041731 Interviewer: We'd like to start by having you state your name, and where you were born and raised and what was your education, educational background.

041738 French: Well my name is L.F. Bell, middle name is French. I was born in Macon, Georgia and I graduated from Georgia Tech with degrees in industrial management and civil engineering. I'm a veteran of the United States Army and served in the Republic of Vietnam and worked in the private sector as a consulting engineer for 25 years before I came to work for the government. I started with the Agency for Toxic Substances and Disease Registry in the Fall of 1991.

041809 Interviewer: Uh, growing, just growing up you were interested in engineering as a career or what were some of the things that led you into the field that you are in today? Just some of your interest as a young man.

041824 French: As a young man I attended a multi-prep school, played in the band, played sports, was a boy scout, eagle scout, always did well in the science and mathematics and so forth so engineering just seemed to be the career of choice.

041845 Interviewer: Was your position with ATSDR, was that the first job within the federal government that you had?

041851 French: Besides from service in the army, yes.

041854 Interviewer: How did you land that job or what were the circumstances that led you there?

041859 French: They were recruiting different types of professional people for the agency. There were a lot of different specialties there. There are engineers, hydrologists, and geologists and toxicologists, and doctors and epidemiologists and all sorts of folks like that and they needed an environmental engineer to fill that slot.

041923 Interviewer: What was your, some of your early assignments with the ATSDR?

041929 French: My earliest assignment with ATSDR was Fernald. The Feed Materials Production Center here at Fernald, Ohio. That was my first assignment and have been with it ever since. I do have, I have been to other sites also, but Fernald has been my main site.

041945 Interviewer: When you first joined ATSDR what did they tell you in terms of sort of the overall purpose of the agency and then you were in a particular branch of the agency, so how did that work?

041950 French: Well, ATSDR is a part of the Public Health Service, Department of Health and Human Services. And we were created by Congress to go to different NPL sites to see if any of the toxic materials at those sites had been hazardous to the public's health. The group that I work for was created specifically to go to federal sites, and we go to both Department of Energy sites

and another group goes to the Department of Defense sites. I've always been with the Energy group.

042026 Interviewer: NPL stands for?

042028 French: National Priorities List from the CERCLA and legislation that creates the Superfunds.

042037 Interviewer: Would you characterize your group as an information gathering and dissemination or what sort of role do you play?

042046 French: Well ATSDR is a, like the Centers for Disease Control and Prevention, is an advisory agency as opposed to the EPA which is a regulatory agency. We make no regulations or rules, but we advise EPA, the Department of Energy and so forth regarding the different sites that we're involved with, particularly regarding those issues that can involve the public's health.

042112 Interviewer: Does your work purview, your agency purview include the workforce as well as the community or is it primarily community? I know there's overlap there.

042120 French: It's primarily community. The National Institute for Occupational Safety and Health, NIOSH, which is part of CDC, deals specifically with worker issues but we have been involved with some worker issues.

042134 Interviewer: Can you remember any experiences or reflections about the first couple times you came up to Ohio and visited the site and started to get to know site officials and community folks? Just some of your initial impressions.

042151 French: We first came to the site in May of 1992 and met with Jack Craig and several DOE people and the contractor folks and they gave us a site visit. We came up with a team of about six people, including health physicists and me as an engineer and several other folks representing different disciplines and we toured the facilities and met with the different corresponding people with the DOE and with the contractor. And uh, spent several days going through the site, looking through records and also meeting with local people and people within the community around Fernald.

042233 Interviewer: In those initial encounters with the community, what was your team's feelings about the community's views on health and how perhaps they felt that there were some health effects that were out there that needed to be documented?

042250 French: Well, when we first came to the site, it was a very, uh, there was a lot of skepticism, there was a lot of fear, there were a lot of concerns. People were not trustful of other people and it was quite an interesting challenge. I can remember specifically some folks when we said we wanted to talk with them, they didn't want to talk with us in a public place because they were afraid that somebody might be listening. And there were people that said that we heard that you talked to somebody else and, you know, we tried to explain to folks that we were talking

with anybody who wanted to talk to us and that we had no axes to grind or no specific groups we were working for, but that we were here to represent all the people that lived in the area. So, it was quite an interesting initiation into the concerns around the Department of Energy site.

042354 Interviewer: When did you first hear about something that Fernald Residents for Environmental Safety and Health were cataloguing, that I think they referred to it as the cancer map, a map with the circles.

042408 French: When we first came up here we met with people from FRESH. We met with Lisa Crawford, and Edwa Yocum, and several others and they showed us the map right off the bat. But one of the things that we wanted to do also was to talk with other people in the area as well as the FRESH people, and talk to the Department of Energy and find out for ourselves what issues were there. Later on that year, we held public meetings where the public, where the people who lived around the area were invited to come in and very private sessions, one-on-one with our people, discuss their concerns and their health issues and the things that they wanted to know about and that sort of thing. Based on those interviews and other contacts within the community, we then did four health consultations about the site. The original scope was we were going to do a public health assessment, which is a major document that ATSDR produces at each NPL sites, that's part of our mandated task of things to do. But the health consultations are a very focused report on a specific issues that may be of great concern to individuals or certain people. So, and at the same time the Centers for Disease Control was already conducting a dosimetry reconstruction project here at the site which covered the exposures that were historically, had come about during the production era days. So in trying to put together the health assessment we didn't want to re-invent the wheel and duplicate CDC's efforts. So, we got with CDC and decided to use their data from the past exposures and then we got together with the EPA's National Air and Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama and set up a sampling program to test environmental samples around the site to see, to be able to focus in on those issues that people were concerned about. For instance, we did groundwater samples, we did air samples, we did samples of produce, we did samples of milk, and of the four consultations, consults that we did we used that sampling data, not that our sampling data was necessarily better than or more extensive than the Department of Energy's, but that is was independent of theirs. So, we published those documents in a series over the next couple of years and found out that some of the concerns were because of the dairy farming in the immediate area, there were concerns over the dairy products and whether that could be hazardous to a person's health to use those dairy products. And we found out that wasn't a problem. We did a sampling of a lot of produce in the area, fruit and vegetables and so forth. People were concerned that with the emissions in the air that perhaps the produce was not safe for public consumption. We found no problem with any of the produce that we studied. We did sampling of the groundwater for uranium and radon and we found that, and the specific issue there was, was there any hazard to non-potable uses of the groundwater that was contaminated. So, we studied that and our health physicists looked at that and the data from that and there's was no major, there's no risk of non-potable uses of the groundwater. And the last issue that we studied with the consult were the K-65 silos and the radon from, that was coming from the K-65 silos. Even though DOE had done some capping and so forth it was still a major concern of the community about the radon from the silos. And we did a series of indoor and outdoor radon sampling

programs, in fact the outdoor ambient radon program is still underway. We have nine radon monitoring sites outside the fence line in the community around the plant but we have also sampled a, in people's homes and individually notified those people of what the radon levels were in their homes. The vast majority of those there was nothing out of the ordinary. And the ambient radon outdoor monitoring program, we have not had any major deviations from both EPA, Ohio's EPA and the Department of Energy's sampling data.

042855 Interviewer: It's been said just in a more general way sometimes that it's hard to disprove a negative. When a scientific group or a health agency or a federal agency comes out and does research and says that there's minimal or not a very significant risk of contamination or health damage based on something and you report that to the general public that should be a comfort to some level but sometimes I think a community member might say, "Well, you know, just because you haven't found something doesn't mean its not there." What sort of ways do you try to inform the public about the meaning or significance of some of these findings to reassure them at that level?

042940 French: Well, part of our job has to do with is establishing a rapport with the community so they believe what we're doing, that they understand that it's an independent agency and that we are there for their interests and their well-being. The vast majority of the things that we study and look into turn out to be no finding or findings of little or no impact, and in those areas where there is an impact we've put out health advisories and issued warnings and done health studies and done blood sampling and things of this nature. But in the Fernald community, there's just not been anything of great concern that we've been able to find, so it has been a null finding. But we've been very open with everybody when we talk to them and you know there doesn't seem to be a problem with it. The documents were published, they were given opportunity for public response and questions about them and we responded to the questions that came up about them, and they are also summarized in the public health assessment which is currently out for public review and they will, we're incorporating the public comments on that right now and the final edition of that will be out in a few weeks.

043059 Interviewer: Were you involved at all in … as an observer or participant in the work of the Fernald Health Effects Subcommittee that was around from about 1996 until recently, how's that, how's been that involvement?

043114 French: Well I helped to get that one formed. The Centers for Disease Control was the agency that actually started the Health Effects Subcommittee, but I worked with them because I had been working in the community for several years and helped them to review applications and help set up some of the initial meetings and places to meet and that sort of thing. And I attended the first couple of years worth of meetings that they had. The Health Effects Subcommittee is in the process of winding down. The Department of Energy's federally-assisted community groups and the Health and Human Services community assisted groups have slightly different focuses and so the one for DOE is continuing operating and they keep getting additional tasks and the one at HHS is very focused on specific issues, and when they feel those specific issues have been addressed they tend to back off.

043216 Interviewer: More generally, you mentioned a couple of minutes ago the difference between let's say an ATSDR and a U.S. EPA is the difference between providing (had to close the door because of the noise). I'm just going to ask you to comment a little bit more about the difference between a regulatory agency and an advisory agency. Hypothetically let's say you find something at, I'm sure the ATSDR does find stuff at some of those ...

043244 French: Oh yeah, down at Oak Ridge we found mercury in one of the river down there and what they did was they actually studied the biota in the river and found out the mercury bio-accumulated in turtles and certain fish so people that subsistence fished and ate turtle meat and that kind of stuff were warned not to do that. So that's the kind of thing that we do there. We did a mercury blood level test series up there, went out into the community took all kinds of blood samples to find out, you know, so ...

043322 Interviewer: Can you move your chair to the right a little? That's great. Yeah, Andrea asked me to just get you to back up and clarify, you said there were four consultations that you did concerning Fernald, I think you said they had to do with the dairy aspect.

043358 Doug: The, well I'm not sure which one we did first now that's been several years ago. We did one on whether dairy products had been contaminated by the cows eating grass and so forth with possible uranium contamination. And that had a negative finding. There were no hazards there. We looked at produce, both fruits and vegetables, they'd grown in the local area and may have been contaminated with uranium and so forth and we found nothing there that would be any kind of a hazard to the public's health. Then we did one on the contaminated groundwater. We studied non-potable uses of that groundwater to see if there were any hazards that, for instance absorption through the skin or taking, even if you showered in it would be taking it through the skin or anything like that, whether there would be any hazard to the health and there was not. And then we did the study on the radon in the community around the site based on their concerns from the radon in the K-65 silos.

043506 Interviewer: What I was gonna ask you before we stopped was the ATSDR is an advisory agency not a direct regulatory agency. Uh, can you give me an example of a time where ATSDR has had a positive finding and it leads to some set of recommendations or some set of actions that actually leads to either a change in behavior or change in regulation or something that may even be a little bit different from Fernald, just to illustrate ...

043535 French: Well at other sites for instance where EPA has had …, regulates the amount of a contaminant that may be allowed into the environment and we find that the levels of that material either might be higher or lower, their regulations need to be higher or lower limits to protect the public's health or it may be less costly to clean up the lesser levels and is still protective of the public's health. We've had cases where we've issued advisories to people about mercury in, mercury contamination in fish and turtles from mercury that had contaminated the water and so they were advised not to eat the fish and turtles from the water. In some cases, we ask them to have more stringent limits and in some cases we suggest that they ease up on the limits, but our total focus is how it affects the public's health. Many sites we go to are contaminated, but if there's no possibility of contact with the public then it's not a public health

risk. As an example the site may be very contaminated, but if none of that contamination is leaving the site and getting where the public can come in contact with it then as far as our agency is concerned it's not a public health issue. We look at all the different pathways like the air pathway, the water pathway, the soil pathways and different combinations of those where it might be uptake by animals and plants and whether the public eats those or consumes those plants or the meat from those animals or products from those animals. So we try to look at the different pathways that could connect the public to the contamination and if there's no contact, if there's no chain that's completed, then there's not a hazard to the public's health. That doesn't mean that there's not contamination at the site.

043745 Interviewer: It may just be more a threat to natural resources ...

0437448 French: Then it's up to the regulators to work with the site, whether it's a private site or a federal site, it doesn't matter it's the same regulations, and EPA may require them to clean up the site to certain levels. But if we find that the public has not been exposed, that's our facet of the picture, if EPA may require them to clean the site up to pristine conditions, but if there's been no contamination that's gotten to the public then it's not an issue for us.

05003315 Interviewer 2: What's the difference between potable water or non-potable water?

05003611 French: The only difference is whether you drink it or not. The ground water here is certainly potable from the standpoint that you can drink it. And quite frankly, I think the levels of uranium in it were just at borderline. I would not … I didn't think it's a tremendous risk but certainly you don't want to take chances of somebody coming at harm from drinking the water, so DOE provided a water system to the community.

05011405 Interviewer: Yeah, let's go back to this issue with Fernald that there are some selection was made about looking at the dairy cattle intake and fruits and vegetables and non-potable water. In that situation or any situation where ATSDR arrives on the scene, you need to make choices as to what, to focus on first or which issues to consult. How do you make some of those choices? What data do you look at in making decisions about what focus on?

05014410 French: Well, EPA is probably on most sites that we go to, and at Fernald certainly Environmental Protection Agency and Ohio EPA were both deeply involved with the site before we got here. So, the contaminants were fairly well known. There were some issues in the community where the community wanted answers to certain questions that perhaps had not been addressed by DOE or EPA that we tried to look at and help out in that respect. You were talking about non-potable water. The water is potable. I am talking about the non-potable uses of the water not that the water is not potable. The non-potable uses where you don't drink it that didn't mean that the water was not drinkable. An engineer picking on things here…So when we had these meetings with the community, different members of the community, both FRESH and non-FRESH people, and different folks lived around we met in Ross and in Crosby, I mean New Haven, and we had over 100 people at a series of four meetings. And these folks expressed their concerns to us and asked specific questions and as a result of those, we tried to categorize the issues and those were the four that came to the forefront. And at the same time, CDC was

looking at past exposures while the plant was in process and producing uranium. So they were already looking at those doses so we were looking at what was any present exposures. And then we have also looked at the potential for the future exposures while they're cleaning up the plant.

05033006 Interviewer: What was the focus of the reconstruction study in terms of risk agent and potential …

05033812 French: You're getting a little bit out of my purview here, but basically they looked at those things that might have been released from the plant, both accidental or unintentionally. And that might have been released through accidents through the stacks and so forth. And they were primarily looking at the uranium and so on and found out the radon, and in the course of their study found out the radon was a major material and they did a study on the risks associated with that radon release. And that was in their study. So we didn't address that issue other than to refer to their study.

05042024 Interviewer: You mentioned there's a public health assessment, I think about the document in your lap there, that's in the process of undergoing public review and comment. Where in the next year or two or three as that document becomes finalized, where will that take ATSDR, in terms of its relation to Fernald. Is there going, what kind of role will that that assessment is put to bed?

05044720 French: That's …, the public health assessment is probably our biggest product that we have to, you know, we were required by Congress to produce those. We will basically, basically finish incorporating public comments and the final issue will come out in the next few weeks. That doesn't mean to say that if something happens at the site in the course of clean up that changes some of the parameters we would go back and amend the document, so we will not just close up shop and walk away. We will still be involved; we're still involved with the Citizens Advisory Board. We're still doing the ambient radon monitoring off-site. And we will continue to do that as long as the K-65 silos are being cleaned up. So we will have a presence here until the site is pretty well finished.

05053424 Interviewer: We interviewed Susan Pinney, one of our folks. And she indicated that some of her work recently has found some surprising increase in level of bladder cancer cases. And she wants to do additional work. I don't know where that is in terms of … I think it's out for publication or whatever, but just using that, not necessarily that specifically, but just let's say, uh, either from a researcher or from a member of the public, there's a issue that gets kind of starts getting out there for discussion. At what point does ATSDR sort of say, hey, maybe we need to hold, uh, sort of a community forum and see what, you know, as of the year of 2001, what are some of the concerns out there that may lead to looking at a different, maybe a different issue that wasn't in the initial health assessment or what have you. How would that process work?

05063713 French: Well we have within our agency there're three different divisions that do different things. One of them does health studies and one of them studies different toxins and they issue toxicology profiles regarding different materials and the health studies group works

with universities and medical people all over the world doing health studies and that's the group that Dr. Pinney's been working with. And I am not really familiar with what they have or haven't done, but I know that the agency has helped Dr. Pinney and her group with funding and with information and we have used some of databases from the medical monitoring program. And what they're doing with that right now I couldn't tell you but certainly if something comes up on that, there would be trigger mechanisms that would cause things to happen. My kind of little tunnel vision group, we look specifically at the site and the site doing cleaning up, site before clean up and site doing clean up and so forth and to see what the contaminants are whether they're coming off site and get in touch with people. So, it's kind of separate functions within the agency. One thing that the agency does do is if there's a concern in the public, anybody can petition the agency to do a consult. The bigger you are, the better, the more powerful you are, the better the chances for the consult to come through. But anybody can … - you might not want to put that one in there, that didn't sound good. In other words, anybody can petition the agency to do a consult on any issue. It doesn't mean that we will do it, but we will respond to that petition, and it may be that we would say … a lot of times people are concerned over issues that just really can't happen. For instance, and this is just a hypothetical, so I may be concerned of Alzheimer's Disease. And they may say, "I am concerned there's Alzheimer's Disease in this area and it's kind of from contamination at the site." And if there's no linkage and no studies that show Alzheimer's Disease being associated with any contaminants that are at the site then we would tell them that and we wouldn't do the study. But if there were connections there, then we might look into it further and we may do a consult or study on it.

05091008 Interviewer: Yeah, I was gonna ask you sort of, you've been to many community meetings and kind of observed the Fernald community and perhaps others how they talk about health issues. And I was gonna ask you to comment on maybe some communication challenges. A couple, you know I've been to of these Health Effects Subcommittees too, the couple I see are getting the community to differentiate between correlation or sort of observation like you mentioned with Alzheimer and causation or linkage, actual linkage to contaminants. The other issue is sort of the privacy or how willing is someone to share that medical information. Those are probably common across the agency in terms of dealing with the public. How do you deal with some of those …?

05100214 French: Well, you know, if we happen to get involved in medical records and that sort of stuff, of course the privacy is assured. Uh, but basically if … I have to collect my thoughts here, I didn't anticipate this direction of the interview. Uh, when people have expressed concerns, we've had, first of all we've had these meetings where we've talked to people. And one of the key things at any site is to develop a rapport with the people and where they feel free to tell you their concerns and don't feel like there is somebody looking over their shoulder and that kind of thing. And then we take those concerns and issues and then we sort through them and decide, you know, what we can and can't look at and what we are able to shed light on or get involved with. Sometimes there are issues that there's no way you can address them and we have to be practical 'cause everybody has budgets. Uh, but one thing that I've noticed about the Fernald community particularly. When we first came here, they were just really … there were a lot of concerns, there was a lot of fear, there was a lot of anxiety and people didn't trust each other, especially didn't trust anybody at DOE and didn't trust anybody with the federal

government. And over the years, I've seen that community grow and mature so to speak, to where they become involved at the site. The site has opened up, the Department of Energy has opened up and given out certain information, we have worked with EPA and O-EPA and ATSDR and other agencies and because of the community's involvement, and the community is becoming educated and learning about the site, and learning about the hazards, and learning about the issues and learning about the risks a lot of that fear and anxiety has gone away. It doesn't mean it's totally gone, it doesn't mean there's not concerns, but it's at a totally different level. I mean it's like a mature discussion among equals. Like at the Advisory Board meetings and the Health Effect Subcommittee meetings, the last ones I went to, there were still concerns, but they're not panicky, and they don't feel like it's an adversary relationship.

05123402 Interviewer: Did your group looked at radiation primarily or as radiation and non-radiation?

05123913 French: We do radiation and non-radiation. We do, like I say we have toxicologists that can look at all sorts of chemicals. We have health physicists that look at all sorts of radiation issues. We have hydrologists that look at … and geologists that look at ground issues and groundwater issues. As an environmental engineer, I look at a lot of different things, like, not only how the plant was built and how things were maybe, how they ran, but how they treated their waste, how they handled their waste, how they handle all sorts of different things. And then that combination of a team of different specialties kind of forms a picture overall what the major area of concerns might be and what area of risk might be. And then we look at it that way. When you get in some of the toxic stuff, I mean I've picked up a little bit now and then, but you know I am not a toxicologist.

05134413 Interviewer: Just one more question and you can say whatever you want to and have your own closing. But just, this is sort of a history project and part of an environmental educational project where we're interviewing folks and hopefully teachers and students down the road can look at these interviews and kinda see what some of the issues were at Fernald. You've been interacting with Fernald issues almost a decade it sounds like. It's just, any other general impressions about the Fernald community or the Fernald site history as you've seen it evolve other then what you said just a minute ago about the public that you'd like folks that study it down the road to keep in mind.

05142703 French: Well I think that we've all learned, I think when I came up here with the agency, the federal programs group, that group that goes to DOE sites was just forming up, just starting. So we were learning, and DOE was learning, we would go to all these different sites. And then the community was learning because they were learning about their sites, and they were learning about us. And I think over time, it's developed into a good relationship, I think that there's certain amount of trust, there's certain amount of comfort. That doesn't mean we have all the answers and all the answers have been brought out. But at least, there' s a relationship where people can talk to people and express their concerns and feel like they're going to get the answers and be able to work with each other. I think that the Fernald site in particular has done a tremendous job. You know all the different agencies, all the cast of characters, all the stakeholders throughout the national scene are looked up to as those that have

forged the path, so to speak, of dealing with these issues in a rational way and in a way that gets results. Doesn't mean all the problem have been solved or will be solved you know perfectly but at least they're headed in the right direction and people around the country can look around and see that. They ask about how Fernald is doing this and how people in Fernald are doing that. So, and I've seen the other sites a little bit too and Fernald is definitely a step ahead.

05160711 Interviewer: How much do you travel in a given amount of time? 3 weeks out of 4 or …?

05161404 French: No, probably about a good solid week out of a month. I go primarily at Fernald. But I've also picked up work at Hanford and I've been to most all the other DOE sites in the country at one time or another.

05163103 Interviewer: Anything else? I appreciate your time.

05163813 Interviewer (2): Tell a little about see if you have any advice for the students down the line what they could think about?

05164419 Interviewer: Yeah, I mean you are in a career that's kind of an interesting mix between environmental … environment and health …

05165002 French: Well actually, you know, I didn't think the … when I came to work for the agency I thought I would be doing more engineering work, so it's been a learning process for me about health issues, about the different effects of different chemicals, different radiological stuff. I think if I were talking to young engineering students, I would say, "Don't be so focused that you can't see other avenues or other ways to apply your engineering skills."

05172804 Interviewer: Just tell us what you're doing today as an example of something new in terms of, somewhat new in terms of radon.

05173612 French: Not new. We've had the series of radon monitoring sites around the plant for years. And they have to be maintained. The equipment has to be changed out and sent to the laboratory for analysis, that sort of stuff. Today was different in that I had a new gadget. I had a GPS system with me, a little antenna to pick up satellites and so to pinpoint the location of that. So on a computer we'd have the coordinates from the satellites. So that took me a little longer to do today. I had to play with a machine I had never played with it before.

05181907 Interviewer: Have you seen Ohio EPA's website? They've got real-time or close to real-time data there.

05182610 French: They're running real-time data and we're running kind of a over-time … we're using alpha-tracking detectors. And they essentially monitor alpha emissions over time. So if we got word from the site or from O-EPA that there's been a release or a big spike we would immediately check our stuff and we would … we have established the baselines of what

the radon levels are in the generally in the area. And then we would be able to pick up and confirm that spike, but it would read differently on our stuff than on theirs.

05190603 Interviewer: What would be … You've got kind of a concrete silo, it's covered with soil and there's a little bit more on top. What would be a scenario that might lead to like a venting or a spike or just a deterioration of the cap or a venting or …

05192017 French: That's been the most source it's a bentonite cap that was put in there several years ago has begun to dry and crack and the radon seeps out from that. But the structures are very old and have outlived their design life. They're working hard to get the materials into different containers to minimize the risk of any bad things happening on the old silos.

05195206 Interviewer (2): What about under the silos? That was another thing. Is there a … (**French:** I'm sorry?) Under the silos. Why don't you tell him, Steve. Is there radon coming out from the bottom?

05200413 Interviewer: It is mostly the risk to be venting out the top?

05200615 French: Well, mainly the materials are in the silos. There's certainly a risk to the groundwater and so forth if there would be a rupture in anything that's in there, should it come into contact with groundwater anything that was leachable or soluble in water could get into the groundwater. But the big risk in the silos is the radon products from the decaying of the radium that's in the silos. It's a gas, so it's going to go up and out. It will seep through cracks and crevices fairly easily.

05204329 Interviewer: I think the ability for members of the public, to the extent that we have more and more people being able to get on the web, the ability for the public to get data in a timely fashion is another risk mitigating, sort of risk perception mitigating factor which potentially folks can kind of see. They can get access to data anytime they want to. No one is keeping secrets from them.

05210625 French: Oh, sure. The openness, I mean, the Fernald site has been just absolutely wonderful as far as providing information to my agency. Uh, and the Ohio EPA and EPA been, we've been to Chicago and looked though EPA's files. We've been to Dayton and looked though O-EPA's files. We've shared information and worked together with their people. It's been a … maybe one of those rare cases where different federal agencies actually cooperate and work together. That's a good experience here.

05214117 Interviewer: I'll be interested to see what happens in the next three years in Paducah, Kentucky because they've got, you know, some hazardous waste there that DOE … and to the extent that there can be built a similar degree of cooperation and trust between community regulator and agency. It takes a long time. It took a long time here.

05220315 French: One of my coworker's working on Paducah right now. I am not involved in Paducah so I don't know, but I know they've been working hard there. I am not sure what all the issues are but they…

05221420 Interviewer: Well, producing nuclear weapons creates a lot of environmental waste, there is no doubt about that.

05222123 French: That's true, but it was necessary at the time, I think we have to be real careful not to go back and apply today's standards to things that people did 50 years ago. The technology wasn't there, the knowledge wasn't there, in many cases they did the best they could with what they had. It turns out hindsight showed to be wrong. But it was not done with evil intentions or they were going hurt people. Nobody I don't think ever wants to hurt people.

05225120 Interviewer: Right, when you compound that with the whole notion of half-life and other stuff that had been around for a long time …

05225914 French: That was an enlightening thing to me to be learning about certain radiological things and how long they stick around and a lot of them don't go away over a long, long time.

05231009 Interviewer: Well, thank you. I appreciate it.

05231407 French: I enjoyed it. I get a copy of this and I hope I won't lose my job.

05232107 Interviewer: I think it's really hard with the health issues especially in the past because, you know, first of all if someone actually gets sick or has cancer. And lots of times there's nothing you can do about it.

05233428 French: Well, the thing that people don't understand is, and I assume we are not recording and it doesn't matter, but …