

NOTICE

This transcript contains a Living History Interview conducted and prepared as part of the Fernald Living History Project. The narrations, descriptions, perceptions, opinions and beliefs expressed in this interview are solely those of the interviewee(s) and are not to be attributed directly or indirectly, to the United States Government, to the U.S. Department of Energy, to Fluor Daniel, Inc., to any Fluor Daniel Fernald teaming partner company, to any of their officers or employees, to the Fernald Living History Project or to anyone associated with the Fernald Living History Project.

FERNALD LIVING HISTORY PROJECT
Transcript

Name: Graham Mitchell

Date Interviewed: 09/09/1999 Date Transcribed: 01/10/2000 Tape: 87

Project Number 20012

Tape FLHP0201

09:01:1

A:
All right.

Q:
Okay, first of all, if you could just give us your name, and spell it.

A:
Uh, Graham Mitchell. G-R-A-H-A-M M-I-T-C-H-E-L-L.

Q:
And what is your official title?

09:01:13
A:
I'm currently the Chief of the Office of Federal Facilities Oversight for Ohio EPA.

Q:
Great.

(Cameraman: Let's turn off one more light)

Q:
Good call. (Cameraman: We're rolling.) Alrighty. So if you could give us a little bit of background, um, where you grew up, where you went to school, those kinds of things, how you got into your line of work.

09:01:32
A:
Uh, pretty much grew up in southwestern Ohio. Uh, what, graduated uh, from high school in Middletown, uh, but actually grew up more on the west side of Cincinnati. I went to uh, Miami University, I got a Bachelor's Degree in um, in zoology in Miami University. And I went on right after that got a Master's Degree in Environmental Science. Um, and then went to work for Ohio EPA in 1977.

09:01:58
Q:
Great. And um, when do you remember um, first hearing about Fernald?

FERNALD LIVING HISTORY PROJECT
Transcript

A:

I first heard about Fernald in the early 1980s. We, I was among a group of people who, we were planning a survey of the Great Miami River. And uh, we went to the site. We, we came, and we came to Fernald because we wanted to um, although we regulated them on the, on the NPDES permit issues, we wanted to sample their effluent over a 24-hour period, over, over several days.

09:02:28

A:

When we were gonna do the survey, it would have been in 1980. And so I first came to the site, and I actually got a tour of the site around, at that time, and that was my first contact.

09:02:38

Q:

Did you know what they were doing at the site?

A:

We knew it was a, a uranium facility. Uh, we knew, I think we knew that it was somehow connected with a defense mission. But I think that was about it. I mean they were, they were open in telling us what they did, but without specifics.

09:02:57

Q:

And give us your impression of the tour, of the site. What did you think of the plant?

A:

Well, it seemed uh, it seemed old. It seemed uh, you know, it was like a science fiction movie. You know, a 1950s science fiction movie. You know, all the gray, the uh, transite buildings. Uh, and all the, all the stuff stored around the facility. You know, old T-hoppers and drums, and there was just lots of, lots of uh, debris and things like that all over the place.

09:03:28

Q:

So as an environmental person, how did you act, I mean how did you react to seeing that amount of debris around site?

A:

I think I remember thinking that we might be back here sometime. Because we were really there just for sort of informational, and they were cooperating on their survey. I remember thinking that we might be back there sometime.

09:03:48

Q:

Was it hard to get the Department of Energy to cooperate with you at that point in time?

A:

Well, not at that point because we were just, you know, they, they were, they were being regulated by us on the NPDES permit which is a permit to discharge to the Great Miami River. Uh, for more

FERNALD LIVING HISTORY PROJECT
Transcript

traditional, pradtional, traditional pollutants, not the uranium. So they had to be, they were cooperative there because they were being regulated by us. It was later on with other issues that we had, had more of a dispute.

09:04:21

Q:

Now since this was a, the Federal government was running the site with radioactive materials, how did that um, sort of I guess exclude certain, um, what 'm I trying to say, legislation for handling wastes at the time?

A:

Yeah, and to get back into 1990, 1984 when our office was implementing RCRA, which was the hazardous waste laws. And uh, actually they became effective in 1980, so really it was four years later that we started visiting the site. So in March of 1980, uh, not myself, but inspectors from our office came out to Fernald.

09:05:03

A:

And Fernald was very cooperative as far as you know, "Yes, you can have a tour of the facility. We'll show you around. We'll show you what we do." But they also then added that, "But we don't believe that you have any jurisdiction over us because all of our hazardous waste has radioactive materials in them, and we're exempt from those laws under the Atomic Energy Act."

09:05:21

A:

So the Atomic Energy Act was a very, and we disagreed. And so actually, some legal efforts right after that started, after they made those statements.

Q:

Are you pretty familiar with the Atomic Energy Act?

A:

Uh, somewhat.

09:05:36

Q:

Can you sort of address a little bit about what some of the legislation in that is? And, and I know it's a very powerful piece of legislation, if you could just explain that a little bit.

A:

Well, I think the you know, as an overview, the Atomic Energy Act was set up as both a regulatory structure around, for the federal government to sort of regulate itself, and how they were gonna deal with, with uh, with the radioactive materials. They didn't, you know, early on, they made the decision was made that they didn't want an outside uh, regulator. And so um, they set up the Atomic Energy Act.

FERNALD LIVING HISTORY PROJECT
Transcript

09:06:07

A:

So you know, it both, it both makes, you know, it was supposed to make it safe, because they wanted to make sure that uh, at the time they were being safe with their materials. And also promote the use of nuclear power as well. Which gets into what later you know, was the big complaint about the uh, Atomic Energy Commission was it was both a regulator and a promoter, and that led to the split to uh, the NRC in the '70s.

09:06:36

Q:

Nuclear Regulatory Commission. (Can we stop rolling for just a second? I got a question for ya.)

09:06:46

Q:

Okay. Um, So in about 1984, a lot of stuff happened for Fernald.

A:

Right.

Q:

And uh, the dust collector releases and those types of things. What was your reaction, um, sort of on an official capacity, uh, to all the press?

A:

(Coughs)

Q:

That was happening at that point?

A:

Can we stop for a second (begins to cough)?

Q:

Oh, sure. No problem.

(Tape stops and starts)

09:07:11

Q:

Okay, so the 1984 reaction.

A:

Yeah. Um, that's when I started, at the end of '84, that's when I started to get involved. And I really didn't know too much about the air releases at that point. I remember seeing some press, uh, but it was at the end of '84 when I started to get involved at Fernald officially with Ohio EPA. And I was asked to put together a file briefing, a file search of, of several industries, including, including the Fernald site about groundwater problems in the area.

FERNALD LIVING HISTORY PROJECT
Transcript

09:07:39

A:

So I did that, and that started, that started me on my official involvement at Fernald, which eventually pretty much took over my career, and changed my career.

09:07:49

Q:

What were those initial findings?

A:

The initial findings were that uh, there was groundwater contamination of uranium, uh, with you know, from Fernald, moving towards, in a southerly direction from the plant. Uh, and that's where the house where Lisa Crawford lived, you know, was renting, and several other uh, properties were also contaminated, the groundwater was contaminated, with uranium. We also found at that time that there was additional contamination from other industries in the area as well.

09:08:25

Q:

So to what level was the contamination? I mean, was it a really high level of contamination?

A:

Well, it was significantly above background, and I mean, background, there's always some uranium. Uranium's a naturally occurring material, so there's some pretty much everywhere. But then, depending on the, on the location, there were pretty high levels. You know, above, well above the, what was then the EPA uh, proposed drinking water standard.

09:08:56

Q:

And that's throughout the aquifer, under the plant?

A:

It sort o' moves, in different, there's different, the aquifer is somewhat complex in that there's different layers, and so it's not, as it's not deep. For instance, the production wells at the site, I don't believe have ever been contaminated. But it was more of a surface aquifer, and especially as you move south across the property.

09:09:17

A:

Because so much of the surface runoff the property was drained south, into Paddy's Run, and from there into the groundwater. Paddy's Run was a major avenue for the groundwater to get into the aquifer.

09:09:30

Q:

And how about air pollution? Uh, that was a big issue in the '80, '84 because of the dust collector releases, and uh, how did the EPA address that then?

FERNALD LIVING HISTORY PROJECT
Transcript

A:

Right. Well, we were very concerned about that. We were very concerned about just the historical air releases. What kind of uh, what kind of volume had been released. What kind of health, health impacts it might have had. And also what kind of environmental impacts.

09:09:52

A:

Because it was clear, it became clear soon after that, that a lot of the uranium that went up the stacks, came right down on the site or near the site. And then was part of the runoff, and became part of the, became part of the surface and groundwater problems.

09:10:10

Q:

So it would land on the surface. And there was a lot of people say that uranium was too heavy to go very far. So how was it really spread? Was it spread through the air, or was it spread?

A:

Well, I think it was, it was both. I mean, because you look at the, you look at the data from around the site, and cl-, clearly, there is air deposition on the site and off the site. But a lot of it, you know, if you also look at the stacks on the plants, most of 'em have a rain cap on top o' them, and they're not real high.

09:10:39

A:

And so that meant most of the stuff went up and hit a rain cap, you know, and then sort of, you know. It couldn't go, not that it didn't go straight up but a lot of it, you know, stayed at a low level and being heavy a lot of it fell back down. Ah, but again a lot of it, some of it did get off site as well. But then it got down to the property and then it would wash off into the streams and into the groundwater. So the air problem became a surface, a surface and ground problem too.

09:11:06

Q:

Tell me a little bit about the sampling process. How did you find out all that _____ and those types of things?

A:

There were a number of studies going on and the US Geological Survey was doing a study around that time and that's one of the things that we had heard about. They were doing that study for the Department of Energy ah, and then there was sampling that we did. We sampled ah, Ohio EPA sampled a bunch of wells ah, about 15 wells in the area. Both public water supplies and private wells in the area.

09:11:32

A:

We did that in January of 1995, yeah 1985, ah, and then that sort of lead to further dis-, you know, a lot more further sampling, eventually getting into the actual studies ah, of the site.

FERNALD LIVING HISTORY PROJECT
Transcript

Q:
And in 1985 you sampled Lisa Crawford's well.

09:11:51

A:
Lisa Crawford and other people's well and there was media coverage that day on that.

Q:
And what did you find?

A:
We found, you know, just what we said before. Her well was contaminated, the Delta Steel well and ah, the Albright Steel well um, I think those were the three that were contaminated at that point with uranium. And then there were some other wells that I mentioned earlier that were also contaminated with other industrial contaminants from other sources.

Q:
Was formaldehyde one of those?

09:12:19

A:
I don't believe so.

Q:
I, I, I.

A:
There were some volatile organics ah, that were part of that yes. But not formaldehyde I don't think.

09:12:32

Q:
Um, how much is there to worry about, a contaminated well?

A:
(Clears throat)

Q:
Why is that a problem?

09:12:43

A:
Well it's mainly because of the uranium in it. It's mainly because uranium is an alpha particle emitter, that's the type of radiation that it emits. And you know, here in this room an alpha particle isn't that dangerous because your skin or your ah, your clothes pretty much stop that. But if you get that inside your body either through inhalation or ingesting and it gets, it can get into the soft tissues of your body and actually do quite a bit of damage. And so anything that gets, anything that gets uranium inside your body, you know, can be a risk.

FERNALD LIVING HISTORY PROJECT
Transcript

09:13:18

Q:

So drinking water.

A:

Right, so drinking water is a, you know, could be a problem.

09:13:24

Q:

And what kind of health effects generally can come from uranium contaminated water?

A:

You're getting a little bit out of my area of expertise, because you're really getting into medical impacts and stuff like that. But, I mean, what I've heard is ah, you know, there are cancers ah, there is, there's actually a toxicity associated with the uranium metal, not just the radiological components of uranium, that, that affects the kidneys.

Q:

Wow, so um, what was your impression, you mention that there were a lot media coverage going on while you were testing the well. Can you sort of tell us of that day. Were there people standing around with cameras?

09:14:04

A:

Well, we had, they knew we were going to be out there. And so, we um, they had asked if they could meet us at a place. And we ah, I think we met at the Crosby School; wanted to meet at a public place not at someone's house. So we met there and they ah, they watch-, they filmed us ah, sampling and then ah, interviewed us.

09:14:22

A:

There were two people there interviewing two, or, two people sampling – somebody else was with me and then ah, we ah we were interviewed.

Q:

Was that national or local media?

A:

It was local.

Q:

Was it?

FERNALD LIVING HISTORY PROJECT
Transcript

09:14:35

A:

Yeah, but that wasn't, that was sort of the time that you mentioned where the media was starting to become very interested. It followed the air release, you know, and people were concerned about the groundwater. That was the next thing that was coming out about Fernald.

09:14:48

Q:

What was that like to be sort of caught in the media coverage of all that, just by doing your job?

A:

Well it was sort of interesting 'cause it was like, I think, it wasn't the first time I'd been on camera interviews or interviews with the press, but it was, it certainly quickly became the most experience I had. So it was ah, it was very, it was interesting but it also took up a lot of time. It ah, you know, we had to think carefully about what you were going to say.

09:15:19

Q:

So then how did the EPA become more involved as time went on?

A:

EPA became more involved going back to when we ah, we did the RCRA inspection. That lead to more concerns about ah, the hazardous waste componen-, how hazardous waste was being managed. Ah, and the fact that they were saying that we couldn't legally enforce anything. That was a major issue.

09:15:45

A:

Ah, a legal case, you know, a legal suit started to be put together ah, we added surface water concerns ah, how the, how Fernald was treating its wastewater to that. And that was filed, I'm not sure exactly when, when you sue the Federal government you've got to indicate an intent to sue and so there's a process that starts there. You issue that, that strikes me like that was 1986.

09:16:10

A:

And ah, we would begin negotiating with the, with DOE to try to get some things, you know, get some improvements going on, and actually that's around the time period that the, the ah, the basins were, were ah, planned and eventually constructed. Because it was found that a lot of the surface water that was running off the site was getting into the groundwater.

09:16:33

A:

And if we could contain that, that would a major ah, a major effort to keep groundwater from becoming more contaminated than it all ready had been. So the two basins that you see now when you come into the site ah, from the south; were those basins that were built like in '88, '89 time period. But they were designed and negotiated earlier than that.

FERNALD LIVING HISTORY PROJECT
Transcript

Q:

And how did the Department of Energy um, receive the EPA at first; their suggestions?

A:

Well I think, you know, they, as I mentioned before, we, we, you know, we were cooperating on some of those things. But when, you know, when it came down to do Ohio laws have jurisdiction over, you know, how they deal with nuclear materials. It was clear that it was DOE's national just Fernald's but DOE's national policy that ah, the states had no jurisdiction and so that lead to the lawsuit that we filed.

09:17:25

A:

And also, you know, not great relations at that time, although we did keep, you know, we did keep working together. I have to credit that to, I guess, some of the DOE attorneys as well as our Attorney General at that, the Attorney General and their staff at that time that allowed us to, a lot of times when you have a legal issue going on everything else stops and the only communication that goes on is through attorneys.

09:17:50

A:

But we really were able to make some progress at this site even while we were negotiating what, what eventually became a settlement which was in December of 1988. Of all the those issues.

Q:

And what exactly were the issues in the lawsuit, that were named in the lawsuit?

09:18:03

A:

Well there was the hazardous waste, so DOE ended up ah, you know, agreeing to pay a penalty for that ah, for their hazardous waste and then, then for surface water. For NPDES permit problems. They also agreed to um, to ah, pay the state for our costs for past oversight and also allow us to recover costs for the future oversight.

09:18:28

A:

Which is frankly still working, still running today. And also there was natural resource damage assessment issues which are still being discussed today. That were ah, set aside but now are being, are being renegotiated again now.

Q:

That's interesting. Now during all this, in the mid '80's um, you were approached with ah, by a reporter from the Netherlands. Can you tell me that story?

09:18:52

A:

Yeah, ah, it was during the early, probably ah, first half of 1984 when we, following when we did some of the sampling and there was quite a bit of media attention from that. There was a lot of media

FERNALD LIVING HISTORY PROJECT
Transcript

attention focusing on, you know, the fact that these were defense plants and that they were supposedly keeping the country safe.

09:19:14

A:

And yet, it appeared that they were also polluting the environment and so that was a good angle for the press to use and, you know, frankly it was an accurate perception as well. And other sites, this theme was being picked up on too. Other sites like ah, ah Hanford were also starting to be in the news and um, apparently some international press were following this too. And so I got a call from the Netherlands and she ah, wanted me to do an on-camera interview down by, we met down by Paddy's Run.

09:19:45

A:

Ah, right near the site. And we did, you know, went through the interview, and went through most of this of the standard questions and then at the end she asked me if it made me mad ah, about what I was seeing here. And that sort of took me, that sort of ah, caught me off guard and I ah, I think I answered.

A:

I started hamming and hawing and said yeah it did make me mad but ah, we were working it out and I look forward to, you know, solving the environmental problems and that kind of thing. But the question, you know, did this make me mad certainly made me realize that there were much more aspects of this kind of an effort.

09:20:20

A:

Not just a technical, the, the materials contaminated, the groundwater's contaminated, or the air's contaminated but also there were emotional issues and, and people issues associated with all these things.

Q:

So we've made a whole mess of things.

A:

Yes, exactly.

Q:

Okay, um, something that happened I think in the press too, at the very beginning, early on; that I'd like to sort of cover too, is it took a lot in the beginning to get the press interested in the story or reporting the story accurately. And in your estimation, why was that at the time?

09:21:07

A:

I don't know. That's a good question. I mean, I think that ah, I haven't thought about that in a while. Ah, I think the press was hesitant to deal with these sites and I think they had been sort of hands off for

FERNALD LIVING HISTORY PROJECT
Transcript

so long, I'm not sure that they really wanted to delve into that and maybe deal with the fact that they hadn't followed these. Or maybe for security reasons they probably couldn't get at these sites.

09:21:28

A:

Or were told to stay away from these sites and so there was, that's probably another whole aspect that was happening right in that 1985 time period was, you know, yeah you have to be secured but, you know, does that, does that result in a, in not being able to find out what's going on at these sites. You know, that may be hurting us or may be hurting the environment and our residents – state residents.

09:21:51

Q:

Good, yeah, I was kind of going for the state defense thing, so that's it exactly. Yeah, exactly. Um, so how has the Fernald plant affected your life and your family's life?

A:

Well like I said earlier, you know, it resulted in a major, major career change for me prior to 1985 I had been working ah, ah, as a surface water person ah, which means streams and rivers. I, I, I actually managed that program so I supervised other people who did that as well. But I spent a lot of time sampling streams and rivers and sewage treatment plants and industries and things like that. So it was, you know, coming up with NPDES permits limits and things like that.

09:22:39

A:

So, ah, but starting in 1985 my life certainly changed and I still did that, but slowly but surely between 1985 and 1988 that pretty much took over my job. So, by the end of 1988, Fernald was pretty much all I did and so, ah, it certainly changed my career life and you know, my family certainly knew the things I was working on. And ah, (clears throat) knew I worked a lot on atomic and family and friends knew I worked on these kinds of issues.

09:23:06

A:

So it's really the change a lot. And also I got more of a commitment, you know a personal commitment on getting these sites cleaned up as well as just doing my job.

09:23:18

Q:

And why do you feel that personal commitment to it?

A:

I guess because I've been involved with it so long but also I see this is something, you know a lot of environmental problems are, I mean this is a huge problem, and, and it's big. But it's not too big that you can't solve. You know a lot of, a lot of problems are, are nationwide problems and these like that.

FERNALD LIVING HISTORY PROJECT
Transcript

09:23:38

A:

And we do have these sites all over the country but here at Fernald I feel more confident about this now than maybe when we started. Was here's 1,050 acres that you know we can clean this up. You know it's gonna, it's fairly expensive but we can do this. And but I think in the long run it will be cost effective because we will solve, solve problems here.

09:23:58

A:

Where a lot of times you know environmental problems you don't really get your, you really can't solve 'em because they're just too big, but we can solve this one.

09:24:09

Q:

Tell me some of the biggest challenges that um await the cleanup here at Fernald.

A:

In the future? (Comment - yeah) Okay, um, the biggest challenges in the future are going to be you know continuing to handle and ship waste in a safe fashion. And because as we've seen recently with the white metal box incident things like that. You know it doesn't take much of an incident to, to you know bring shipping to a halt and so we're going to have to make sure that we handle all that material very carefully and safely.

09:24:42

A:

Worker safety issues are going to be critical you know. We're moving a lot of stuff around you know, got to make sure you know that regular type of construction site hazards don't cause problems. Um, of course the K-65 silos are always going to be continue to be a challenge as we deal with that because that's probably the most dangerous material that we have to deal with as far as the radiological hazard of just being near it.

09:25:07

A:

You know as we get workers close to that stuff and start taking material out of silos you know that's going to be, that's going to be a big challenge.

09:25:16

Q:

And how are those challenges different from the challenges in earlier years?

A:

I think now we're all focused, when I see we you know USEPA, Ohio EPA, DOE, their contractors and I think the residents of the stakeholders around the site are pretty much all focused on cleanup. Uh, we all you know we all may have different ideas along the way but you know in the early years we weren't necessarily aligned.

FERNALD LIVING HISTORY PROJECT
Transcript

09:25:40

A:

And we really didn't know where we were going all the time. We were trying to, trying to uncover what really had happened out here for a good part of the late '80's and early '90's. Trying to put together the puzzle of you know where was material buried and where did it go and where's the groundwater, where's the source of the groundwater contamination.

09:25:58

A:

You know all those things just sort of, you know the investigation part. And in that process people learned to work together. And when I say people, everybody, I'm talking DOE, I'm talking the contractors, I'm talking the regulators. You know not that anybody gave up their authority or anything like that but people learned you know how to get involved early in projects.

09:26:18

A:

Talk to the public early about issues and so you know the public doesn't find out something right at the end after the decision has already been made. You know right now and in recent years the public knows about things you know very quickly. You know if there's a problem out here the FRESH and other citizens know about it very quickly and that's, that's key to success.

09:26:40

A:

That's key to building trust in this type of a set-up. It's very important also if you're trying to do something a little bit different on the cleanup you've got some trust built up and so you can convince or talk or educate both us, the regulators and the public, and their stakeholders into trying something a little different.

09:27:02

Q:

You mentioned FRESH, um, tell us a little bit of um history as to your relationship with FRESH.

A:

Well I think FRESH has been a key stakeholder group and you know probably a clearly a leader in this area both locally and as well as nationally. Lisa Crawford and her group have you know lead, lead a lot of the public concern about this site. And also they've been involved in national issues which you know both they've educated people outside this area and also in other states.

09:27:38

A:

And they've also been educated by them as far as how other states feel about Fernald's material. Could you repeat the rest of the question again, I'm sorry.

Q:

Just really your relationship with FRESH.

FERNALD LIVING HISTORY PROJECT
Transcript

09:27:47

A:

Yeah, I mean we, as you mentioned early and I explained, we sampled Lisa Crawford's well. That was our first encounter with Lisa and I think the group, I'm not sure the group had formed yet when we did that but they formed soon after that they started to form. And we made it a point of going to a lot of their meetings and working closely with them and hearing their concerns.

09:28:08

A:

Making sure that where possible we could support each other. And I think, I think that's been a key aspect of, of building relationships where you know DOE had to do some of that too and it took them a while. We quickly realized that we had to have that kind of relationship. A lot of times, a lot of times DOE is the center in these kinds of relationships in which they deal with the regulators and then they would deal with the stakeholders.

09:28:33

A:

And I think we sort of closed off that piece of that triangle by dealing with the stakeholders and the FRESH group as well. And so we worked on our relationships with them and you know cooperatively working with them. Like I said where we were, we could supporting them.

09:28:49

Q:

We're going to take a little bit of a break and change tapes.

A:

Okay.

TAPE FLHP0202

10:01:05

Q:

Did you attend any of the public meetings early on?

A:

Yeah, probably all of them.

Q:

Do you remember the very first one?

A:

I don't know, what was the first one?

FERNALD LIVING HISTORY PROJECT
Transcript

10:01:13

Q:

Um, gosh it was shortly after some of the media attention happened and shortly after like I think the day that Lisa Crawford found that her well was contaminated. They had a big meeting and it was a public meeting and I think it was at Crosby Civic Center. (Comment – Okay) And there were quite a few people there but I know that the even subsequent meetings. Tell us a little bit about that public meeting process.

10:01:40

A:

Well I think the, it was clear that you know DOE didn't want to be investigated. It was clear that uh that they didn't like the outside scrutiny. And it was clear that they wanted to control the information that people got and it was obvious by how things were presented and pretty much the line was we don't have any problems here.

10:02:02

A:

You know, and if we do have any problems we'll take care of them. You know and that was not really what people wanted to hear at that point. And that was pretty much you know, that was pretty much the I guess I'd describe it as a culture thing. It was just the way they probably didn't realize that they were probably alienating everybody but they really were and people saw.

10:02:26

A:

Saw it as very controlling and rebelled against it. I remember being at meetings where you know DOE would want to divide the group up into different groups and you know and have different sessions. And you know Lisa Crawford said no, we're not doing that, stop the meeting. And you know DOE ended up following what she wanted and you know kept the group together.

10:02:48

A:

You know now when we have meetings that can happen. I mean a group can be divided up, it's not a big deal any more. But that's mainly because DOE has you know DOE and their contractors have just evolved so much further in the openness, open communication, sharing of information, than they were back then. But it was a gradual process. It didn't just happen overnight.

10:03:11

A:

And a lot of people that were there early on left and so you didn't have the, the baggage that went with this is the way we always did things and changing you know is, you know is difficult.

Q:

So at these early public meetings what were the residents really upset about?

FERNALD LIVING HISTORY PROJECT
Transcript

10:03:29

A:

I think they were upset by you know just the fact that their, they felt that they've been contaminated you know. And clearly some of them had and you know they weren't sure of the extent. I mean they weren't sure really you know, they knew some wells had been contaminated and you could kind of sort of you know if your well had been contaminated you know that but if you haven't you still were concerned about air.

10:03:49

A:

Air releases and no one was really sure how much material had been released over the years or where it had gone. Um, early on the groundwater contamination and the groundwater movement, I mean we had some ideas from just the early studies but people really weren't sure. And so there was really just a lot of uncertainty um and I think that's what Fernald did early on.

10:04:09

A:

They did a lot of well sampling. They actually got ODH, Ohio Department of Health, to actually do some water sampling in the area. You know if a resident had an interest to have their well sampled they would do that. And so they just did a lot of identification and you know they made people find out if their well was contaminated. This was sort of while we were gearing up to do the RI/FS.

10:04:30

A:

Which was, really didn't get started until '86, '87 time period. And probably really didn't gear up 'til about a year or so after that as far as really doing good work. There was also an effort during that time there was a big push to USEPA and Ohio EPA, we worked very closely with the USEPA as well, we wanted to make sure that we were all on the same page as well.

10:04:55

A:

We didn't want, we didn't want DOE to feel they were being told to do two different things by two different regulators. So there was a lot of coordination efforts there. Early on we wanted them to do a sitewide study which is what an RI/FS is. And DOE was very much, we'll hire one contractor to do the waste pits, and they actually did that.

10:05:17

A:

Uh, the CIS study, if I remember right, this, there's that study. Uh, and really, ya know they just did that because they were self regulating. That was still during the time period when they weren't listening, weren't agreeing. And the site wasn't a Superfund site yet. Um, which that was I want to say '88, late '88, early '89, it actually was named as a Superfund site.

10:05:42

A:

And so that changed things a little bit. Um, but , ya know, we were very adamant that they had to study the site, ya know, with one study, like a RI/FS.

FERNALD LIVING HISTORY PROJECT
Transcript

Q:
Instead of doling it out.

10:05:55

A:
(Coughs) Excuse me. Instead of doling it out to different contractors who had different ways of doing things and different quality assurances. And things like that. Ya know, when we got it all put together we really wouldn't be able to, uh, er, ya know, to, to find what areas overlapped and things like that. So that's where the, eventually that led to the operable unit concept of studying the site under the five operable units.

10:06:19

A:
A lot of negotiations with USEPA. USEPA played a major role there. There's a woman by the name of Catherine McCord who played a major role, uh, in that effort.

Q:
So, that's a big job, studying the entire site?

10:06:35

A:
That's a big job. And as you know it took a number of years to do that. And that really got started, I want to say '80, '86, '87. And that's when ASI and IT came on board to start that effort under when Westinghouse was here.

Q:
So, while all that was happening, what were the workers doing?

10:06:55

A:
The workers were producing. I mean, ya know, the, we, uh, Westinghouse was, was brought in, in, I want to say '86, I think. They started in '86, I believe. And, ya know, they were hired after NLO left to, to produce uranium. And that was the main reason they were hired. And, um, when we started saying that they needed to study these plants, that, it was clear that they, uh, that they really didn't wanna get too much bad news about the production facility.

10:07:24

A:
They really didn't want to put too many wells. Ya know, it was, it was difficult to put wells around production buildings, especially active, ongoing production facilities because you've got utilities and, ya know, workers and ongoing operations occurring, but, uh, it was also clear that they didn't wanna get bad news about their production area.

10:07:41

A:
That there was, uh, it might be heavily contaminated or things like that were occurring. Mainly because they didn't wanna, uh, affect the future life of the, of the production, mission of the site. It

FERNALD LIVING HISTORY PROJECT
Transcript

took a while for us to realize that that was the, that was, that was going on here. And of course people that, uh, worked here, that was a, that was a major dynamic. This was a lot of jobs for a lot of people. And you were talking about possibly ending that.

Q:

In fact, um, what was your reaction that they were going to close down site in '89?

10:08:11

A:

Well, I remember being out at the site that day when, when uh Westinghouse and DOE made the announcement. And, I think, I think overall at first I was pleased. Uh, it was, it was difficult, I, it was difficult to clean the site, uh, it is difficult to clean any site up when you have two missions - both production and cleanup. Uh, but I think, and so I was pleased that now we were gonna have just one site.

10:08:35

A:

And it, it had also been rumored pretty much that Fernald's days as a production site were limited. I mean, it really, ya know, Fernald had not been, had not really upgrades in the past and it really, it was pretty much, ya know, other people would say the writing was on the wall that it was gonna close. They just didn't need this kind of stuff that much anymore. Uh, I was really pleased about that that day.

10:08:59

A:

In retrospect, ya know, it was a good decision but we should have, we should have changed it slightly and we should have, DOE and, and the contractor should have run the rest of the materials through the process. Ra-, ya know, rather than leaving everything in the tanks. Which is pretty much what they did. They turned the switch and went into what they called the stand-by mode, which, 'cause they really thought they might start back up again.

10:09:21

A:

'Cause it really wasn't until '91 that the decision was made that it would never produce again. But by then it was too late to start the facilities up without going through all the safety reviews and what became safe shutdown. Ya know, if we had, if we had run all the material through the tanks back then you really would have avoided a lot of the safe shutdown work that ended up costing a lot of money in the future.

Q:

And I was just about to ask you that question.

10:09:47

A:

Yeah (laughs).

FERNALD LIVING HISTORY PROJECT
Transcript

Q:

Why was that important? So, yeah, um. So moving into the cleanup years from those years of production, how has the communication between like the management of Fernald and the community and the regulatory agencies that work with Fernald, how has that all changed down through the years?

10:10:09

A:

Well, it's just improved dramatically over the years. I mean like I said before when we first started meeting, ya know, it was difficult to get information, it was difficult to get good information. Um, it was difficult to know when problems had occurred. Ya know you didn't here about those things right off the bat. Uh, and I'm talking about us and the public, cause, ya know, information just wasn't getting out.

10:10:28

A:

And we were getting information that they thought we wanted to hear. Um, and over the years just through, through process, through improvements, through changes in people in contractors and on the site, I think they began to realize that, in, uh, ya know, and Lisa was, Lisa Crawford was adamant, I mean, she would really, really yell at these people at meetings about why hide this stuff, why not just tell us.

10:10:23

A:

If it's bad news, tell us. If things aren't working right, tell us. And I think eventually that got through. Um, and DOE started being very open. Ya, I think, ya know I think if the site has a problem Lisa Crawford gets a fax. A fax of a daily incident report or something like that. If it occurs she gets that. She probably gets it before a lot of other people get it.

10:11:16

A:

And so, I mean, ya know, going to some, ya know, doing, uh, going to some extremes like that really, uh, uh, starts to build, and I put the emphasis on "starts to build" some trust. Especially since someone who felt that, whose well was contaminated. Drinking contaminated water for a number of years. That's a, that's a big hill to get over.

10:11:36

A:

But over time, also I think people realized that this is a difficult site and we can't just keep fighting. Ya know, we really need to get on with the effort of, of cleanup. Uh, and that, that we need to spend the dollars wisely and if, if we're constantly fighting over every step of the process we're not really gonna get anywhere.

10:11:57

A:

And, so, I think starting around 1989, '90, '91, ya know, those kinds of working relationships started getting better. And they continue to get better over the years. Not that there aren't, ya know, glitches

FERNALD LIVING HISTORY PROJECT
Transcript

here and there or issues that people don't agree on. But still the communication and sharing of information is wide open.

10:12:15

A:

The other thing that happened, that's happened in the last five, five to eight years is that DOE has learned and we have encouraged this to involve people early in the process. Ya know, rather than, rather than if DOE, if DOE has an idea or if they have a problem, rather than going off and trying to solve that problem on their own with their contractors, ya know to involve the regulators and.

10:12:41

A:

And the public in that early so that there is some input and buy in to that process so that we are along for the ride rather than seeing that we are getting to the end of the process and then they deliver this and we go, ya know, "Well why did ya do this? This will never work." And ya know that can be, it's, it's how, it's, it's, it's sharing of information and that kind of a effort.

10:13:02

Q:

Now FRESH and of course, Lisa Crawford, as their (interviewee coughs) sort of helped bring that about. But what was it like for them at the beginning? How did they get, sort of like s-, fighting City Hall. How did they get the government to listen to them?

A:

Well, I think Lisa worked very well with local congressional staffers. You know, uh, Senator John Glenn was a very strong supporter of, of trying to uncover what was going on at these sites. Uh, so you know, there were, there were congressional hearings. Uh, Tom Luken had hearings later on in the House, um, he was a Representative at that time.

10:13:38

A:

Um, and then there were lawsuits that brought a lot of material out. A lot of you know, that resulted in the release of different information on what was happening at the site, past history. There was also, (sighs) there was also um, I've just drawn another blank here. I had another thought. Uh, but I mean this all brought information uh, to the public and brought support to put pressure on DOE to be more forthcoming with the information.

10:14:12

A:

Uh, some o' these hearings, I went to some o' these hearings in Congress, and you know, DOE just got beat up. You know, and beat up by Lisa and beat up by you know, a lot of citizen activists that were you know, probably complaining and concerned about these kinds of sites for years. You know, this was their opportunity to talk about these things, too.

FERNALD LIVING HISTORY PROJECT
Transcript

10:14:30

A:

And so, and of course worker, worker safety issues, you know. I-, if you're concerned about an environment around one o' these sites, you're also concerned about the workers, and so that also became an issue of concern.

10:14:46

Q:

Now there was an Earth Day celebration here. What year was that?

A:

(Smiling) Yeah, there was. Oh, I should uh, I'm not 100 percent sh-, for sure on it. That was probably, oh, I don't know, late '80s, early '90s. Maybe probably late '80s. It was after things started to get a little bit better, and they invited me to come out to an Earth Day celebration, and they had it over at Stricker's Grove, and they had a good number of, of staff there.

10:15:11

A:

And uh, that was the first time I uh, the first time I met Roxanne. Why am I drawing a blank here? Roxanne's last name.

Q:

Qualls (both laugh).

10:15:25

A:

Roxanne Qualls. And uh, on uh, and we were both on the agenda, and talked about that. Talked about in the environment. And I gave a short speech, and then uh, and then she did, too. And it was very interesting, it was uh, you know, sort of maybe a turning point, if you will. Because it was clear that you know, DOE and the contractor were making the environment impor-, a key factor in what was happening at the site.

10:15:56

Q:

And during the Earth Day celebration, um, Roxanne wasn't in public office at this point.

A:

I don't believe she was, no.

Q:

Do you know what agency she was working for, or what she was?

A:

I don't know. I'm sorry, I can't.

FERNALD LIVING HISTORY PROJECT
Transcript

10:16:10

Q:

I'll ask her that (chuckling).

A:

Yeah.

Q:

I'll be talking to her in a couple weeks.

A:

Yeah.

10:16:14

Q:

Um, I just thought at that, I think it's interesting there was actually an Earth Day celebration at a place that was uh, such um, a center of contention, at the time.

A:

Right.

Q:

Uh, tell me a little bit about that day and how people reacted to that.

10:16:34

A:

Well, I think, you know, I remember getting invited to it and everything, you know, and on one level thinking, "This sort of doesn't fit." Just like you said. But the same point, it seemed to me that, you know it was during the same time period where things were starting to improve a little bit to where you know, DOE and, and uh, the contractor were doing, you know, trying to do a little better job.

10:16:53

A:

Trying to share information. Not that everything was working well, but, you know, and I decided this would be a good opportunity to you know, try and build that a little bit further. And so um, that day, I, I remember going out there, and it was, it was a nice celebration. It wasn't real long, but it was um, you know, it seemed to be just the right touch to send the right message to the workers, that uh, you know, that this is the future mission uh, of Fernald.

10:17:20

A:

And I think that was real important to do that. I'm not saying that that day did this, but I mean it was, it was important to send the mission that you know, your old mission was producing uranium, and now your new mission is cleaning the site up. And you know, that that's a good job, too.

FERNALD LIVING HISTORY PROJECT
Transcript

10:17:36

Q:

And in your estimation, how has the transition of the workforce from production into cleanup, and they've kept a lot of the same people.

A:

Right.

Q:

Was that a struggle to get them to do that?

10:17:48

A:

Uh, I think it was a struggle early on. When you have, mainly because you had production people who really weren't environmental people. Uh, and then you also, I think it was very difficult for Westinghouse when they first you know, because as we said before, Westinghouse was hired as a uh, as a con-, as a production contractor.

10:104

A:

They really, when they bid for that contract, they really didn't win that based on any environmental work. It was really environmental work came, came on the scene right after that. So I think you know, they had people there that were production people, they weren't necessarily environmental people. So they had to transition and train, and bring people in. And I think that took a long o' time.

10:18:24

A:

And at the same time you're trying to overcome that culture of production ah, versus environmental stuff and like I said before I think it's very difficult, not that you can't do it, but just very difficult to have two missions at a big site like, what I think is a big site like Fernald.

10:18:39

Q:

So now that they're focusing on of course just on cleanup, um, what kind of feedback do you get from various members of the workforce?

A:

You know, I think ah, mostly good feedback. Mostly that they're pleased, I think that ah, I have to give a lot of credit to John Bradburne ah, you know, the early days of Fluor Daniel ah, some of the labor relations were a little rough. I'm not, I'm not clear on all the details there but I know that John Bradburne and Don Ofte and then John Bradburne came in and has done a major job, you know, sorting out the differences between the labor unions.

10:19:17

A:

I know that there, there are between the building trades and the, the Fernald trades. There were a lot of concerns over who, who did what work and what was appropriate and ah, a lot of issues had to be

FERNALD LIVING HISTORY PROJECT
Transcript

negotiated there. And frankly just, come up with a negotiated settlement, not settlement but negotiated ah, issues on what, who's gonna do what work.

10:19:37

A:

And I know that John and his staff has done a really good job on that. And that ah, you know, the laborers, the laborers seem very supportive at this time. Not that they were ever un-supportive to this but, you know, we don't have those areas, we don't have those issues to distract us from the cleanup.

10:19:53

Q:

Great, and um, how have all the parties involved, including what we were just talking about; laborers, and the regulators, stakeholders, and ah, DOE, and the contractors, how has all, in your estimation, how has all this gelled to make something happen?

10:20:13

A:

I guess that's been more, well I touched on it earlier, is there's been sort of an evolution of, of people at this site, you know, going from a highly contentious, back in the mid '80's when everything was sort of happening in the media and you know, a lot of venting occurring. And lawsuits, you know, occurred in that time period, you know, and then, you know, I guess I would describe it as people were out on the edges of that, the circle and, and over time they've slowly come closer together.

10:20:45

A:

And are working more closely together, ah through sharing, getting back to what we were just talking about, through sharing information, through building of trust. Ah, through open communication and just that kind of an effort. And then also, you know, everyone sort of focused on a common goal. Where, which, you know, no one had in the mid '80's when this stuff first started. We really didn't know what we were dealing with. It was just a huge unknown.

10:21:10

A:

You know, now I think we've got a pretty good handle on, you know, what's, what's wrong, what kind of contamination is out there. And how, you know, the plan is pretty much set as to how we're gonna clean this site up. We just have to do it.

10:21:22

Q:

That's great. That's a really good point too, because it's kind of like, when you look at the big site it's like how did they (tape cuts out and begins again).

Q:

Oh, I thought they were open 'til 7:00.

(Cameraman: it was on it just wasn't taking, so now we're good)

FERNALD LIVING HISTORY PROJECT
Transcript

Q:
Okay,

(Cameraman: we're rolling)

10:21:38

Q:
Yeah, I only have a few more, (shuffling of paper) oh great. Yeah, what um, just what other kind of agencies besides the EPA are involved and also what other kind of community um, organizations are involved?

10:21:55

A:
Well I guess there's just a lot that we haven't mentioned. There's, you know, the Ohio EPA, the then US EPA which we've talked about main-, talked about the most. But there's been other agencies involved ah, the Centers for Disease Control ah, has people on the, the citizens advisory board, the CAB has been instrumental in ah, in getting things done here at the site.

10:22:19

A:
Ah, again that's the citizens and also a good cross section of the community, ah as well as _____ members of from a lot of different groups. Ah, trying to think what else – you know, a lot of, a lot of the representatives, the staffers, and Congress, you know, people watch this site very carefully. And people talk about funding, making sure that funding is, is, that this site is supported.

10:22:46

A:
You know, all that type of support has been critical to the success of Fernald. Ah, I'm sure I'm forgetting other agencies. The Ohio Department of Health is involved, I think I mentioned them, Ohio Emergency Management Agency for planning for emergencies and transportation issues. Ah, a lot of other local groups too I'm sure, and I'm, I'm sort of forgetting now, but maybe you can refresh me ah.

10:23:11

Q:
Sure, what, what has your involvement been with the FCAB?

A:
Well I'm an _____ member of the FCAB and ah, I think that's been a key group that started sort of late, but also been key in getting some of the final solutions and you know, when I mentioned before we know what the job is, they were key in doing some of the final steps there.

10:23:34

A:
(Coughs) Mainly answering the question about ah, future use of this site. Ah, what kind of, what kind of, the balanced approach came out of a lot of involvement by them. Ah, of what, you know, some waste stays on site some ah, ah, waste goes off site. Um, and also priorities, so the FCAB's been ah, real critical role and I'm and _____ member of that.

FERNALD LIVING HISTORY PROJECT
Transcript

10:24:00

Q:

And how about waste shipping? I mean, what was the decision to go ahead and ship waste off site? (Interviewee coughs) Was that ah, a major fight, or what actually was happening at that point in time?

10:24:12

A:

Well I think that it goes back to a number of years ago to, you know, starting discussions with the public and DOE and I'm saying everybody started talking about, you know. Once we started to investigate the site and sort of some of that, the relationship started to improve, you know, people started to discuss.

A:

You know, we knew we weren't ready to ship all this stuff, but we knew that, that we were gonna have to do something with this stuff. And we started having discussions, you know, just brainstorming sessions not, not anything that had any ah, you now, it wasn't, it wasn't negotiations by any means. It was just discussions like with the FRESH group or amongst the regulators um, or with DOE and, you know, what are our options?

10:24:54

A:

You know, and you could say, you could say you're gonna pick this stuff up and move it. Picking this whole site up, all the contaminated material on the site and move it someplace else and ah, or you can leave it all here. And we really, you know, through some basic discussions we pretty much realized that neither one of those options was, was really gonna work.

10:25:11

A:

First of all, you know, not, the states on the receiving end don't want to be receive everything at Fernald. They're looking for, and Lisa learned this too, they're looking, looking for sites to do their own as best they can to take care of some of their own material. And so out of that the balanced approach idea came.

10:25:30

A:

And we also knew that it all couldn't stay here 'cause it just, the groundwater would not be protected. If, if we kept everything here. It just, it just couldn't work, so that's where the idea of the balanced approach came and we spent a lot of time discussion that and the FCAB really developed a lot that ah, through that process and through the out reach that they did ah, over a number of years.

10:25:52

Q:

And that included a the formulation of having a, a the OSDF (On Site Disposal Facility) on site?

A:

Yes, the OSDF was the on site component where it, where the most, most contaminated materials like the K-65 silos, production material and drums on site ah, the waste pits will go off site. Ah, and then

FERNALD LIVING HISTORY PROJECT
Transcript

other material like building debris ah, contaminated soil below a certain level go in the OSDF. Go in the On-Site Disposal Facility.

10:26:24

A:

And it's, you know, we feel very confident that that material will be safe for both protection of the residents around Fernald as well as the groundwater.

Q:

Great, so you have no concerns that that's gonna leak or anything like that?

A:

We don't think it's gonna leak but it's also designed to still be protective if it does leak some. I mean, and all these things are designed either they're designed, I won't say they're designed to leak but they're also, they're designed that if they do leak they'll be protective of, and all the models and when, when that, that ah, went into that.

10:26:55

A:

And we also placed it in good geo-, in the best geology that we could. We also did a lot of studies to make sure that it was located in the best site on site – geology wise.

Q:

Great, let me see what happens here, cause I thought they were open 'til 7:00 today.

(Cameraman: I think we're – let's rock it)

10:27:16

Q:

Let me just ask this one more question. Um, they're tearing down buildings pretty quickly and they're leveling the site pretty much. What would you like to see done with the land?

A:

I think that ah, there's a plan out there right now that talks about ah, making it a green space and I think there's discussion on how much of that green space gets used, natural habitat. There's really an interesting, you know, the natural resource damage assessment that I mentioned earlier, that was part of our original lawsuit.

10:27:54

A:

Ah, there's been a, there's a, there's on-going negotiations to integrate the restoration of the site with that claim. Which means when you dig up the waste pits instead of bringing clean fill to fill that, what will be a huge hole, you'll sort of grade that out and make wetlands and prairie areas out of that. Um, and

they're looking at, I mean they're doing a lot of studies now of planting natural grasses as, as, for erosion control.

FERNALD LIVING HISTORY PROJECT
Transcript

10:28:22

A:

Ah, looking at what trees would be good to plant on the site. There's just a whole effort underway, there's a wetland area that's being, been constructed. Ah, up in the north, northwest, northeast corner of the site. Ah, that's all part of this, you know, what the can be future of Fernald. So there's actually, it's starting right now. And so, there's ah, I see Fernald in the future as being this ah, green space. I see it as being sort of a park, ah, that the public will have some access to.

10:28:51

A:

Not ball fields, not that kind of a thing, but natural area with wildlife, birds that kind of a thing. Where people can come ah, walk and be an asset, you know. I think if we spend as much money as we're spending on this site it would be nice to have something to do with this site when we're done. And I think that's crit-, that's really important.

Q:

Great, you want to go ahead and get nat sound? (Cameraman: yeah) Okay, we're gonna go ahead and roll off some nat sound. We just need quiet on the set for about 30 seconds. This is nat sound.