored the data and done what seemed to be the politically correct thing at the time, and said, "No, you should never resettle these lands around Love Canal. They should be used as a monument to chemical dumping and just a museum should be built."

EPA Interviewer: Well, Bill Reilly was the Administrator of EPA [from February 1989 through January 1993].

Luftig: He was, thank you.

EPA Interviewer: Just wanted you to identify that.

Luftig: Instead, though, he used the data and the careful analysis and agreed with what Tom Jorling then announced, which was that some areas could again be residential, and one residential area, in particular, which has now been renamed Black Creek Village, has been entirely resettled. It's a beautiful, almost suburban residential community in Niagara Falls, and other areas are being used I believe for other purposes, although I haven't been up there in a couple of years.

So the Love Canal habitability study occupied a lot of my time, as did a lot of other Niagara Falls area issues. EPA had established a small Niagara Falls office, a community involvement office, so that people in the community could go there. We were continuing to have public meetings about Niagara Falls and other sites where disposal had occurred throughout Niagara Falls and the surrounding areas, old landfills that reportedly leaked. Many of those were on the NPL [National Priorities List] and in various stages of completion. Controversies related to an EPA whistleblower who declared that an old landfill—actually one that was currently being used, the acronym being CECOS—was leaking and endangering the community, and he held his own public meetings, made headlines in the local and national papers.

EPA Interviewer: Is that Hugh Kaufman?

Luftig: It wasn't Hugh Kaufman. It was another fellow whose name escapes me.

EPA Interviewer: Yeah, I don't know either.

Luftig: However, we put in a lot of monitoring wells in addition to those that were already part of the landfill's operation and showed in fact that the leaching had not occurred. I recall one incident at Love Canal. As I was the third generation project manager, a lot of the

controversy, especially after we made the habitability determination, a lot of controversy waned, and a lot of the community folks who were involved in the public meetings, who had never relocated or lived outside of the relocation area but came to the public meetings, a lot of those people still came, but a couple of them, I think, missed the publicity. One fellow, who is since deceased, and his nephew who came to all the meetings asked me if I wouldn't like them to take me hostage, as an earlier group had held a few EPA hostages, so that they could again make national headlines and get the Administrator and others up there, and maybe the President. And one of the best decisions I think I made at EPA was to say to these gentlemen at the time, "Sir, I don't think that's a good idea."

EPA Interviewer: And so they did not hold you hostage?

Luftig: They said that if I agreed, they would—that we would just go out and eat dinner, but they would report that I had been taken hostage, but I declined their offer.

EPA Interviewer: And so that's what happened?

Luftig: That's right.

EPA Interviewer: And who paid for dinner?

Luftig: We didn't go eat dinner.

EPA Interviewer: Oh, you didn't go eat dinner?

Luftig: We just agreed to not do it at this time.

EPA Interviewer: Oh, too bad! That is one of those myths that doesn't seem to die.

Luftig: Yeah there was an earlier hostage situation, of course, that had taken place in the late '70s, I believe, or early '80s.

EPA Interviewer: And who was taken hostage? Do you know?

Luftig: There were a couple of EPA folks held hostage in a home, and the FBI [Federal Bureau of Investigation] was indeed called in to try to free them. They were given cookies, but it was quite a tense situation and it was before the decision was made to relocate all those worried angry families at Love Canal, who had built their dream homes or bought their dream homes and later learned that there were health issues and contamination issues.

Oh, you could smell the chemicals walking down the street through parts of Love Canal. I recall, too, a meeting with the Congressmen at the time and the Mayor of Love Canal at the time, Mayor of Niagara Falls at the time. This is years after the evacuation and Congressman [John] LeFalce—talking about his memory, because he had lived through the actual relocation and the crisis—some of the darkest days he could recall in his long tenure in Congress and how EPA had come up for a meeting, announced that there were genetic problems with people who lived in Love Canal, DNA damage, and then were going to get on

a flight and go home. And he told them, "You can't leave. You've got to stay here. You've just scared everybody."

Well, it turned out that that was not a valid study, but later we did learn that there were data that did show that people who lived in Love Canal tended to have lower birth weight babies, which is an indicator of future health issues, and there were obvious health issues among people who lived there at that time, so I think there were quite a few health impacts from the fact that that stuff was disposed there, capped, sold to the city for \$1, and then inappropriately reused for houses, schools, and churches and then became a leaking, inappropriately capped landfill, which drastically affected hundreds and hundreds of people's lives. But that was one of the reasons for passing the Superfund law, and while I wasn't there in 1980, I certainly got involved later on. Today Love Canal has achieved its construction completion status. The landfill's capped, the treatment system is working, all the cleanup has been completed, and now it needs a perpetual tending to make sure that the landfill and the cap continue to work.

EPA Interviewer: And the site is not on the National Priorities List any longer.

Luftig: It's been taken off the list.

EPA Interviewer: Were you involved in any other relocations efforts in Region 2?

Luftig: I was. There were no others as big as 950 families, but at another site in Niagara Falls, when I became the Division Director in Region 2 later in the 1980s, we found another site called Forest Glen where a community of trailer homes had been built, and they were more than just mobile homes, though. Many people have lived there for years and had built foundations under some of these homes. The anecdote there is this was where the mothers were putting their children's sneakers in the freezer overnight so that in the morning they could peel the chemicals off their sneakers. I recall going up to our Niagara Falls office and meeting with some of the chemical firms who may have disposed of wastes at what became this Forest Glen development. We spoke to them about that story and one of the firm's responses was, "Well, what's all this confusion and trouble about some dirty tennis shoes?" They declined to take responsibility for the site, but we were able, through good analysis, to link some of the chemicals we found there to some of the production chemicals from some of those firms. Through historical aerial photographs, we were able to learn how, over time, the site had become a disposal site, how the ground had become scarred, and records of construction at the site where the earth caught fire when they were moving some of the dirt because of reactive phosphorous—red phosphorous had been disposed of there as well as some other organic chemicals.

So there was another relocation of a number of people. In fact, [there was] one family who was relocated from there that had already been relocated from Love Canal, so they probably hold the record, I guess, of a double Superfund relocation. And that site, too, has now been cleaned up and is being reused, I believe, for commercial purposes, and I believe, it, too, has been taken off the NPL. So another cleanup success, but it took a lot of time. It was very controversial, and any time you have to relocate people and get involved in their housing needs on an interim basis, the cost of their land, negotiating with them for sale of their property...

EPA Interviewer: Having somebody take title to the property, once they've sold it. I mean, that in and of itself is a big issue.

Luftig: Right, the state has to take title under the Superfund law, and the whole real estate part of it is a difficult thing, as is the relocation part. Fortunately, another big part of the Superfund program is a strong community involvement program, and we have some excellent people, and we certainly did there, to work with the community who suddenly finds themselves surrounded by contamination. It's pretty scary.

EPA Interviewer: I'm told a lot of the community involvement things we sort of take for granted today got their start in Region 2 with the awareness of these problems and ways to fix...

Luftig: I think that is safe to say. I think that through the findings in Niagara Falls and in other parts of New York and New Jersey at the Montclair-Glen Ridge site, where people had to be relocated because of the radioactive soil under their homes, a lot of the community involvement techniques were developed, and Superfund is fortunate to have those authorities, such as TAG [Technical Assistance Grants] grants and it envisioned the need for the outreach program. Few federal statutes have that kind of an approach, so I think it's been very helpful to have it in the statute, but we've had a strong community involvement presence.

EPA Interviewer: If someone said to you that the people who made up the early Superfund program were people who knew how to spend money—for example, construction grants people and other programs where there were small funds, nothing like the Superfund—and that now that we had the new Superfund to spend, these people did what they knew best, spent money, what would your response be?

Luftig: I didn't see that. I saw a continuing struggle, then as now, to get adequate funds for everything that needed to be done. I think it's the problems of Superfund, just as the community involvement techniques started early, some of the problems that started early was the attempt to put on the Superfund list everything that needed to be on the Superfund list as soon as possible, with no throttling of it. Throttling of it based on either the people available to manage these sites or the dollars available. So the list of sites grew tremendously in the early years. The amount of people-time available and contractor-time available had a ceiling on it. So sites went years and years before they had their studies done. Even those that had studies initiated—which tended to be the worst of them, which needed a lot of money and a lot of attention because of their status—we were at the time developing the techniques for assessing contamination, for determining data quality, for figuring out how to use the enforcement authorities in Superfund. So those sites, which today might take less time, took a lot of time and much too much time. I think, in retrospect, it wasn't spending money. It was just having too many sites on the NPL; far more than we could have addressed. And the need to throttle and restrict—I think at that time—the list, as we do today, based on our resources to address them and the absolute need for them to be on the NPL to get cleaned up, looking at all available tools for cleanup.

EPA Interviewer: And of course none of that would be saying that we were ignoring emergency situations as they arose, because that's a whole other arena.

Luftig: Right, a big, big part of the Superfund law has been the removal and emergency response programs, and each of the sites we've just discussed, Love Canal, Forest Glen, Montclair, and Glen Ridge, all started as removal actions. We were restricted to six months or \$.5 million in the first statute that eventually became \$1 million and with the authority to go to higher dollar amounts and longer time periods, if the situation warranted. A great many cleanups have been accomplished and continue to be accomplished by EPA's removal program, and it's a very important part of it. The training for those folks, the use of a National Environmental Response Team and Regional Response Teams, the coordination with local governments that you see today as so important in the counterterrorism activities, in flood response activities—all of that was born out of this Superfund emergency response group. And it's been a very productive and successful part of the program in terms of protecting health and cleaning the environment and really cost-effectively spending the Superfund dollars.

EPA Interviewer: What do you think the biggest mistake the Superfund program made in the early days was, and what did we do to correct it?

Luftig: The Superfund process that we put in place can be very lengthy, and we would occasionally see the pendulum swing from “shovels first, lawyers later” to “lawyers first, shovels later.” We would talk about a basis for action, and then we would talk about the need to make sure all the responsible parties were out there doing the work in lieu of EPA. I think that the need for a basis for action and the need to address the problem in the field was sometimes secondary to the collection of data and the process itself to study the sites. And that is unfortunate. Some of it was necessary, because no one had done this kind of thing before—tried to address the surface and subsurface contamination problems. But—and I see it still today in some regional offices—the idea that until we've completely studied the problem, we can't take any action. Until we have everything tied up in a neat little bundle, whether it's with the PRPs [potentially responsible parties] or with all the data we need to collect, we can't take any action for fear that we might do the wrong thing, for fear that we might not cost recover, or for whatever the fear happens to be.

I think that early on, the quality of the data seemed to become more important than the basis for action, the need to do the cleanup. That was my experience, and we tried to fight it sometimes, but I don't know how else we could have gone about it, given all the myriad responsibilities, everything being done in a political and public fishbowl and all of the need to invent the technologies and the methods to address the site from an engineering perspective and from a legal perspective, given all those responsibilities. And so maybe the more streamlined process that does exist today, most of the time, had to emerge out of that slower time then. But somehow I think the Agency needed to take more action and have a greater bias for action, less inertia that caused greater studies.

The other thing, I don't want to say it was a mistake, but I think that a greater delegation of authorities to states would have sped things along. I think that the lack of a delegation in this one program as compared to all of the other environmental—federal environmental—statutes, I don't recall if the noise law had anything about delegation, but that aside, everything is done as a state-lead in those other statutes. Here for whatever the Congress perceived as the problem, whether it was a perceived relationship between states and companies, or the need for national technical expertise, the state delegation aspect was

missing, and I think that was something that still carries over today. I think that a smaller federal infrastructure could have been used, greater reliance on state programs, and I think that is still the case. I think the latest Superfund amendments that seem to put the states in the driver's seat with a bar to federal enforcement on sites being cleaned up under state response programs starts to recognize that states can do a very good job. But I think that since without that state-lead issue, I think that caused some delays early on.

EPA Interviewer: So the flip side of that is the best thing that the Superfund program delivered early. What would you identify?

Luftig: Well, where there were true emergencies, I think those were addressed quickly. That had not happened in the past. We developed the methodologies for sampling, analysis, for characterizing sites, for using nine criteria to qualitatively determine what the remedy should be at sites, perhaps a few too many in there, but nevertheless a good analysis of remedies. And we did bring a lot of sites to public attention. We invented the community involvement program, and we helped develop a huge and very important training program and all of the technologies for cleanup. Unfortunately, today the development of those technologies, where we had that strong research and development component in EPA for many years, that's been eliminated.

EPA Interviewer: For budgetary reasons?

Luftig: Well, I believe so. That or because people felt that it had all been done. It's now offshore United States. It's out of this country that those technologies are being developed. Here, we've just eliminated the Superfund Innovative Technology Evaluation Site program from our research budget—from EPA's research budget—and so unfortunately the innovative technology development won't happen here, but did happen here in terms of groundwater assessment, groundwater treatment, waste treatment technologies, and assessment technologies, ways of protecting people who are assessing sites. But all those research aspects are now lessened in the U.S.

EPA Interviewer: Now, fast-forward to 1986, the SARA [Superfund Amendments and Reauthorization Act] amendments, the reauthorization of Superfund. I'm told that you had a role in that reauthorization process, at least as regards the community involvement. I know you've already touched on that, but SARA, of course, is where we got the more statutory basis for community involvement. Were you involved in the reauthorization efforts?

Luftig: Yes, and all of the community involvement stuff that EPA does in Superfund comes out of only a page or a page and a half in the statute, and it really is a comprehensive few paragraphs that directs us to involve communities and governments as well. The TAG program is unique in the federal statutes as far as I can see.

EPA Interviewer: And TAG is Technical Assistance Grant?

Luftig: Technical Assistance Grant. Thanks. And they are used fairly and equitably by EPA. Not all communities want them. Efforts later to reauthorize Superfund again and expand that section to 10 or 15 pages of mandatory involvement at every site fortunately never made it through Congress, because I think that it's a good set of provisions in the current statute. The

one thing it didn't do, and perhaps a mistake of the past that's now been corrected, I believe, was involving local government in all of the Superfund processes. Local communities were involved, but often the local governments that had master plans for land use, or need to know information, were ignored by our regional offices except later when they rose up and said, "We need to be contacted, as well." But EPA does that now.

EPA Interviewer: I'm interested in exploring a little bit about the changing culture. What I mean is our early emphasis, of course, was getting sites cleaned up, but in the 25 years that Superfund's been around, we now seem to have a very strong focus on revitalization. I mean it used to be you'd have a landfill and you'd say, "Well, OK. We're going to clean it up. We're going to cap it." Now what? Put a fence around it and plant some roses? But we have a whole different approach now, after 25 years, and I know you've been very much involved in that from the beginning of your involvement, so I'd like for you to talk about it a little bit.

Luftig: You know, I went to Washington in 1990 from EPA Region 2, and became Director of the National Emergency Response Division, the program that dealt with the removal actions in Superfund. Henry Longest was the Office Director for the entire program, and then, between 1994 and 2000, I was the Superfund Office Deputy and Director for the national Superfund program, and I often thought that if anyone ever asked me, "What was the greatest change I ever saw in the Superfund program from the time I started in '84 to the time I left EPA in 2004?"...

EPA Interviewer: 20 years.

Luftig: ...it would have to be the frightened, angry communities that surrounded us in the beginning. When I think of those public meetings at Love Canal, including the ecumenical task force that had been set up among all religious representatives, social organization representatives, because so much of the community had been ripped apart and so many sites where citizens were frightened and angry, to the actual scenes I participated in 20 years later, where people asked if we had any Superfund sites to sell them. And some community people asked if they could get a Superfund site in their community. How could they get one? And the difference was this idea of envisioning the future uses of the land once the site has been restored to where it protects human health and the environment. It was something that isn't in, really, in the Superfund statute, although it's been amended by the Brownfields law. It's not really in the nine criteria, although they do talk about long-term effectiveness of the remedy.

EPA Interviewer: Which seems to presuppose new use.

Luftig: Yes, if you want to include it in there. But it is very much a part of all the other programs within EPA that talk about sustainability. What we are dealing with here, and I don't think we saw that in the beginning, is property. Land, not just sites, and it's real estate. It's the same property that you think of when you buy your home. It's unfortunate that when homeowners go to work and are environmental scientists, engineers, environmental attorneys at EPA, some of them lose track of that real estate idea and think of the land only as the contaminated land they have to clean up. More and more I'm seeing regional folks and Headquarters folks get the complete vision, which is the need to really make sure that the site is cleaned up and that for the long term, the site will be protective and the best way of doing

that is to involve the community and see it put into some productive future uses. It was by far the greatest change I saw in the Superfund program. Times Beach, that awful site where another town had to be evacuated for the dioxin contamination has now become Route 66 State Park. It's one of the most used state parks in Missouri.

EPA Interviewer: I was there two weeks ago and saw the mound where Times Beach houses were bulldozed and then capped. It's a lovely park, and there's an interesting story. An EPA official commented [that] after the Times Beach dioxin contamination became known and then the Meramec River flooded Times Beach, which ultimately led to the buyout, commented, the best thing that ever happened to Times Beach was the flood. Of course, the Times Beach people, like the Love Canal people, were all dispersed all over the community, and like the Love Canal people, some of them had to be relocated twice for pretty much the same reasons. So it is amazing to see what can happen to these contaminated areas.

Now starting in the '90s, you were talking about the culture change, and EPA undertook a series of administrative reforms which were part of efforts to reauthorize Superfund. I'm wondering what role you played in any of those administrative reforms or in the efforts to reauthorize the statute.

Luftig: I was a part of the effort within EPA Headquarters and the regions and involved all the agencies that deal with Superfund—the Department of Justice, the defense agencies, and many others—to try to reform the program to speed things along, to make it fairer, and we did in the 1990s come up with several rounds of reforms.

One of the good memories I have of that time, having come up with some of their forms like the presumptive remedy approach, the idea that for some sites you don't need to study them as if they were *tabula rasa*—we've done that before. We've had sites like that and you can just almost leap to the conclusion, and we identified a few presumptive remedies. We identified ways of assessing sites more rapidly and decided that we would publicly say, "We're not going to just go after the deepest pocket. We're going to fairly assess liability among all responsible parties with an EPA federal contribution, if necessary."

Many reforms were issued, and one of the ideas we came up with was that with all the new technologies that had been developed, if you, the PRP, or the community, or the state, come to EPA and say, "We'd like to revisit an old remedy decision. We have a new technology," EPA would say, "OK, we'll take another look at it." And I was at one public meeting where a very major PRP, the DuPont Corporation, stood up and said that that reform had saved them something like \$50 to \$100 million. This was an industry meeting at one Superfund landfill where the remedy had been changed from a very costly one to one using a more modern technology.

The idea that we could use natural technologies without giving up the quality of the cleanup or without ceding time in the cleanup, natural technologies and monitored natural attenuation technologies as part of the remedy, and that we could, as we came up with in the 1990s, think of reasonably anticipated future land uses at our sites, that all sites were not going to be the backyard of a day care center in the future, reforms like that saved a great deal of money, saved a great deal of time, and were the right thing to do and still are the right

thing to do. The reuse of sites for residential purposes, where appropriate, for wildlife habitat, for parks, for commercial and industrial purposes—this whole reuse concept came out of those reforms and has grown quite a bit because it isn't just a tail on the dog. It's part of the vision of the whole cleanup.

If, perhaps, we're talking about some of the early mistakes and, could that continue today, I think each region probably needs to hire on an attorney, in addition to their environmental attorneys; someone who has some real estate background, who can talk to developers, mayors, business districts, who understand that aspect of land use and uses and the use of the property in the future.

We also, I think, in developing the criteria, tried but never really succeeded in recognizing that, as in all decisions we make, cost is an important factor. In Superfund, one thing I've seen since leaving EPA is that in the private sector the dollars are very important. In EPA, in rendering Superfund remedy decisions, cost is one of nine criteria, and the term "cost effective" is defined very circuitously in the National Contingency Plan. That's unfortunate, and I think that could have been more sharply defined, and still could, but it would require changing the rule. I think that today, though, with thinking of future use, some of the important cost-related decisions can be brought to bear in site cleanups. So those reforms—presumptive remedies, reasonably anticipated future land use—continue today.

We have the new Triad approach for assessing sites, for making in-the-field decisions. We have new good ideas, like Triad, that can be used in almost every site to speed cleanups. So I think the reform-mindedness of Headquarters continues and I think a lot of the changes have been put in place that were made during the 1990s.

EPA Interviewer: Now after the 1990s, of course, we ultimately did get a new statute in 2002, and I understand that you also had some role in the Brownfields amendments. I'm wondering if you would like to discuss that a little bit.

Luftig: That's a nice set of amendments [that] we didn't expect to pop out of Congress the day they did. We thought, in fact, that like so many attempts to amend Superfund over the years, the Congress was deadlocked over an issue related to wages.

EPA Interviewer: Davis Bacon?

Luftig: The controversy was over the Davis Bacon Act. Fortunately, though, that got resolved, and to everyone's surprise, one day in early January 2002 we got a call that Congress had indeed enacted the bill, and the President was going to sign it on January 11, 2002, in Pennsylvania.

Luftig: Were you there?

Luftig: So we all ran up to Pennsylvania and watched him sign the law. The law had some great amendments that recognized some of the land use, future use issues—not all of them—and some amendments to the liability scheme in CERCLA [Comprehensive Environmental Response, Compensation, and Liability Act], although, again, having left EPA, I'm seeing that not all of the changes that that law brought about are yet in practice.

EPA Interviewer: Or that everybody accepts them as being what they appear to be at face value.

Luftig: Yeah. Yeah. That's true. Those were important changes we had tried—I had been involved in a great many meetings with Congressional staff during the 1990s on different ideas, ways of amending the law, and I think some of the essence of that did come out in the 2002 amendments, in terms of the state role and in codifying the Brownfields law—codifying the Brownfields program—which had been put in place as a set of pilot projects perfectly legally—but not envisioned in the Superfund law up to that time.

EPA Interviewer: So I imagine that you would like to talk a little bit about your role in one of the things that grew out of the Brownfields amendments, and that is EPA's obligation to develop a role for all appropriate inquiry. We know that you were the representative of the federal family in that negotiated rulemaking. So maybe you can take a couple of minutes to talk about that experience.

Luftig: That was a very recent aspect of my work at EPA, and I chaired a group of people that were certainly a diverse group. We had real estate interests, people who build shopping centers, people who represent environmental justice communities, we had scientists and attorneys and engineers, all convening to discuss how to develop a regulation that would let you say you did your due diligence before you bought a potentially contaminated property, and because you did that you are meeting other conditions as well. You are free from the awful burden of Superfund past liabilities, of the liability associated with old contamination. You can be a bona fide prospective purchaser, purchasing property that you know is contaminated and part of that is to do this all appropriate inquiry process. One way of doing that would have been to draft a regulation, and we probably could have done that, because the American Society for Testing and Materials [ASTM] had their standard out there, which is the one that is in common use for all appropriate inquiry. We could have based the regulation on that with a few tweaks, sent it out for public comment. But it would not have had the quality that this document had. What we did was, we met over a period of nine or 10 months and, you were in many of those meetings.

EPA Interviewer: All of them.

Luftig: And all of the different groups expressed their opinions about how diligent one should be in looking at property before one purchased the property to determine if it was contaminated. [We] found some areas that indeed the ASTM approach did not address, and proposed the rule last August after I had left EPA, which was signed just this week, November 1, 2005, here in Denver, as the final regulation to take effect in November 2006. It very much represents the interests of all who are involved in assessing property. While it will change the way it is done today, I think it is for the better. I don't think it'll wind up costing much more than current site assessments cost, and yet it'll help communities and future landowners ensure that they're not buying a pig in a poke, so to speak. That they're walking into these property purchases with their eyes open.

EPA Interviewer: It sounds from your background like you were a logical choice to be the lead government negotiator on that negotiated rule making, but how did you come to be selected for that position?

Luftig: Well, after being a Director of the Superfund program through the year 2000, I became one of two Deputy Assistant Administrators within the Office of Solid Waste and Emergency Response. And then became what the press called “the EPA’s first redevelopment czar,” trying to bring this idea of future land use considerations to all of the federal cleanup programs, not just Superfund, but the RCRA [Resource Conservation and Recovery Act] corrective action program, the federal facilities cleanup programs, the oil spill response program, and the Brownfields program, to try to make sure they were all thinking in terms of future uses and to be the spokesperson and a driving force for EPA in that regard. So I became very involved with communities that were using property again, and productively, and there are so many good stories in that regard and became somewhat knowledgeable in the issues associated with all of those stakeholders—private sector, public sector, community groups, local governments, state government. So it became a good choice and I really enjoyed doing it, to chair that all appropriate inquiry regulatory negotiation group.

EPA Interviewer: Has the Brownfields amendments had any impact on the work that you do consulting, now that you’ve left EPA? Do the liability protections in the new law have any role in what you currently do, or any of the other new provisions in Superfund?

Luftig: One thing I’m doing is working with a nonprofit organization called the Clean Land Fund that has taken title to a Superfund site in New Jersey, and they’ve been working with EPA Region 2 on trying to ensure that they are considered a bona fide prospective purchaser, and that in the taking title to the property and then in donating it to the township, that in fact the township, too, will be a bona fide prospective purchaser. So the provisions of that new law have become very important in those discussions, and that land will turn out to be a wildlife habitat as well as some land for public use. It’s going to change from an old chemical landfill into a river walk for a community in New Jersey, so that new law has helped that happen.

But in implementing that, it is only a couple of years since that law was enacted, but there is still at times an undercurrent within some of the EPA regions of, “Don’t bother me with that real estate stuff. I’m here to clean up sites.” And there are many people in the regional offices who can envision future uses, who work hard on getting that done, but there are still many who feel that that is not for them to do, that it is not the Environmental Protection Agency that should be involved in land uses. I think it is unfortunate. I think they are only seeing part of the big picture and not really serving the communities, because I think it is the communities’ expectations that their government will not only clean up and protect them from the problems of hazardous waste sites, but will also help them in reusing their land in the future. And where we do that, where we think of the future, we have great successes, and where we don’t we’ve had some significant failures.

EPA Interviewer: If you had to sum up your work in Superfund by picking the most significant issue that you dealt with, would you be able to do that? I’d like to know what the issue is and how you resolved it, if you did, and...

Luftig: Well, there are so many. Some of the ones that I haven’t mentioned yet, but come to mind. We talked about the Love Canal habitability study, and relocations, and developing the nine criteria, and reforming the program, but the problems continue. Hazardous wastes were

disposed of in the U.S. for a long time without regulation, and in my last few years in the Agency, I became involved with the Libby Asbestos site in Montana, and it is perhaps the one site where the worst health implications have been measured. People's health, in terms of asbestos related illnesses, has really been impacted. And in helping address that site by working with the removal and remedial Superfund programs, personally attending public meetings and chairing public meetings there...

EPA Interviewer: And that's in Region 8 in Montana?

Luftig: In Montana—and trying to bring that site to its current state of cleanup, where homes are being remediated, where one of the former mine owning company officials have been indicted, where their trial is set to begin shortly. It's been a major, major aspect of what I did at EPA.

I think we accomplished a lot in terms of health protection. If you think of the Bunker Hill site in Idaho—the children's blood-lead levels were at record highs from the smelter emissions and the ambient lead in the communities in which people live in the Bunker Hill mining area. Shutting down the smelter and doing the cleanup, we now have children with far lower average levels of lead in their blood.

We've accomplished a lot, both in terms of cleanup and reusing land, in terms of protecting public health. The study that was done by Resources for the Future, the think tank in Washington, at Congress' direction where they were to look at the next 10 years of funding need in the Superfund program from 2000 to 2010, I think really hit the mark as to what's coming. And aside from the dollars, where they looked at the needs of the program and said that the program will need somewhere between \$1.4 and \$1.6 billion a year between those 10 years.

They also saw that the controls that were put in place for the long-term management of sites were often either not working or not documented to be working. In particular, the non-engineering institutional controls. So I think the future use aspects of the sites become more and more prominent in what has to happen in the future. In fact, the more I think about it, the more I think that some sort of sustainable consideration needs to be part of the very remedy-making decisions that we do early on in the project. The idea that the long-term effectiveness of remedies needs to include the future land uses, the sustainability of the remedy, if you will, needs to be thought of with the thinking of the technologies for cleanup. I think that the future will see more and more sites where the dollars needed to keep the controls in place are going to be harder to come by as this Resources for the Future study predicted. That whole science of managing sites, often in perpetuity, will become a more important aspect.

The other thing, again, to mention that EPA's Superfund program has many, many parts: removal, site assessment, listing, risk assessment, studies, designs, construction, attorneys, research, and development. All of those programs need to continue to be part of it and need to feel that they are part of the larger, larger picture, and the idea that we need to continue to have a sense of urgency in cleaning it up.

The other thing I've seen in Superfund is that, in addition to the excellent staff, we've managed to hire excellent contractors. Our field contractors for Superfund remedies—firms like Camp, Dresser, & McKee in the regions, removal emergency response firms like EQM, Environmental Quality Management, in Region 6 and in other regions. A number of them. Firms we've hired in Headquarters to help us with listing sites, like a firm called E². We've hired so many good contractors so that the resources EPA has can be multiplied in terms of the technical eyes and ears, and the assistance in making sure we're using the latest technology, the latest community involvement techniques. We've hired some excellent consulting firms.

EPA Interviewer: I'm going to switch horses just a little and ask you to look back to the way that Superfund was originally funded. In particular, I'm talking the taxes on certain segments of industry, and if you have an opinion on whether that was a good way to go or not. Now we know the tax expired 10 years ago, so it's a thing of the past. But what's your view on how we started out?

Luftig: I think that the idea of industry creating a fund was fair. In addition to having them pay for the sites so they could be directly connected to on an individual company basis. I think it was fair to have industry as an entity, as whole, asked to take a small, a very small, amount as a corporate environmental income tax—a tax on imported petroleum and petrochemicals and three or four other tax components—to put into a pool for those sites that were created by industry undoubtedly, or through the inappropriate disposal of their wastes, and used to fund it so that the general revenues wouldn't need to address that issue. That said, I don't think it was a broad enough tax, in that it excluded some components of the industry that should have been included. But I think it was fair and I think that it would be something that Congress should look into restoring so that this next 10 years of funding needs could be ensured. Of course, the budget has continued by using general revenues, but that is taking away from hospitals for the Veterans Administration. It's taking away from space travel, from housing, from health needs, and it shouldn't be part of this. The idea of a devoted fund was a good idea.

EPA Interviewer: When you look back to when Superfund was enacted in 1980 and you became involved in a few years more closely with Love Canal, did you have any inkling of the impact that this law would have? Did you think you would be sitting here 25 years later talking about Superfund?

Luftig: Well, some of the impacts, certainly, have had an impact on the current production and disposal of hazardous substances in this country. The impacts like that were not envisioned at the time, but there are nice benefits of it. The idea that it has had, that there are so many sites—I don't think anybody envisioned that large number of problem sites in the country.

I recall giving speeches in the early 1990s. I was in Headquarters when I first became the deputy and then the Superfund Director in the mid-1990s, giving speeches about how the program was then 15 years old but we were unfortunately still finding sites. And I recall one in New Jersey, now called Federal Creosote in Manville, NJ, where a house basement sump pump kicked on—a house that had been built some 30 years earlier—and instead of pumping ground water, it was pumping creosote, because a whole community of homes had

been built on old creosote pits. And now 30 to 40 years later, the creosote had seeped into their basements, so the problems were continuing. I remember giving a speech saying this wasn't 1980, this was 1994. Now it's 2005, and some sites are still being discovered.

The rate of site addition to the national list has diminished, but that's appropriate, because what didn't exist in the early 1980s and exists now are very excellent state managed programs, whether they're voluntary cleanup or enforcement led programs that can address many of the sites that used to need to go on the Superfund list. So it's now a process where only sites that must be on the national list go on the national list, and I think that's a great new way of doing it. It's the right thing to do. It recognizes that the power of the Superfund law that companies are now more willing to spend \$1 and clean up sites and represents the fact that states have the wherewithal to manage these clean ups.

EPA Interviewer: Do you foresee a time in the future when hazardous wastes sites and identification of these sites as we know it today will no longer be necessary? When all the sites will be cleaned up? When EPA, as it exists now 25 years later, 2005, will no longer be needed?

Luftig: Well, I think the rate of discovery of sites will diminish, but I think there'll always be some unscrupulous people who dispose of wastes inappropriately. One of the sites I recall in Region 2 was a family in northwestern New York, near Tonawanda, New York, that had purchased their home and a large backyard area from someone who turned out to be the guy who drove the waste truck from a large national paint company. And the children were playing in the backyard and they had dug up paint sludge. It turned out that this fellow had made quite a bit of money, the former owner had made quite a bit of money, by taking the wastes from the paint company and not bringing them for disposal to the appropriate places, but had buried them in his backyard, and these kids were playing in paint sludge. So here's an unscrupulous person who had inappropriately disposed of wastes affecting the lives of some people. Unfortunately, there will always be unscrupulous people. There will always be chemical accidents, whether it's highway accidents, train derailments, or explosions at chemical firms that will create hazardous waste problems.

EPA Interviewer: Floods?

Luftig: Or huge floods like we've seen in New Orleans. And old disposal problems—remember we are still dealing with problems from the industrial revolution—will continue to emerge. Though I think the discovery of them will diminish, and the rate of addition to the Superfund list as we are seeing now will diminish. Plus, the way of doing it, developed largely by EPA and by some states—over the last 20 to 25 years we've developed how to do it here and in other countries now, as well—and so sites tend to get addressed at lower levels than the EPA, the Federal Government. They don't all become federal issues, if you will. It's only the large ones, the worst of the worst, the megasites, that will need to be addressed. Unless new science generates new lower standards, and we don't know whether PCBs [polychlorinated biphenyls] in the mother's milk of Eskimos, or the high rate of breast cancer among women on Long Island, New York, or other health-related issues are related to very low levels of chemicals in the environment. We don't know whether in the future lower cleanup levels will be needed for sites that we've already addressed under what we think are appropriate cleanup levels. So we don't know whether there will be a need, as the law

envisioned, to revisit sites should additional health issues emerge and the need for lower criteria be established.

EPA Interviewer: I would like to get some concluding words of wisdom. In particular, I'd like you to opine on if Love Canal had not spurred Congress in the waning days of the Carter Administration to pass Superfund when it did, would we have a Superfund? Or was something like that inevitable? And if it hadn't happened when it did, would life today be different or was it inevitable?

Luftig: I would think that the Love Canal, Times Beach, Valley of the Drums, the triumvirate of sites that are used as examples of why Congress passed Superfund when it did, would have grown in number over time. I mentioned Federal Creosote as one where creosote was coming into people's basements, and Forest Glen where children's shoes were being coated with waste chemicals, and there were many, many others. So I think that the number of sites would have grown and the overwhelming need for some federal program to close the loop, to fill the gap that existed with the existing federal legislation, would have eventually emerged. I wonder if Congress were rewriting the law today, whether they might now put in different criteria for ranking sites for the federal list, whether some higher number might be established than the 28.5 cut off point that we have used.

EPA Interviewer: That's the old Miter ranking system that you're talking about.

Luftig: Yes, the HRS [Hazard Ranking System] number of 28.5 being the number to get proposed for the list. Whether some number of sites per year might be another way of doing it that Congress would envision to limit the budget, but also allowing for emergencies to be addressed. And whether some timeframes for cleanup might not be put into some of the statutes as they put in for federal facilities, sometimes ignored, but there nevertheless. That would create what I talked about earlier as a bias for action and a need for environmental attorneys, engineers, scientists, and risk assessors, all to be put in the field to be part of cleanups that happen faster.

EPA Interviewer: So Steve, I appreciate your time very much. If you have other comments you'd like to make, I'm open, or I'll give you a break now, and we'll quit.

Luftig: OK. I think I'm looking at my notes here, and I think we've covered everything I had hoped to say, and I really appreciate your spending so much time with me, and as I see with others. I think the oral history project is a very important one, and the only last thing I would add is to again... I've mentioned the many parts of Superfund, but there are so many excellent people over the years that I've worked with in the regions and Headquarters, like yourself, and people like Henry Longest and Bill Ross in the Headquarters Superfund program, and Suzanne Wells whose name we mentioned earlier. And people like Barry Breen who was my compatriot when I was the Superfund Director. Barry was the Enforcement Director. And while we were in different parts of the organization, we spoke daily, sometimes more often than daily, to make sure that we were both doing the same thing at each site. I'll stop there, but thank you, very much, and I very much appreciate your time.

EPA Interviewer: Thank you, Steve.