

# TOM GRUMBLY

Former President and CEO of Clean Sites, Inc., and Assistant Secretary for Environmental Management—U.S. Department of Energy

**Interview Date: December 22, 2005**

**Location: Seabrook, Maryland**

EPA Interviewer: It's December 22, 2005, and we're about to commence an interview with Tom Grumbly. We're here in the offices of Lockheed Martin in Seabrook, Maryland. I want to thank you very much for participating in our project. Just to start off, could you tell us a little bit about what your current position is and if you have any current affiliation with the Superfund Program?

Grumbly: I don't have any current affiliation with the Superfund program, but I'm currently Vice President for Civil Programs for the Lockheed Martin Corporation. While Lockheed Martin is well known for a lot of the work it does in the defense area, we do a lot of work in the civilian area, including for the Environmental Protection Agency, particularly in the information systems side. So I'm responsible for that, among other things.

EPA Interviewer: How did you first become involved in the Superfund program?

Grumbly: I first became involved in Superfund when I became President of an organization called Clean Sites, Inc. Clean Sites was established towards the end of 1984 with the help of then EPA Administrator Lee Thomas and a bunch of people from the chemical industry to try to figure out how to get more and faster involvement by industry, primarily in stepping up to the plate and dealing with the Superfund liabilities. And trying to develop, frankly, a less adversarial style between EPA and the industry. I think there was a perception in the early 1980s that this program's primary objective was to punish people who were responsible for hazardous wastes sites. And while that was probably necessary in many respects at that time, that attitude didn't always lead towards people belying up to the bar with either their money or their willingness to clean up. And so there was a sense that it might be useful to have an intermediary organization working in the non-profit sector that could try to work to link government and industry together in an appropriate way. Clean Sites was that organization.

EPA Interviewer: What was your experience with environmental issues prior to Clean Sites?

Grumbly: Just prior to this, I had been executive director of a similar type of organization that had been actually established by, again, Former EPA Administrator Doug Costleback in the late 1970s called the Health Effects Institute (HEI) that brought together the EPA and the automotive industry to do a lot of work on the health effects of automotive emissions. The apparent success of that organization led the government to think about how we could do something that was the same. So I had been involved in helping start HEI and had been its Administrator. I kind of got dragged into this. In the winter of 1984 a colleague of mine, Chuck

Powers, was the first head of Clean Sites, and then three years later, I came down from Boston to take his place. And prior to that, I had been a regulator in the Carter Administration, where I was actually in charge of meat and poultry inspection for the government. So I had some government experience as well.

EPA Interviewer: What did you think were the original objectives of Clean Sites?

Grumbly: The primary objectives of Clean Sites were to bring responsible parties, generally Fortune 500 corporations, together to try to work out agreements among themselves about what their allocation of responsibility was going to be. Take those allocations to the government and try to get EPA agreement to those allocations. Secondly, to try to serve as an impartial third party observer on the development of the remedial selection process, because there was a lot of distrust of industry, probably still is in many ways. The thought was, if you could have a kind of a certifying organization that would put a good housekeeping stamp of approval that might serve as some use. Then the third function of Clean Sites was to actually manage some of the more contentious cleanups, particularly where there was high community involvement and community concern. Again, with the proposition that you could establish more credibility with a neutral third party than you could with anybody else. Some of those propositions worked out better and some worse.

The first, the allocation area, I think, was always Clean Sites' strength, and I think over time the organization proved its value in that area. The whole area of technical certification proved to be kind of a non-starter. There just wasn't the kind of willingness, nor, I think probably the ability, of the EPA to kind of deed over in any way responsibility to anybody else for making the fundamental governmental certification. That just never worked the way it was envisioned. And the project management thing worked more or less fine, but lots of companies flocked into the area. And while we ended up managing quite a few projects—it was financially probably the most successful part of Clean Sites—but I think it felt largely, in the long run, to be not as necessary. But the relationship among the responsible parties and between the responsible parties and the government seemed to take hold and was, I think, a very significant player for about a decade. I think. And then we got overtaken by events, and fortunately it didn't try to stay around past its useful life.

EPA Interviewer: In an early interview at one point in time you were concerned that lax enforcement of the enforcement program was affecting the mediation business, because there was no incentive for PRPs [potentially responsible parties] to come and do cleanups.

Grumbly: Right. We were ironically—even though there had been a lot of industry interest in creating Clean Sites... I'm trained actually as an economist, and my very strong view is that money talks. And you need incentives. You needed economic incentives to get people to the table. You can get people to talk around any table, but unless there is a threat that something bad can happen to you, people won't reach an agreement. And so we were concerned that the government was not being sufficiently aggressive in using its enforcement authorities. That position kind of befuddled some people who occasionally felt we were an industry organization, but to me, it was just a simple case of economics. I think, in part as a result of being persuasive with Former Administrator Bill Reilly, I think the government did pick up the slack quite a bit in that area, and it ended up being one of those things that benefited everybody I think. I think it benefited the government's credibility. I think it assisted in bringing

more people to the table and in getting more cleanups at least begun with the least use of taxpayer resources.

EPA Interviewer: You mentioned one of the functions of Clean Sites being trying to allocate liability or responsibility among PRPs. What were some of the issues that you had to face in dealing with that, and what was EPA's relationship with all of that?

Grumbly: Well, I'll answer the last part of the question first. I think fundamentally, EPA, at least gradually, took the stance of, "We don't care how you do this, as long as you've got the amount of money that's necessary to do the job." So the government, I think wisely, stepped back a little bit from trying to say, "Oh you're responsible for 10 percent, you're responsible for 15 percent," and simply said, "Come up with the money. If you don't come up with the money, we'll use our enforcement authority. And if there are not sufficient people around to take responsibility for the whole thing, we'll think about using what was called mixed funding authority in taking some money from the Superfund itself to match it with industry." That turned out to be harder, I think, than most people thought it was going to be, but it was still something that the government was willing to do.

Among responsible parties, I would say there were several issues. First, a lot of these hazardous wastes sites were the result of companies having been bought by other companies. So trying to just figure out who owned what, when, was a less trivial task than you might think. Secondly, the actual forensics of trying to figure out what you were responsible for, again, proved to be a more difficult task and involved a lot more resources than one might have thought at the beginning of this. So the actual development of the factual base so that you could actually sit down at the table with a bunch of people and say, "OK, this particular waste site is the result of the following five companies being there," and, "You pretty much brought this, and you brought that, and here are the rough proportions that we think..." Clean Sites—because they would often give us the responsibility for actually doing the investigation—[would say,] "This is what we think you were responsible for. Now, argue us, tell us why you're not responsible for that." So the forensics of the whole thing were quite challenging. And then I would say, finally, the different financial circumstances that companies found themselves in. Companies are quite different in terms of their ability to fund major cleanups, and there's no question that there was an incentive sometimes to let the lawyers spin at \$300 per hour because that was a lot cheaper than coming up with the \$50 million that it would actually take to do the cleanup. So you had differing incentives among the parties to actually come to a settlement. So I'd say those are the three major issues that usually got dealt with.

EPA Interviewer: You also were concerned at one point in time about municipality participation—the cost of cleanup being prohibitive for municipalities to become involved, and then all sorts of different schemes proposed to provide liability relief—both to them and other small *de minimis* parties.

Grumbly: That's right. The whole issue of how municipalities were going to participate in this was a very contentious issue at one time between the Federal Government and state and local governments. And because of the way the law was written, it wasn't really clear that it was in the municipality's interest to step forward since, because of the joint and several liability aspects of the law. If somebody stepped forward and then nobody else was around,

you could potentially get stuck with the cleanup for the whole thing. And as we know, most state and local governments—particularly ones that have your local garbage dump—frankly felt they couldn't afford to be forthright about that for fear of getting stuck for the whole thing. So trying to draw them out, trying to bring them into the process—frankly, trying to agree to get companies to cover parts of their liability—was interesting. Of course, that caused us to become involved from a policy perspective in the sense that part of what Clean Sites did—and I think did with some increasing effectiveness—is to kind of build on the practical experience that we were having and make suggestions into the policy process, either through testimony or directly to the agency about, “Here's what we're encountering. Over here, if you twisted the process 20 degrees, this would work better.” So the theory was—and again, I think it was a pretty good theory—is that rather than just kind of inventing ideas out of our head, a lot of the ideas actually came from real, practical, on-the-ground experience. So we made some progress in that area.

EPA Interviewer: Do you think that the liability relief provisions, both through the administrative reforms as well as in legislation, were effective and useful for advancing the Superfund program?

Grumbly: I do. That's probably still controversial in some quarters. I think that the initial liability provisions were extremely useful in getting people's attention; in getting corporations, in particular, to take this whole thing seriously, and getting it to the top levels of corporations and to their accountants, who were forced, by virtue of the liability provisions, to get companies to say, “You have to make an allocation for this on your books. This is a material impact on your financials,” so I think that was useful. I think, at the same time, the initial liability ideas offended some basic fairness ideas that a lot of chief executives, in particular, in American companies had. Their basic attitude was, “Look, I'll pay for what I did, or even for what the previous company that we owned did, but I don't want to pay for what these other people did. Particularly when I know they're gaming me; it's not a level playing field.” There were a thousand arguments that people would come up with. So I think that that sort of basic fairness concept sometimes stood in the way of final decision-making on this and actually delayed cleanup at many sites, because companies simply couldn't wrap their heads around the fact that the government could stick them for more than what they were exactly proportionately liable for. So it had its pros and cons, and I think to the extent that we've moved more towards both *de facto* administratively and ultimately perhaps even in the law, is probably the right progression that things needed to go in.

EPA Interviewer: Do you have any stories from PRP steering committee meetings that you care to share?

Grumbly: None that I can tell you, actually, because we swore then, and without a release I can't really tell you about the specific stories. I can tell you that the major chemical and oil companies in this society spent a lot of days and nights in a conference room—and Clean Sites—a lot of the time jumping up and down, screaming and yelling at us simply because we were telling them what the law is. It's difficult for me to convey to you now, 15 to almost 20 years later, just how angry people were on all sides of this issue in the early 1980s—and throughout the entire 1980s, I would say. Going to community meetings and being called a killer by people who felt that their health had been genuinely hurt. And then going to industry meetings and almost literally having chief executives have a stroke because of what their

financial liability was, and listening to them rant and rave about how unfair the government was. Talking to EPA officials in the early '80s who sometimes came across more like Inspector Javert of *Les Mis*, as though they were on a moral mission to take care of this problem. So the passions ran very high on all sides. And I again think that it's... Well, I still know that in some places in the United States, passions run high over hazardous waste cleanup, because people feel like their lives and fortunes are on the line. I think the Agency has done an increasingly better job over the last 20 years of making this into a more rational process and taking the heat out of it. And then also, I think, as other issues have emerged from our society, people have perhaps gotten a little bit better perspective on the relative risk of these sites to other things that are happening in their lives. And I think that's helped.

EPA Interviewer: There are so many issues related to fairness about the Superfund program, and I want to touch upon several of them. One that's tangential is certainly the cost of cleanup and your interest in promoting innovative technologies to decrease those costs.

Grumbly: Because I don't, and never did, see the Superfund program as a punishment drill for companies, but rather how can we efficiently get to a cleanup, I was interested when I was running Clean Sites and then later when I was at the Department of Energy and kind of turned around and actually, I guess, became a responsible party, always [was] extremely interested in the development of technologies that would enable us to do pump-and-treat, air stripping, and a variety of other things in a much less expensive way, but that would leave the ground or the water at a level of cleanliness that basically was acceptable to the environment. And of course the innovative technology issue and the whole issue of remedy selection is totally combined, because technology can be great, but if it won't meet the standard that you're trying to clean up to, it's essentially worthless for the effort. So I always saw and I continue to see it.

The fundamental issue is how you use that technology and how you get people's minds wrapped, in some kind of agreement, around, "What are we going to try to do here? What's the level of cleanup going to be? What are we going to use this land for in the future?" All those questions directly related to whether new technology has a place at a site or not. In addition, from the practical side, no matter what level ultimately got set, I saw a whole lot of sites where basically what we did is moved in the back hoes and just picked up all the dirt and took it and burned it someplace. And that certainly was not very innovative. But you know, in some cases that did the trick as well. So the right interplay between conventional technology and innovative technology has to be thought about pretty carefully and had to be thought about pretty carefully inside the Agency. But yeah, I think one of the best things that Americans are good at is innovation when they're given the opportunity to do it and didn't see any reason to force people to pay more than they absolutely had to in order to do the job.

EPA Interviewer: What kind of implementation obstacles did you see in any efforts to try innovative technologies? I know that one issue that was of concern to you was the risk-sharing between private parties and the Federal Government to try new technologies.

Grumbly: Right. Well, you know you're doing a good job refreshing my memory as we go along here, because it's been a while since I've been doing this. Having been in the private sector now for several years, I have a much better understanding about why companies don't

want to take risks with their shareholders' money in something that hasn't been proven to work. And I think that to the extent that the government—the public interest—has an interest in trying to get things cleaned up with the least use of both private and public resources, that it was important to try to figure out whether the government had any role in underwriting somehow the risk that was here. Very heavy lift though, I think, for the government to be persuasive that it ought to share risk in an area where a lot of people were more judged along the lines of a quasi-criminal standard rather than a commercial kind of a standard. It's like, "You're guilty; you've screwed it up; you clean it up." And I think as long as you're using that sort of prosecutorial enforcement world view in order to do this, it's extremely difficult, if not impossible, to accept the notion of risk sharing. You have to be able to look at it as a broader kind of public policy issue. I'm not sure whether the—you'd have to tell me—whether the government actually ended up underwriting much of the risk of this. I think EPA ended up spending some money to help in the development of technologies, but I don't believe that the allocation of responsibility or risk ever shifted on this—just too tough. I think it should've, but it just didn't.

EPA Interviewer: Let me pose one more question related to liability or allocation of responsibility. Prospective purchasers had no incentive to participate because of liability restrictions. What kind of efforts do you think took place then? Were you involved in trying to...?

Grumbly: Well, I think that the more the commercial sector did, in the end—ended up taking up most of the space in the, what I would say due diligence on prospective purchases. In fact, the whole industry developed over time—that for maybe a dozen years—ended up making pretty good money on helping companies figure out what their prospective environmental liabilities were going to be and Superfund liabilities were going to be here. It's funny, it seems like totally accepted practice commercially, sitting here in 2005, that this should be done and that people who are buying companies need to do appropriate environmental assessments. But that was not something that was taken for granted in the mid-'80s. And again, while my entire perspective on this is colored by the fact that I got into it because I thought things were too adversarial in the 1980s and felt pretty strongly that a different model ought to be brought to bear, I think that the toughness of the law—and I can say this easier from hindsight—and the toughness of a lot of the people who were involved in this early on, actually probably was necessary to get people to focus on the problem. I think we persisted longer in that adversarial approach than was necessary, and frankly I'm glad to see that that's moderated over the years in the interest of getting things done. I think the biggest positive that the Superfund program has over the last 10 years—from about 1994 to 2005—is that it changed from a program that talked a lot, preached a lot, and studied a lot, to a program that did a lot. And I think ultimately the public recognized that, and that's why a fair number of people—outside of some of the folks in the United States Congress—why a lot of people would hope that the Agency would have the money to finish the job.

EPA Interviewer: Do you think there was a particular turning point when the Agency's position softened or changed?

Grumbly: Yeah, I do. I think that—and not everybody would agree with me on this, and I realize that—first I think Bill Reilly, who had participated in the development of Clean Sites...

And actually, I could argue that the single largest benefit of Clean Sites was nothing that it did while it was actually there, but in the developmental process, because it enlightened a lot of people about what was going on in Superfund. And I think when he came in, in 1989, I think he brought with him an attitude that cooperation was necessary, but the government needs to carry a big stick. So he was willing to spend a lot of his own time and resources on the notion that it was important to get people to get to work together, but also had the sense that the incentive—using the 106 orders and the other tools that the government had—was something that was necessary to do. I think that was an important break. And then I think that—in kind of the same way that Nixon was able to go to China—that Carol Browner’s actions, as opposed to her rhetoric, changed the course a fair amount as well. Carol, Mrs. Browner, very strident in my opinion, very strident vocally, but much more accommodationist in terms of the policy that was being run during the 1990s. The Agency undertook some administrative reforms, frankly I think in lieu of fearing that the Congress would go overboard in changing the statute, I think Mrs. Browner tried to—particularly after 1994—pursue an accommodationist set of practices with industry. While at the same time, ratcheting up the rhetoric as a cover for what was actually happening. And I actually think though that was beneficial to the Superfund program, because she actually provided a lot of cover for the Agency to be able to make changes that I think many people wanted to make that ended up being pretty successful for the Agency. So I would say those were two kind of defining points.

EPA Interviewer: Did you ever agree with the statement that the Superfund program was broken?

Grumbly: I think it was in paralysis in 1984/85.

EPA Interviewer: That was very early on compared to when Carol Browner actually made the statement.

Grumbly: Yeah. I agreed with it in 1984/85. I personally did not agree with it in 1993. I think that it was already on the road to being fixed. But I think that the politics at the time—I won’t say mandated—but encouraged her to say things like that. And you know, I’ve had the advantage of serving as a senior executive in a government agency in the Department of Energy as Undersecretary and Assistant Secretary. And I think it’s best to let the career people know why you’re saying what you’re saying. But I also know that a lot of the time there is a disconnect between what goes on, on—in EPA’s case, I think it’s the 12<sup>th</sup> floor...<sup>1</sup>

EPA Interviewer: It’s moved. We’ve changed buildings.

Grumbly: OK, well, where it used to be...and where things are in the rest of the Agency. In the perfect world it would be better to have a lot more connectivity between the policy makers and the implementers, but occasionally—even though you feel bad—it’s actually better for you. And I think you could argue that in Mrs. Browner’s case, her very strong rhetoric enabled the Agency to go forward more effectively.

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<sup>1</sup> “12th floor” refers to the 12<sup>th</sup> Floor of the West Tower at Waterside Mall. This was the location of the Administrator’s Office in 1972.

EPA Interviewer: Changing the subject to another area that I know is of interest to you, you mentioned previously how businesses now take for granted the need to do an environmental review of properties. Something else that, I think at least the Superfund program takes for granted, is land use considerations.

Grumbly: Absolutely. If I were going to... I guess a victory has 100 fathers, and failure is an orphan. I feel like Clean Sites was one of the first—can't say the first because that requires a level of knowledge that I don't admit to having—but one of the first institutions that basically said, "You've got to think about what we're going to use this land for, that one size may not fit all." Well, that was a very radical statement in 1987, even 1988. It was like, my God, you're violating the religious truths that have come down to us from on high. And yet, I think again, practically speaking, it was a very clear kind of distinction that needed to be made about whether or not you were going to have something that was a parking lot for buses versus something that was going to be a grade school and that you were going to have people on all the time. And of course the whole issue of land revolves around the issue of risk, which basically goes to the issue of how many people are going to be there for how long, and are those people young, old, or in-between? And vulnerable populations and all the other great issues that are about environmental protection. But fundamentally the issue of what you're going to use the land for has morphed into the whole brownfields thing over time, and I think Clean Sites stepped up to the plate, took some heat, argued with people in the Agency, but I think in a good way. The folks who were running things at that point—I think about people like Henry Longest, Gene Lucero... Gosh, I'm trying to remember some of the other enforcement guys and folks who were there. There was a fellow who was in charge of enforcement who....

EPA Interviewer: Diamond?

Grumbly: Yeah, Bruce Diamond. Yeah, we had principled arguments about that. That, I think over time, changed some people's views. And again, from hindsight and being a lot older now than I was then, you can almost never change anybody's mind on the spot. And people need to get comfortable with ideas. But I think Clean Sites was pretty good at introducing germs of ideas that it had seen from its practical experience and kind of put them on the table and let people of all persuasions look them over. I think the genesis of and the relative success—I won't say absolute—but relative success of Brownfields as a policy has at least some of its roots in the Clean Sites remedy selection experience.

EPA Interviewer: I know that some of the work that you did certainly involved communities. How did they respond to this kind of proposal?

Grumbly: Well, I think most were, at least initially, strongly against it, particularly to the extent that they didn't have a chance themselves to participate in the cleanup choices that affected them. I think one of the modest insights that I certainly had, and others had it about the same time, was that, the more you could actually treat community activists as true players in the policy-making process without getting paralyzed, the better off the ultimate decision would come and the more flexibility that people would permit into their own situations. When you think about it, it's just common sense. If I take a knife and try to move it close to your hand, you're going to move your hand pretty quickly. And you're probably not going to let me get very close to it. However, if you have the knife in your hand and I tell you to get close to your



other hand, you're in control! And so I think that all the issues in remedy selection, but including the issue of land use, got a lot easier to the extent that the government got more comfortable with actually including citizens in the decision-making process as opposed to saying they were interested in the process. Not perfect, there are obviously situations in which people can be irrational, where they can have their own motivations for not wanting something to move ahead. I've seen sites where literally some of the citizen activists, their whole life was involved in being opposed to what the government wanted to do. If you fix the problem, they wouldn't have anything else to do. So as with most things involving human beings and human nature, there are a wide set of behaviors you can expect, but I think on balance it was better to act like a "small d" democracy than not in dealing with issues like land use.

EPA Interviewer: As assistant secretary, how did you view communities?

Grumbly: We embraced them. We took over the Energy Department—I had the honor of serving during the Clinton Administration—so, 1993, the Cold War was over, the Department of Energy no longer operated under the cover of darkness. It had been forced to come out into the light. Because the department is the responsible party for manufacturing nuclear weapons, there's a lot of emotion around that issue in and of itself in the society. Let alone nuclear power...but simply having made the bomb maybe makes the DOE the enemy in a lot of people's minds. But without the Cold War to sort of provide the cover for what DOE wanted to do, it found itself in a situation where it literally didn't have the political support in the Congress to move forward with the massive amounts of money that were supplied by the Congress to undertake a cleanup. It didn't have the political support to come to closure on what it was going to do without involving the citizenry that lived around these sites. I'm unabashedly a supporter of major public involvement in hazardous waste decisions. I do *not* think that they are fundamentally technical decisions. I think they are fundamentally social decisions. You have to be clever in moving things forward; you can't just throw something over the transom and expect it to go all right. But I think that if you involve citizens in hazardous waste cleanup—and I have a couple of specific examples of where this has worked dramatically well, including Rocky Flats and the Fernald site in Ohio—you can get the public to be actively involved and make responsible citizen choices about how they use their money and how they use the taxpayers' money. And the cynics in our society would say, "No way that can happen. People will just spend all the money—and more—that's given." Well, I've seen personally that if you involve citizens and you make them responsible and you give them technical advice and you provide them with the independence, that you can get pretty good decisions. I, for one, am not a—and have never been—a proponent of, "There's only one right answer to these sites." I think the objective is to get inside the universe of good answers. Anything inside that universe is OK. So I feel pretty strongly about the virtues of public involvement.

EPA Interviewer: Do you have a story you can share with us?

Grumbly: Well, particularly Fernald<sup>2</sup>. Fernald did all the processing that took uranium and

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<sup>2</sup> "Fernald" refers to the U.S. Department of Energy Feed Materials Production Center in Fernald, OH.

turned it into what's called "yellow cake," which is the fundamental basis for building a nuclear weapon out of uranium and is absolutely essential—a debate in the last couple of years about yellow cake and its relationship to us going to war in Iraq. This place manufactured this yellow cake from unrefined uranium for like 40-some odd years. The place was a total mess. The levels of not just radiation but contamination of the material itself—heavy metals that were used in the refining process—pretty much any chemical you can think of were very high. And there was a very large amount of anger from the citizens around Cincinnati, Ohio, where this plant is. The government slammed its head against the wall at Fernald for about four years, from '89 to 1993, trying to come up with what's the remedy going to be. And because of the way this works, EPA had to be involved in this process too, as well as the State of Ohio. Well, it was becoming a gigantic pain in the neck for everybody, because, first of all, the government was spending lots of money and getting nothing. EPA found it impossible to come to a remedy, because anything that the other parts of the government came up with, the citizens were hating. And the State of Ohio wasn't very happy either.

So in 1994 we formed a Citizen's Advisory Committee at Fernald, hired a small consulting organization that specialized in group dynamics—getting people to be able to kind of work together. Also provided to the citizen's organization the ability to hire its own technical consultants, populated it with people who were not chosen by the government, but were chosen by another independent group of people led by the former director of OSHA (Occupational Safety and Health Administration)—who was then the provost at the University of Cincinnati—Eula Bingham, who had been head of OSHA during the Carter Administration and so had some credibility with the public. She selected, without the government's involvement, who was going to be on the advisory committee so that nobody could say that we had sort of tarnished it with our dirty hands in doing that. And basically said, "OK, you are going to tell us what the ultimate remedy is going to be here. Now, if you do something that technically can't be done or is going to have a shoot-yourself-in-the-foot kind of thing, believe me, we'll let you know right away. And we'll be right here to work this along with you. So we're not just throwing this over the transom at you. But we give you our pledge that we will do what you come up with."

EPA Interviewer: Strong pledge.

Grumbly: Yeah. And it worked. I'm sure we were lucky, but I just can't tell you what that sort of level of empowerment did with the people who were on the committee. All of a sudden, they started to act like taxpayers as well as community involvers. They started to take into account what was going to happen to the citizens of Nevada if they shipped all this stuff off the site. It was really pretty phenomenal to see people acting like I think most of us would want us to behave if you were in a situation where somebody came to you and said, "We've got up to about \$2 billion here. How do you want to spend this?"

EPA Interviewer: Wow.

Grumbly: And you know, it took two years and there was a gradual evolution of trust. I can't remember now, but I know they did some things to sort of test our credibility, like could they really commission this study, could they really do this, do that. And some times I had to hold my nose, but we let them do it. And I think ultimately it's resulted in a solution that—

won't say everybody—but the vast majority of ordinary citizens say, “Well, OK, maybe that's not perfect, but that's pretty good.” Took a lot of work, a lot of time, probably a lot of money and in the government's case, back in the mid-'90s because hazardous waste and environmental cleanup was a big issue, we actually had the authority, from both the President and the Vice President and the people in Congress, to actually do these kinds of experiments.

EPA Interviewer: Do you think lessons learned from that experience, similar ones, have been incorporated into Superfund?

Grumbly: Well, I don't, I don't...yeah, I think some. I still think there's plenty of skepticism about the role of citizens, and I think that the general level of skepticism at the upper levels of our government about involving too many people in decision-making processes has probably worn off throughout the government. And you know the fact is, it takes a lot more work. It's a lot easier to sign documents than it is to face public meetings. But yeah, I think there is a residual level, from what I understand and can see, there is a residual level of understanding actually inside the program that it's better to involve people than to not involve people.

EPA Interviewer: I guess as a flip example of a case, Industrial Excess Landfill, could you describe what was going on there and what were the emotions of the community? And how could that have been dealt with perhaps differently? And what your role was in it?

Grumbly: Well, this was not something that actually Clean Sites institutionally was all that involved in.

*[First interview ends. Second interview on December 28, 2005.]*

EPA Interviewer: Today is December 28, 2005, and we are about to start another interview with Tom Grumbly. We're here at the offices of Lockheed-Martin in Seabrook, Maryland, and the last time we left off, we were talking about some of your site-specific experiences, and we had a really interesting one that you described at Fernald, which was a positive experience, and then I was going to ask you about Industrial Excess and what that was like.

Grumbly: Well, it was a very different experience from the experience I had at Fernald. I can't say it was completely negative, but quite different. As I recall and the facts are a little hazy, this many, many years away, but Industrial Excess was a landfill in Ohio that had been on the Superfund list for several years operated out of Region 5 in Chicago, I believe. And Goodyear Tire and Rubber, I think, was one of the major responsible parties at the site, and there were other responsible parties there as well, including potentially the Army and, according to some of the people who were around the site, the Department of Energy. This was a site that I would say had been resistant to solution for several years by the time I got into it at the request of then EPA Administrator Bill Reilly. The remedy that had been discussed and I think, perhaps, even selected at the site initially, was a relatively limited remedy that, frankly, a lot of people in the community around Akron, Ohio, which is where Industrial Excess was, I believe, it wasn't acceptable to folks. And it wasn't acceptable not simply because they felt that it was the wrong technical solution, but because I think several of the people who were involved, and one woman in particular, really felt that they were

being schemed against by the government. They simply refused to believe that the Environmental Protection Agency and the contractors that it had hired to do the investigation had done it in an honest way. Well, this is, of course, a very difficult kind of an issue to deal with, and the more the Agency sort of slammed its head against Industrial Excess the more difficult it got. The Congressman from the district, Ralph Regula, I think, had gotten involved.

Anyway, to make a long story somewhat shorter, the Administrator asked if I would try to see if we could review the entire remedy selection process, work with the people who were involved, and see if we could at least close the gap between where the government was and where the community was. Well, this was easier said than done, and I would say that what came out of the project were a couple of things. First of all, I did a written review of the process, and there were definitely some problems with the way in which the EPA had come to the conclusion about what the right formula for success was here, and as I recall, there were certain elements of the cleanup that at least, you know, sort of the “man from Mars” might come in and say that there had potentially been—the Agency had perhaps jumped to a conclusion about what the cleanup solution should be here and had kept that solution in mind while organizing the evidence that went toward it, so there was colorable case that the process should be looked at again. From the community’s perspective, and in this case the community fell into a number of different camps—one group of people that were pretty much fed up with the entire process and just wanted it to be finished, and then several people who had essentially taken this on as a political and personal cause, and for those people there was really nothing that the Agency could do then, nor over the years later, to persuade them that this had been an honest process. What I would say is that, to me, this was an example of someone turning a hazardous waste site into a kind of religious quest.

The process assumes rationality. The process that we have assumes that scientific fact will deal with at least most of what we see in the process, and that there’s a certain amount of residual risk that we can sort of model in the process, and that rational people can maybe agree to disagree about this, but that ultimately you can get to some kind of a solution that makes sense. Unfortunately in this particular case—and I’m still not sure that it’s totally been settled—certain people in the community just refused to believe that the government was being honest. Nothing that I could do to—nothing that I did—did anything but further persuade them that the government was dishonest, and it, I think, points up just the level of emotion that sometimes invades these processes, and the limitations of what a scientific and technical approach can bring to issues that are inherently emotional and fraught with fears. I’m not sure that the Agency could do anything more than it did or that anybody could ever persuade the few people who were involved who were kind of zealots about this that anything short of digging up the entire place and taking it away would satisfy them. So, it was a disappointment.

EPA Interviewer: What kind of lesson did the community involvement function at EPA learn from all of that?

Grumbly: Well, you’ll have to ask them, but I hope that the lesson that’s learned is that you have to continuously involve people from the very beginning of projects and provide them with a degree of independence in the process, so that the reasonable man, looking at these processes from the outside, would say without hesitation, “That was a fair process that was run.” My overall feeling about community participation in projects is that it is extremely

important for the governmental authorities who are involved to keep listening, to keep outreaching, to not substitute their technical judgment for the community's judgment too quickly in these kinds of equations, and to adopt the stance that just when you believe that you're about talked out, that's the first time that anybody on the other side is listening.

EPA Interviewer: Do you think as an observer of EPA that there's been a change in how we deal with communities over time?

Grumbly: Well, I think institutionally and at the career levels of the Agency, yes. I think that there has been a gradual—sometimes grudging, sometimes willing—adoption of the point of view that that community involvement's pretty important in these things. I don't know that those attitudes have been reinforced in the recent past by the people who were overseeing them, who don't seem to get much positive feedback from their own superiors about involving anybody in decision-making in this society.

EPA Interviewer: Right. I wanted to go back to technology for just a minute. You have given me a number of site-specific examples, and within technology innovation there was a particular site that you worked at: McClelland Air Force Base. And I wanted to know if you can tell us a little bit about what that pilot project was like, and whether or not you think it had success in fostering technology innovation in the organization.

Grumbly: Well, this is a project that we worked with Dr. Walt Kovalick, who was in charge of technology innovation at the Agency, and also with some of the people at McClelland Air Force Base, both in EPA and in the Air Force. And my recollection of this is that there were a bunch of new technologies that were coming onboard revolving around sort of treatment technology, pump-and-treat technology, that the Air Force wanted to try that were not within the, then 10 of, the EPA standard solutions, and which it seemed like a good place that if you could try some things and would be successful, that maybe you could bring some new technology onboard and make some progress. And I guess I'm glad to say that over about a three-year period of time, some new technologies were brought onboard that were much less costly than the stripping technologies that had previously been in use, and that it ended up saving the government, and the taxpayer in this case, since the Air Force was the primary responsible party, a fair amount of money. It was thoroughly heralded in that period of time—the very early '90s, late '80s—as something that was worth trying again, so I think that that was a case where being able to provide a test bed, so to speak, for new technologies not only advanced the technologies themselves, and enabled them to be used in other places later on, but cut down the cost of innovation and made innovation more acceptable at a bunch of sites. So, and I think inside EPA it was one of the first times that this particular Technology Innovation Office that Walt Kovalick ran sort of got traction with some of the other folks who were in the Agency and was able to demonstrate that it could make a contribution throughout the cleanup.

I think there's always a tension in the Agency between what you might call the “sure thing” technologies that people knew would work from long engineering use and the sort of folks who wanted to introduce and dabble with new things and bring them onboard. And of course, you know, because the government was not about to let people off the hook if new technologies failed, it was often considered to be the safest thing to simply use older technologies. And one does have to admit that the way in which the earth and these sites

were sampled and characterized with great precision and then we would send in these backhoes and you would wonder, “Gee, there’s a mismatch between the precision with which we’re trying to characterize these sites and the crudity of the cleanup measures themselves, and surely there’s got to be a better match here someplace.” I think that this was a case where Kovalick’s persistence and maybe the fact that it was a federal PRP [who] was involved did make some difference in the Agency’s willingness to experiment here.

EPA Interviewer: Moving into the next phase of your career, you were the Assistant Secretary for Environmental Management in the Department of Energy. Were you able to carry that type of innovative sense into your work there in cleanups?

Grumbly: Well, there was certainly a quantum leap between the kind of responsibility that I had. Going from being sort of a mediator of toxics responsibility to at least being titularly in charge of the largest cleanup projects on the planet was quite a change. I had never... I did not have any experience on the nuclear side of things, but much more in the chemical hazardous waste side of things when I came on board. In part, that’s why I got the job, because I wasn’t conflicted in any way, and a lot of the people who might have had the job worked for the large contractors who were actually involved in cleanup, and I wasn’t. Yeah, I was very fortunate, I think, to have an office that had a significant technology innovation budget to the tune of about \$350 million a year. And the magnitude of the nuclear waste cleanup in the United States was, and still is, of such a large size that it definitely made sense to try to invest in technologies that might not even be available for five or 10 years, but if successful could, you know, fairly dramatically drive down the costs of cleanups to the taxpayers. So, yeah, I think that—and still think that—innovation is an important quality that needs to be factored into the cleanups. Now, saying it and doing it are two different things, and goodness knows we had a number of failures. There are plenty of successes, but people tend to dwell on failures in this area, but I still think that the risk-return equation on innovative technology, particularly for nuclear waste cleanup, the benefit risk ratio is very high about this. And so, yeah, we pushed very hard. This is a program that you know had a price tag in the multi-hundreds of billions of dollars. We were spending somewhere between \$6 and \$7 billion a year of the taxpayers’ money, which even these days is still real money, so definitely a premium on innovation.

EPA Interviewer: Thinking back a little bit on your role in cleaning sites as a mediator, and then being the head of environmental management at DOE, how did you view Clean Sites after you changed your role, or at least...

Grumbly: Well, it’s interesting since—first of all—I personally couldn’t touch them, since I had a conflict of interest, which is one of the, you know, I think, interesting aspects of governing in the United States. Here you could invest your whole life and soul in a particular institution like Clean Sites, and believe in it very firmly and yet, if you go into the public sector, you basically have to act as though it doesn’t exist. The organization also didn’t have any nuclear expertise, and most of what we did was nuclear, so I would say, actually, institutionally we didn’t—we never did much of anything at all with Clean Sites once I went inside the government.

But what I took with me were, I would say, two or three very important pieces of information, and kind of rules that I had learned in the six years that I was at Clean Sites

and working with big companies, and that I took into the government. One is that the structure of contracts really matters a lot, and that the economic incentives that are in cleanup contracts make all the difference in the world. If you are going to pay people to just sit there, they'll sit. If you want to incentivize them to do things, you have to construct the contract so that they are properly incentivized to do it; secondly, that community involvement was extraordinarily important and could make all the difference in whether you could get things done or not, and that, therefore, inherently, the cleanup process is a small "p," not partisan—small "p"—political-social process at least as much as it is a technical process for cleanup; and three, that you have to manage a cleanup project the same way that you would manage a regular construction project. You have to make sure that there is a beginning, a middle, and an end to the project, and that you have set down in advance of putting a shovel in the ground what your measures for cleanup are going to be. Because there's always going to be pressure to do more or less at the end, depending upon how much money you've already spent on the project. So before, you know, you actually put a shovel in the ground, it's pretty important to lay down what the criteria for stopping are going to be, and I would say those three lessons are lessons that I learned at Clean Sites and that I tried with some success to bring into the government at that period—at that period of time.

EPA Interviewer: Do you think DOE and EPA's abilities to write records and to say who actually had a cleanup level, a clear line drawn—did that improve over time?

Grumbly: I think it did. But is there perfection in the world? No, but I think gradually most people learned the same lessons, who were involved in this process. If you were involved in it for 10 years or more, there developed a fair amount of consensus among people who are in it for a long time about what the characteristics of a good cleanup, or at least one that you could get through, looked like. And, you know, defining success was a problem for the EPA almost from the start of the program, and you know early on, it and everybody else was associated with it, including other government agencies like Energy and private PRPs all had a very difficult time with this, because as long as you define success as taking the site off the National Priorities List, you were never going to get success in anything, given how the law was set up. Because it took so long for something to get off the NPL that you could never tell anybody with certainty that you'd accomplished anything. And I bet it took from 1981 to about 1991 for people to figure out that we need to change the criteria for success here so that you get some benefit with the public as well as with your own people, frankly, for having done interim steps, for having completed the initial phases of cleanup. So this whole business of how to define success was a very big issue for the government and for the responsible party community that was around there. But I think by the time of the mid-'90s came around, there was again pretty much agreement on this. It wasn't considered by the Congress to be a flim-flam any more, and you know people started to say, "Yeah, well you know, guess what? We need to be able to get out of these problems as well as into them."

EPA Interviewer: Do you think looking at the Superfund today that it still has the same measures of success, and that the Agency is able to adequately represent its success in cleaning up sites or in managing site?

Grumbly: Well, it's hard. The situation that the Agency finds itself in is different now than it was in 1995, speaking here at the end of 2005. The Trust Fund is nearly exhausted, if not

totally exhausted. Other national problems have overtaken this. Just in the environmental area the whole issue of global warming and greenhouse gases has sort of overwhelmed, as a matter of policy, this area. I think, however, if you still talk to people who actually live on the grounds of the United States, you'll find that for many people, hazardous waste cleanup is still kind of the number-one problem environmentally that leaps to their mind when you talk to them about environmental issues. So, you know, the situation has changed somewhat. I think the Agency is left with—and it did this on purpose, I think, to itself—left with a few very large cleanups that are still on its watch that it, frankly, doesn't have the money to adequately address, at the moment. And where the responsible parties, because of the size of the cleanups—with the exception of federal cleanup, because there's a different driver that's at work on federal cleanups... I think the Agency finds itself still with the problem of how are they going to define success at a few of these very large cleanups where the resources just don't seem to be available to make the kind of progress that needs to be made. So it probably needs to be rethought again, but I don't think we're going to get any significant rethinking on these problems until, you know, for another two or three years.

EPA Interviewer: One of the things that strikes me so much in your description of cleanup processes is the small “p” political socioeconomic issue. When Superfund first began, I don't think that was in anybody's mind. It was, “You've got an environmental problem. Clean it up and get out.” But success really is so much deeper than just cleaning up a site.

Grumbly: Absolutely. You know, it's interesting. The problem sort of sprung full bore onto the American scene with Love Canal, which was a huge political problem. It got people voted in and out of office in this country for several years. I think, you know, the initial response to that was to try to make cleanup into a technical problem that could simply be addressed with technical resources. In part, I think, because people were so angry that to come into a room early on in Superfund and do anything other than to promise that you were going to get the last molecule of the bad stuff out of there; we guarantee that you'd practically be ridden out of town on a rail. And so, you know, it took a long time for what I would say is kind of a greater rationality to build into the process, and I think by greater rationality, meaning a recognition that a whole bunch of different kinds of characteristics have to go on in order to successfully imagine, conceive, and then finally implement a cleanup. For many years I think it was a cliché to say that the actual cleanup part of the job was way the easiest part, getting to the first day, when you could actually bring out the earth mover was a gigantic hassle that I think the Agency wrestled with for a long time before it sort of figured this out. I think it ultimately did figure it out, with the help of state agencies, with the help of local agencies, and with, I think, kind of the maturation of peoples' thought processes about this.

EPA Interviewer: I want to bring you back to the Department of Energy just a little bit. What kind of a relationship did DOE have with EPA regarding cleanups? And did it change under your watch?

Grumbly: Well, I think... First of all, when you asked about DOE's relationships with the EPA, I think—again you have to remember that the Federal Government is broken into regions, that and that the Department of Energy is managed at the site level in many respects—so not only did you have national issues involved, but local relationships were and are very much involved in cleanups, so there is no one Department of Energy, nor one EPA, and unless you realize that you are going to have a hard day every day. So I think that when I came into



office in 1993, relationships were pretty raw in many respects between the Energy Department and the EPA.

Just to put a little bit of background into this, it wasn't really until 1986 that the Federal Government and its many agencies other than the Environmental Protection Agency considered themselves even liable for any cleanups under the law. And there's a famous RCRA decision whose name eludes me at the moment that basically laid out the tenets that federal agencies could be considered responsible parties the same way that other responsible parties in the industrial sector could be, and, further, the Federal Facilities Cleanup Act in 1992 reinforced that. So initially, I think, relationships were pretty adversarial on both sides. DOE was definitely a technical agency; [it] tended to approach these things from the perspective that, you know, "You guys in the EPA don't know anything about nuclear matters. If we're going to listen to anybody here, we are going to listen to the Nuclear Regulatory Commission, because at least they have people who went to the same nuclear engineering programs that we did." I think the people on the EPA who tended to come out of a totally different tradition of environmental protection just thought the guys in Energy breathed some gas other than oxygen. You know, you compound that with the fact that a lot of the people in the Department of Energy who were involved in this had been involved in making hydrogen bombs, and you take a look at how that stacks up with what the prevailing environmental theology was of the 1980s, and you can probably guess what the quality of personal relationships were between folks in the Energy Department and people in the EPA. They were pretty adversarial.

I think that 12 years later they are still not great—that the cultural differences between folks is still pretty broad—but there have been some really notable successes in which the EPA and state environmental agencies have worked closely with DOE in getting things to work all around the United States. Whether it's at Savannah River, SC, or Hanford, WA, or the case we talked about earlier at Fernald or perhaps, most notably, Rocky Flats in Denver, there have been a number of success stories in which people have been able to work together. Carol Browner and I knew each other prior to our taking our respective roles. Carol was a cabinet member, me as a subcabinet member, and that helped some. I think, you know, we tended to trust each other a little bit more, and to not necessarily believe that either one of us was trying to make the other look bad. You know, I think you can't discount those kinds of relationships, but you can't make too much of them either. So...but it's still tough. It's still tough. The people at Energy are dealing with limited sums of money; the people at EPA feel like they have their job to do, and so I'm sure there is still a clash of wills from time to time.

EPA Interviewer: Any particular advice that you would offer either side to keep things smooth down the road?

Grumbly: Keep talking. I would say whenever in doubt, sit down and have a meeting. Talk it out. Don't assume that each side has a monopoly on wisdom. These are simple rules that many of us don't engage in. We assume too much about what people that we regard as adversaries are thinking, and as a result we fail to find the places of common ground that exist. I think that right now there's a huge problem still in the Federal Government about what to do about Yucca Mountain. The "preferred by the Energy Department" disposal site for most of the nation's nuclear waste and without which, frankly, there really is no serious

future for the nuclear power industry in the United States and, you know, the two agencies of the government—EPA and Energy—are still having a very difficult time trying to figure out what's the right residual standard for radioactivity at the site. I think it is more of an epistemological issue than a scientific issue at this point, but you know, they'd better keep talking with each other, or the problem will not get solved.

EPA Interviewer: Is there still a role for organizations like Clean Sites to help the process between government agencies and/or the private sector?

Grumbly: Well, Clean Sites folded its tent, I believe in 1997 or 1998, when it made a determination that there really was not a clear role for it in the process anymore. I think that the people who were running Clean Sites made the right decision, that folks on various sides of the equation had learned a lot of lessons from it and from other people and used up most of the space in the room. I think there is always room for mediation in our society, as long as the incentives for getting to a successful outcome are there, which is to say it isn't enough to get people to go to meetings with each other. There have to be the appropriate mix of deadlines, penalties, rewards, incentives for people to come to some kind of conclusion, and yeah, I think there probably is still a serious role for that in our society. I think that a lot of people in the legal profession are ambivalent about it still. On the one hand, there's the prospect that it cuts into their profits, because it's definitely more expensive to fight than it is to settle, but at the same time most of them have mediation practices to try to capitalize on whatever mediation capability is there. Yeah, I think there's always room for lowered voices.

EPA Interviewer: Well put. Moving on to other later years in DOE, that was around the time that reauthorization debates were taking place in Congress, and I recall that you did give testimony before Congress talking about remedy selection, risk assessment issues. What was DOE's perspective, or were you representing your perspective, or was that the Department's perspective when you gave testimony?

Grumbly: Well, first of all, when you testify on behalf of a government agency, when you're at a Congressional hearing and you put up your right hand, and you're there as a representative of the taxpayer, you don't have a personal opinion anymore. Your opinion is the opinion of the institution that you're representing, and hopefully, the opinions of the Administration that you represent. I think pretty much everybody knows that the Clinton Administration didn't always row in the same direction on all these issues, and we definitely had some interesting discussions with the Office of Management and Budget about what we were going to be permitted to say at hearings and what not. As I recall, we were pretty forthright about the need for some changes in the remedy selection process. Those ideas were not always agreed to wholeheartedly by our colleagues from the EPA, but I think it's to the Administration's credit that we were able to express them most of the time and continue to do our jobs, although I have to say I got yelled at quite a bit by Lois Schiffer, who was Assistant Attorney General in the Justice Department for even, I think, in a rather mild way sometimes suggesting that the amount of money that it was going to take to clean up the Energy Department's sites was not in view, and that something had to be done here. You know, there were clearly people, principled people, who believed that the issue of how much money it cost to clean up sites frankly shouldn't be part of the conversation.

But that just wasn't a responsible position from a government agency that gets

appropriated funds. So I think we still struggle with that; the issue of how much is it going to cost to clean things up is an issue that's in environmental protection generally [and] that some people don't want to talk about. It offends the purists who think everything ought to be done on health and environmental standards. I understand that, but the practical issues of how much money you have in your wallet or are likely to have in your wallet has to be brought into play, because the worst thing you can do is to promise things that you can't deliver from the government's perspective. You cannot go to the citizens of the State of Washington and tell them that every last molecule of waste is going to be removed from the Hanford site, when you know in your heart that it can't be with the amounts of money that are going to be on the table. It's much better to be up front about what you can accomplish and then have a debate about whether that's enough, than it is to promise people willy-nilly and just kick the can down the road for the next people who are going to be responsible. So those tensions, I think, existed during the late '90s and probably still exist now. And they will in the future. They're in the greenhouse debate right now.

EPA Interviewer: What were your overall perceptions of how the reauthorization experience played out both in terms of your agency's interaction with Congress, Congress' point of view overall, and perhaps how the public responded...?

Grumbly: Well, of course, the reauthorization process went in two phases. There was the phase when the Democrats controlled the Congress, and then there was the phase when the Republicans controlled the Congress, and those were two pretty radically different experiences. I think that ultimately the Democrats won the political side, and the Republicans won the cleanup side in the following sense. I think that the Clinton Administration successfully persuaded good parts of the public that the newly installed Republican Congress was willing and able to rape the environmental laws of the country, including the Superfund law, and that Carol won the rhetorical debate about that and frankly made them pay in the 1996 and 1998 elections. The environment—it's hard to remember now post 9/11 how much traction these issues still had in the mid-'90s. I think they actually had a fair amount of political traction in both 1996 and 1998 about this. I think that what happened though is that the Administration realized that time was not on their side, and particularly I think subsequent to the 1996 election when the President was reelected, but the Congress stayed Republican.

The perception was that we better do some things to take the steam out of this reauthorization process, or we could end up without a law here, so I think that what happened is that—at least my perception of what happened—is that the Agency moved pretty vigorously administratively to deal with a lot of the problems that industry companies, lawyers, even agencies like ours were moaning and groaning about. And, that the outcome was, as I recall, was basically a law that has not been changed all that much over all that time, but a set of regulations in the National Contingency Plan, which I think is still the formal guidance that the Agency puts out. That's changed quite a bit. And also plenty of informal practices relating to settlement of cases, and the kinds of remedies that are much more flexible than they were in the mid-'90s. So, you know, each side got something from the debate. The Democrats got points; the Republicans got some action at that point—that's my perception.

EPA Interviewer: Do you think they would agree with you?

Grumbly: Probably not. I'm sure Mrs. Browner is still very much a political player, and—but I have to say, I don't believe that she has very good insight into what the career guys in the Agency did during the '90s and what they do now. I think there wasn't terrific communication between them, so I'm sure Carol thinks that she stood up for what was—for strong environmental protection, and I'm not saying she didn't. I'm just saying that the practicalities of the equation required the career guys in the Agency and maybe her to make some choices that enabled them to survive and continue to fight another day and to make progress, and actually as a result I think that the program at least from the years 1997 through, maybe, 2002, worked pretty well. It had a five-year run where got a lot of stuff done. That's my perception.

EPA Interviewer: You mentioned OMB as one of your interesting colleagues I guess in the Administration. It's fun to note that that's where you had one of your first starts in the Agency.

Grumbly: Yes, right. Gosh, you really did do some research on me, didn't you?

EPA Interviewer: What was it like dealing with OMB then? What kind of a role should OMB have in all of this, and how do you see the role of OMB today?

Grumbly: Well, OMB is a radically different place from the place that I started in, in 1975. It's—aside from racking up budget numbers—historically the Office of Management and Budget, and prior to that the Bureau of the Budget, was really kind of the neutral arbiter of lots of decisions in the Federal Government and was the place where agencies were supposed to go when they couldn't agree with each other, so the OMB for many years had the reputation of being a place that solved problems. Subsequent to the passage of the Paperwork Reduction Act in 1980 and the introduction of the Office of Information and Regulatory Affairs, in I think 1984 or 1985—could have my dates wrong about that—but along about that time some people would argue that the Agency became much more politicized and antiregulatory, Overtly antiregulatory in its positions. And as a result it no longer has a reputation for being a neutral institution. That's a shame, because there—the only, I would say, semi-neutral institution in town now is the Congressional Budget Office. It's pretty much the only place where you can go and actually get an unpoliticized answer that is somewhat knowledgeable about things. But the reality is that OMB is antiregulatory at this point.

I think during the Clinton Administration there was a countervailing effect inside the Executive Office of the President with both the Council of Environmental Quality and just the nature of the Clinton appointees in the Office of Management and Budget who were somewhat less rigid in their views about regulation than folks in the Republican Administrations tend to be, and also the Vice President was clearly a guiding force and clearly a force for the environment. So it was more possible to get a nuanced view of things in the OMB during those years. Frankly, I don't think OMB was all that helpful to really anybody during the Clinton years in the sense that it was a place where you had to go, but it would never really have the capability to sort of put its fist down and say, "We're going to do it this way, or we're going to do it that way." There were always other places to appeal to if you didn't like the decisions that came down, and so I am sure that there were decisions on testimony, decisions on budgets, decisions on reauthorization that neither EPA, nor Energy, nor anybody else in the government really loved, because you could never get a decision that

would stick. Things used to have to go all the way up to the President or to the Vice President before you got a decision and, you know, it's kind of embarrassing, actually, to have governmental decisions have to go that high. So, things took a lot longer than they should have. It wasn't a great experience and in contrast to when I worked there when, I tell you, when the OMB director said, "X" ,"X" got done, but those days are gone, and they are probably not coming back.

EPA Interviewer: Speaking of the Vice President, what was your opinion then and now of the Government Performance and Results Act?

Grumbly: I think all the various attempts to improve the management of government, starting as far back as the Quality of Life review in the Nixon Administration going to Management by Objectives, to Zero-based Budgeting, to Government Performance and Results, to the President's Management Agenda will never be successful unless they are actually tied to the appropriation of money. Now this is speaking as an old budget examiner from the OMB, but I think that the consistent problems that all of these things have is that agencies look at them and then look at the Appropriations Committees and hear, "Is the Appropriations Committee taking this seriously?" And if the answer is "No," they'll go through the motions. If the answer is "Yes," it'll get taken seriously, and I have not yet, including the current President's management objectives and the Government Performance and Results Act, seen the Appropriations Committees take any of this with the level of seriousness that would be required in order to imbed it into the Federal Government. That's not saying that they haven't done some good things. I think there has been an increasing trend towards trying to be more results-oriented and less process-oriented. That's all for the good, but until and unless the Appropriations Committees of the Congress take all of these things seriously, they will never have a major impact on how the United States Government is run.

EPA Interviewer: Thanks. I think I've veered away a little bit from Superfund.

Grumbly: But no, well, I think to the extent that Superfund develops some performance measurements, that was all to the good, but again, I don't think it had much to do with how much money it got in the later years.

EPA Interviewer: I'd like to kind of go back to your more personal experiences—recollections that you might have that you would like to share. What was the high point of your involvement in the Superfund Program?

Grumbly: The high point?

EPA Interviewer: I know there are many.

Grumbly: I think in many ways the high point of my involvement was the reaction that the Agency had to the recommendations that we made on remedy selection, when I was at Clean Sites. I was so impressed by the thoughtfulness with which the government looked at what we did. You know, you never... When you're not in the government, you don't expect the people in the government to just adopt what you say lock, stock, and barrel. You work really hard to try to—if you're serious people—to do work that is both going to be appealing and practical and stretches the envelope and recognize that, you know, folks who were in the

government have a different set of constraints than you do. And there's no question that we were helped in this matter, because Bill Reilly was Administrator of the EPA by this time and had been one of the people who had been instrumental in helping to found Clean Sites, and his predecessor, Lee Thomas, also had a high opinion of what we could do. So regardless of whether folks in the Agency wanted to take what we had to say seriously, they at least had to read the report, because somebody from then the 12<sup>th</sup> floor in those days was going to be asking them what they thought. But all that cynicism aside, I think that was really my high point, and the high point was to see those—it wasn't a high point, it was kind of a plateau, a high plateau—to see those changes in many ways seep into the program over time and to feel at least a little bit like the intellectual progenitor of much of what the Agency did in the brownfields area, so that was a real high point.

The second high point actually occurred just about four weeks ago, in a totally different way, which was when Rocky Flats was declared cleaned up. And anybody who knows anything about hazardous waste knew that Rocky Flats along with the Rocky Mountain Arsenal in those days were two of the worst places in the country. At Rocky Flats you could die without knowing it literally, by being exposed to radiation, and to see a lot of the work that I had a hand in starting, whether it was the agreement that we got with the EPA, in Colorado when I was there, and with the State of Colorado, and the contracts that were put into place and the different incentives that were in them. To see that actually work, to see something actually finished, a place that was the crappiest place one can imagine and now is basically—it looks, it's not, but it looks—pristine; it was a real high. So those were the two high points I would say.

EPA Interviewer: That's great. On the flip side, what was one of the lowest points?

Grumbly: One low but comical point, again, when I was in the government, is as part of the cleanup at Fernald. We were scheduled to knock down a major building that had been put up during the 1940s, and literally implode it. And, of course, the implosion experts who implode all the stadiums around the country were brought in and then characteristically, by the DOE, but also by the some of the other folks who were involved, they were not given their way, and they were told not to put in the amount of explosives that was recommended. And so when I pushed the button in front of every politician in the State of Ohio, instead of an implosion we got the leaning tower of Fernald. That was a pretty low point, and I made CNN that night.

EPA Interviewer: You much would have preferred to have been at Rocky Flats four weeks ago than for that one?

Grumbly: Yeah, yeah. So that was a pretty low point. Clean Sites and with the Agency...actually, it was almost always progress. There were some days when you felt like you were slamming your head against the wall with people. I guess the lowest point might have been when I had to stand up in a public meeting in Atlanta, and Carol Browner was there, too. And you know, we were trying to explain how all this worked, and a few people called us murderers, and you just basically wanted to—it was very bad to have people slur you like that when in your heart you knew you were doing absolutely everything you possibly could do to try to muster the resources and the creativity to get some of these places done. So that was pretty hurtful, but, you know, that's life!

EPA Interviewer: If there is anything you could have changed about the program back when you were involved in it, what would it have been?

Grumbly: I would have enabled the government—on a technical basis—I would have enabled the government to use mixed funding a lot more quickly and a lot more—just a lot more than it did, because my feeling then, and now, is that we would have made a lot more progress more quickly if we could have gotten on with the cleanup of a lot of these places and engaged in a lot less brickbat throwing. And you know, I understood all the philosophical and maybe even legal issues that were there, but from the perspective of somebody who is trained as an economist, that would have really helped to move things forward more rapidly, so that's one thing. And I still think that on balance the doctrine of joint and several liability had more problems than it did upside, and the reason simply is that it stood in the way—I was just in too many corporate board rooms and saw too many angry chief executives say, "I'm not paying that without a fight. It's not fair. It's not American." And again, so I think here we are in 2005; we made a lot of progress. There are still a few big projects left to do, but I think you probably could have sped this process up by several years. I don't know by how many. If we had at least something initially that looked more like proportional funding than joint and several. So those are two things I would probably change.

EPA Interviewer: It sounds like you thought the administrative reforms of the 1990's were successful and that would include some of the liability relief that was provided, as well as the legislative fixes for liability.

Grumbly: Yeah, I do, I do. I think that —I'm sure—I'm not as close to it as you are, at this point, and I'm sure there are problems, because there are problems with everything in this society, but my sense is that a lot of people—a lot of things went in the right direction after those reforms.

EPA Interviewer: You've already—we've talked quite a bit about technology innovation already, but I wanted to know, is there anything in particular that you think the Superfund program is responsible for with respect to innovations? Environmental consulting, legal program management, technical?

Grumbly: Well, we clearly funded a whole generation of law firms. I think some of the stripping technologies that came online wouldn't have come online without the Superfund program. In terms of stripping out contaminants, I can't really say that I think that the Superfund program ended up being the engine for innovative change that a lot of people hoped that it would be.

EPA Interviewer: I would also like to know with respect to the dual funding scheme of the Superfund law, private versus federal, do you think that that was a good concept, and has it worked well?

Grumbly: Well, I think the dual funding scheme is exactly the way we should have gone. Now, you know, whether the exact mechanisms that the Congress chose were the best, you know, people could argue about, but I definitely think that the public would have, and should have, totally resisted a notion of having a totally publicly funded cleanup, when there were clearly responsible parties available and solvent to do cleanups. Even though I was not in

favor—and I think this interview has probably exhibited that—I was never really in favor of kind of a law enforcement mentality, turning these people into white collar criminals. I do think that as a matter of economic principle that folks who impose damages ought to pay to deal with the problem to the extent that you can find them and to the extent that it's possible to get them involved. I think that having some amount of public money to either make up those places where you can't find responsible parties or, in cases, to move things ahead, where there are actual health risks, is the only responsible way to go. A public health... If a public health risk exists, in some areas, or substantial environmental risk, say to the ground water of a community, exists, and you can't afford to spend the time just getting the money from the responsible parties. So, yeah, I do think a dual funding scheme was necessary. I think that one can argue about the proportions, the circumstances, what all that should be done. I think people sometimes got into how many angels were on the head of a pin, in terms of what the principles ought to be, when one should use one form of funding versus another. I tend to be a much more practical person, and so what's it going to take to get the problem cleaned up right now. I think a dual funding scheme was important. I still think it's important. I don't know how the government's going to deal some of the very large sites that it has at the moment, without coming back and readdressing that public-private mix issue again. You know, that'll probably have to wait for 2009 to deal with.

EPA Interviewer: We've only touched briefly on states. Did you want to make any comments about their role?

Grumbly: Well, in the, certainly in the nuclear waste area, it is an illusion to think that the federal cleanup program is a federal program. The states control it. You can't get anything done without the cooperation of the states, and the people who run the nuclear waste cleanup for the United States Government kid themselves if they think that they get to make all the decisions themselves. The Governors can be your worst friends or your best enemies in at least that part of the game. I think with respect to the regular Superfund program, I think there are an increasing number of states that have competent Environmental Protection Agencies, and in very case where you have an agency that seems to have the kind of technical competence to be a partner at the table, it's very unwise for the EPA to simply override their authority, even if they have the authority, and by the way, it's going to become increasingly unclear as the nature of the Supreme Court changes about how much power the United States Environmental Protection Agency is going to have vis-a-vis State Environmental Protection Agencies, so if I'm Administrator of the EPA, right now I'm going out of my way to create strong relationships with the states. That was not always done in Superfund, and I think the program in general was worse off for not having strong relationships with the states. Is it infuriating to have a state agency try to overturn a federal decision after you've gone through all kinds of things? Yes! It's absolutely infuriating. And I know that our colleagues in the EPA didn't like that, but this is basically a government of mixed powers, and I think the more you try to ignore the states, the worse off you are.

EPA Interviewer: What do you think is the biggest challenge that the Superfund program has faced in the last 25 years?

Grumbly: I think, in the past, the biggest challenge it faced was defining success and mustering the resources to actually get a lot of sites into the cleanup phase. And it sputtered for many years until it could do that, but it did overcome that, by overcoming, the inherent,



sort of “process mentality” that many people bring to these kinds of problems, and finally getting the push that it needed to get into the results arena. But I think that was a huge challenge for the Agency, and getting the kind of credibility with the public that it was actually acting in the public’s interest, and I believe it achieved those two things at precisely the rate that it demonstrated to people that it was getting things done. And I think it has much better credibility now than it did. I think in the future its greatest challenge is, first of all, coming back onto the national agenda as a serious problem for those few sites that require multi-hundreds of millions of dollars each, in order to get them to some state of stability. I’m thinking of the big mining sites in the west, and I’m sure there are others—I’m not as familiar with them—I think sort of regaining the momentum is a huge challenge that the government’s environmental programs—all of them—let alone the Superfund program—it’s a huge challenge that the government faces and the EPA faces at this point.

EPA Interviewer: You’ve mentioned a number of times these large remaining sites—small number. Do you see a time when there really won’t be any Superfund sites left—that there won’t be a need for this program? And how far off into the future do you think that is?

Grumbly: Well, when the program started, I would have predicted that we would be at that point right now—that 25 years, a generation—this would be a generational program and that we would be finished with it right now. I’ll go out of the limb and say that it will take one more generation for this program to completely fulfill its mandate of dealing with the past. And actually I don’t think that should be surprising—it took us a half a century to get into the problem. There’s no reason to think it wouldn’t take us half a century to get out of it.

EPA Interviewer: Do you think that Superfund has had an impact on preventing future hazardous waste problems?

Grumbly: Oh, I think it’s had a tremendous impact on how corporate America looks at its responsibilities. In fact, I think—and since I work for a major American corporation, you can discount this if you wish, at the moment—in many ways corporate America is ahead of the government now in terms of thinking about its environmental and, in fact, other kinds of problems—social, what I’ve said, the “softer problems” that are involved in America at the moment, but I know for sure that corporate executives—this generation of corporate executives—is much more attuned to the environment, and that is primarily due to Superfund than it was. So to that extent the program has made a huge difference in the board room of corporations in this country.

EPA Interviewer: Is there anything else that you would like to talk about with us?

Grumbly: I think you’ve...cleaned me out.

EPA Interviewer: Well, thank you very much. It has been a real pleasure to listen to you.

Grumbly: Well, thanks for giving me the opportunity.