

**100056 Interviewer:** Can you tell me your name and a little bit about yourself, like where you grew up, where you went to school, where you live now?

**100103 Velma:** I'm Velma Shearer, and I was born in Minnesota, Northern Minnesota, went to grade school at in Northern Minnesota. Then my parents moved over near to Duluth, and I finished high school there. And, it's a wonderful country, by the way. Uh, then, as I finished high school, I went to Rockford, Illinois to, well I worked a while to earn enough money to pay my tuition for nurse's training at Rockford Memorial Hospital, three years of nurse's training. Then about that time, the war was going on, and they were wanting or pushing nurses to sign up for nurse, Army Nurse Corps. In fact, they were pushing for a nurses' draft at that time, and I felt that I could not go into the military services, uh, not so much from my background as a Peace Church member, but from my own experience with some incidents at home on the farm, with, should I tell my story, little story about that? My brother and I decided we wanted to catch a rooster pheasant. So, in order to do that, we set a little steel trap around the corn shack. It wasn't long until we saw the pheasants flipping and flopping around, and we knew probably one of them was caught. So, we ran down to where the trap was, and it was not a rooster, it was a hen. And so we picked her up and brought her up to the house, and, uh, only her toe was caught in the trap. So, we held her a while, and she was so gentle and so beautiful. It's amazing, you know, we generally think of the rooster as being the colorful, beautiful spec-, uh, pheasant, the most beautiful, but the hen is as beautiful as he is. And she was...so, she didn't respond to our looking at her wings. She let us lift her feathers and so on, so all we did was we clipped her toe and took her back to the corn shack to release her. There was no way that we could have killed that pheasant, and I think that experience stayed with me all through my life. Some of these creatures that are just so wonderful. Anyway, I decided at my completion of nurse's training to do two years of volunteer work. I attended first the University of Minnesota for some public health courses and then left for Castaner, Puerto Rico, to work in a little hospital out in the mountains. This was provided, it was a little Red Cross unit that the Church of the Brethren set up and there were volunteer physicians, nurses, maintenance people, anyone that could serve in the little medical unit. And I was there two years, loved it, wonderful people there. Then, met my husband there and we came back to Ohio. Then, when our two years were up, and we settled in his community, which is near Dayton here, and I've lived here since.

But in 1978, the church called, this is, when I say church, it was our Witness Commission staff at the church headquarters of the general ward, and they called and wondered if I would be interested in going to the Monsanto shareholder meeting in St. Louis, Missouri. The church owned a few shares in Monsanto, and they wanted to use the shares for, as a witness tool at the shareholder meetings in regard to Mound's operation of the Mound Facility, I mean, Monsanto's operation of the Mound Facility, where they produced the detonators for the nuclear weapons. I said, yes, I would try to do that, and, um, so, I did go to that shareholder meeting. Um, while there, um, I met or stayed with Sister Mary Ann, met a young woman, at that time 19 years old, who had, at 16, come down with leukemia. And she, as I questioned her further, she was one of six young people at that time who had come down with leukemia and was treated with, she and her friends, were the first ones to receive chemotherapy at Washington University in St. Louis. Three of her friends passed away, but she was a survivor. So, she was facing the loss of friends, her own illness, and what might be her future from then on. So, I began to wonder and think

about, well, I wonder if she had an exposure to radiation and through the information that she gave me I drove out to the area that she described, found the Weldon Springs Facility there, which is, was closed down at that time, but it had started up operation in the early '50s; uh, and, they refined uranium mills tailing, mills, not tailings, uranium ores converted it to uranium hexafluoride, and so forth, for further processing. She and her friends had gone to school, which I found was located just across the road from the facility, would have been downwind from the facility. I also found out that she and her friends went swimming in a granite quarry, which at which some thorium ores had been disposed and that the young people didn't know it or their parents didn't know it. The gate was down, the kids could freely go to the quarry, and, in fact, there was a little ramp built out into the quarry for the kids where the kids could dive off of into the water. Um, I followed through then with that information and drove up onto the site, got to see some of the buildings, and also saw that there was a coffee cup sitting on the table. And I inquired further and found out that the plant had been shut down quickly. All the workers had abandoned the site leaving the coffee cups sitting just where they were, and it did not reopen after that. I went on to, over to Kansas City, began to gather information from the Environmental Protection Agency office there. I just simply gathered all the information, some typographical information, anything I could get my hands on at that point, and shared it with a resident, actually a lady who lived right at the edge of the site. And she organized a group of neighbors and so forth and used the information and carried forth some efforts further. But, I also learned from a lady whose husband was on the faculty at Washington University that there was another site that was just like Weldon Springs in Southwest Ohio. She was uncertain just where it was, but she knew it was within reach of Cincinnati. And so, when I got back, my husband and I drove to that area. And, all at once, we drove up over the hill and looked down through the valley, and there was the Feed Materials Productions Center. Also included were the two water towers, each painted with red and white checkers just like the Purina water towers near Minneapolis. Um, we drove onto the site but were stopped by security, and so forth, and so I began to collect information the same way about Fernald, as it was called, now called Fernald. And uh, uh ...

**101202 Interviewer:** Can you describe to me how you felt when you first saw the Fernald site and when you tried to go up and the guard stopped you? Describe a little bit more about that experience and what you were feeling at the time.

**101218 Velma:** Well, I think if I can say, um, was the, I was going to say deceit, actually, of being, for the community, being misled as to the purpose of the facility through the name of the site, the Feed Materials Production Center, plus the water towers being painted as they were, and um, realizing that, again, at this site, as at Weldon Springs, that people were being misled. Now, Weldon Springs, they told the people that it was a gunpowder plant. I didn't pick up that at Fernald, but the very fact that the, with the setting as it was and with the name of misleading people, and um... Well, after that was over, I came back and shared that information with our District Executive here in Southern Ohio of the Church of the Brethren, and um, he was very much interested in continuing uh, my work with Monsanto and whatever I could do down at Fernald. Now I can go either way, a little bit more about Fernald or if you'd like ...

**101355 Interviewer:** Yeah, talk a little bit about your initial visit and then how that led you to have a meeting with a site official shortly thereafter?

**101405 Velma:** Um, well, we formed a committee, a church committee. There were three of us working together, and uh, as I recall, the three of us went and drove around further to see more of the site, discovered cattle grazing on the site, saw the silos, this was before they were filled in around with soils, saw the silos where there was a crack and steam was escaping from the silo wall, saw that these were very close to Paddy's Run Creek, and um, saw the residences that were fairly close to Paddy's Run, and um, also saw, followed through on the dairy owner's place. Later on, during another trip, I stopped and got a quart of milk and had it tested.

**101522 Interviewer:** What came about from that?

**101524 Velma:** There was strontium-ninety in the milk.

**101528 Interviewer:** And what did you do with that information?

**101534 Velma:** It wasn't a high level, it, I couldn't do too much with it, but I saw that it was confirmed in some of the later records that I got, that they had buried strontium-ninety plus some other radioactive materials on the site where the cattle did graze.

**101554 Interviewer:** O.k., tell me a little bit more about the formation of the committee within in your Church of the Brethren to address these issues.

**101604 Velma:** Well, two 'fellas very much interested in the peace-making program of the church, very willing to investigate as I was doing and do what we could about it all. We made a call to the Fernald site and set up an appointment to meet with Wendell [Weldon] Adams, the manager of the site at that time. And he did welcome us to his office, we sat down and had, listened to his conversation, that is, I call the conversation his quote "lecture," for quite a bit of time, maybe forty-five minutes or so. And, uh, he was doing an excellent job of promotion of the site. He didn't give us much time, or any time, actually, to ask questions or to say much of anything. Finally, when he seemed to be kind of winding down, I had showed him some papers that I had, actually, I had done a study, this was 1980, of five sites in Ohio; Fernald was one of them. And, I had some material, some Freedom of Information Act material, that had been given to me by the attorney; and, so, I shared that with him, and his face changed entirely. He became red-faced, very much embarrassed. He stood up and took the whole document and headed off to another office or some place down the hall, and we waited, and we waited, and we waited. And I had my fingers crossed. I was afraid something would happen to my document, and I'll show that to you after a while. Um, finally, he came back. He didn't say too much about whether it was, he had verified it or not, but he went on to saying, "We are willing to take you over to see the health center, and it'll be about time for lunch." He said, "We'll go to the cafeteria, and then, I'll show you something." One other thing, I don't quite recall when it was, but anyway, we did have, we were able to have a little more conversation with him, and I said, "Wendell, we're not ..." I said, "you are our brother, we are not here to destroy you or your profession or the work that you are doing. We're here out of concern of what is being done with what is being

manufactured here.” And he seemed to relax a bit at that, but he still was aware that now he knew that somebody else knew, somebody else from the citizenry knew what was going on there. Can I take a break?

**101938 Interviewer:** Sure

**After break**

**01942 Velma:** I think one of the concerns, one of the items of information that we had shown Mr. Adams was about a release of uranium hexafluoride that occurred about 8:40 a.m. on February 14, in 1966. It was from a ten cylinder being, a ten-ton cylinder being vaporized at the pilot plant at the Feed Materials Production Center, I might say, yes, this needed to be vaporized in order to make the chemical change which they needed for working it through the process. A chemical operator received an inhalation exposure to the gas and was hospitalized for six days. The pilot plant personnel who received inhalation exposures in varying degrees were retreated, treated at the health facility, and the feed product loss was estimated to be at 3,844 lbs. Now, this was only one accident. There were several others that were in this document that were of concern, and, in fact, the totals of uranium loss from September, 1962 to June, 1980 totaled over 6,530 lbs. These were only reportable amounts; there may have been other amounts.

**102142 Interviewer:** Can you tell us the years too? What year was it that you met with Mr. Adams?

**102148 Velma:** That would have been about 1980.

**102151 Interviewer:** O.K., and the releases occurred, what year? Can you tell me?

**102154 Velma:** That one was 1966, uh, the others were in that related period up to June 3, 1980.

**102206 Interviewer:** O.K., O.K., and you got this document through the Freedom of Information Act prior to visiting the site, and then you showed it to him during the meeting the information you were talking about? O.K.

**102222 Velma:** Yes, Mr. Adams arranged for us to take a tour of the facility on another date. And our committee did drive in, and we did get to see the facility, the change of the chemical from the green salt, which is uranium tetrafluoride, to the uranium hexafluoride, which is the stage at which it can be enriched at the Portsmouth Plant. We also saw a pile of scrap metal on the site, which they said was worth a million dollars. We also saw drums, many, many drums of um, uranium that is called depleted uranium, and I can explain that later. Um, it's just a tremendous, a tremendous burden for us because we could see all this material which was considered waste; we could see the drums deteriorating, rusting. We could see workers, um, in our opinion, anyway, not well protected and just, just a big concern to us because, not only that, but the question, our question, was the need for the material because the uranium hexafluoride was shipped from there to the Portsmouth Gaseous Diffusion Plant at Piketon, which, uh, enriched the isotope of uranium-235 to be used in, as fuel rods for nuclear power plants or for

fuel for nuclear submarines or for nuclear weapons. The power plants used an enrichment of 3 to 5%, the fuel for submarines was up to 20%, and the uranium-235 enriched for weapons was 97%. The uranium would go, or the uranium hexafluoride would go to Portsmouth for that enrichment, and then it would come back to Fernald to be converted to metal. And the metals, metal products were in different shapes. Those that were for fuel were shipped to the RMI Company near Akron, Ohio. There, they would shaped them into tubes, come back to Fernald for polishing. From there, it was shipped to be made into pellets for nuclear fuel power plants.

**102612 Interviewer:** Does anything else stick out in your mind from the day that you had the site visit and met Mr. Adams? You had mentioned something about a fire alarm.

**102622 Velma:** Yes, oh yes. While we there with Mr. Adams, the alarm sounded. Everyone was to evacuate the building. We did, with Mr. Adams, went outside to the parking lot, and it was there that we realized that Mr. Adams while we were in session had said that “we, uh, nothing goes beyond the fence; none of our releases go beyond the fence.” But, when we were in the parking lot, we saw the fence; and it dawned on us. And we all three looked at each other and grinned, oh, yes, the chained link fence stops the contamination; stops the releases. O.K.

**102724 Interviewer:** Yeah, you want to talk about one of your main concerns with the production was that workers weren’t protected enough, that contamination went over the fence. Can you talk to us a little about the health study that you did to try to get out some of the consequences of what was being produced there?

**102742 Velma:** Well, I did a cancer mortality study on each county in Ohio. I obtained records from the Ohio Department of Health and graphed each county beginning in 1950 through 1979. These were the cancer mortality rates of how many cases of cancer deaths per 100,000 of the population. Um, I will mention that Ohio, itself, as a state, the mortality rate has gone up from 150 in 1950 to 232 per 100,000 of the population in 1980, 1990 I’m going to say, yes, because that’s about when I concluded that.

**102853 Interviewer:** And what did you find out about the Fernald site while you were doing the cancer mortality of all of Ohio? Did it reveal anything about the Fernald site?

**102901 Velma:** Um, in fact, the cancer mortality for that county, which is Hamilton County, was difficult to separate in terms of being, it was somewhat elevated, but not an extreme elevation. And, of course, it was because the whole city of Cincinnati is included in that county. So, it was difficult to distinguish whether there was a higher elevation at that area. So, at that time, um, the Ohio Department of Health was not separating it out into smaller regions. Now, they are doing that, which is showing an elevation of cancer in that area.

**110022 Interviewer:** Can you tell us a little bit about how the health study was used? How did you use the material that you had been gathering?

**110029 Velma:** Um, I think that maybe it was a stimulus for the FRESH group to take up their health study. People were coming to us to tell us of their illnesses, that is residents in the

community. We didn't hear too much from workers at that point because they were not allowed to talk about it. But the residents, the families would come with their stories. One family in particular had a young son that had died of cancer, and I checked into the location of where they lived, what kind of exposure that the boy might have had. And I did find that he had had, yes, a close exposure to a particular area near, an area that was used by a subcontractor to the Fernald site management. Um, then, well, we began to hear from workers later, and these are what FRESH has been working with also. They were able to use the data from the workers.

**110202 Interviewer:** Did you ever present the information to any site officials and have a chance to talk with them about it?

**110212 Velma:** I can't recall, specifically. I know I attended several meetings, and I don't doubt that I did raise some questions at those; and I can't be specific at this point about it. Yes.

**110227 Interviewer:** Sure, O.K. Maybe talk a little bit about the relationship between your committee, the nuclear study committee, and the FRESH group. Talk a little bit about how you all interacted in the early years and how that evolved over time.

**110240 Velma:** Well as I, as we, I should say, went to the meetings at Fernald, we began to become acquainted with different people who became members of FRESH or organized into the FRESH group and to hear their stories and their concerns. And, I'm sure that we encouraged them and pushed them to go with it and, uh, quite a wonderful group had formed.

**110317 Interviewer:** O.K. Tell me about the photographs. You had mentioned before that some of your initial information-gathering included taking some photographs. Could you describe to us that day and what you all were intending to do and any memories you might have of that?

**110330 Velma:** Yes, um, we had contracted with a pilot in the area here to fly down for us to take photographs of the Fernald site. So, we did. We left, woke early in the morning on a good sunny day, and flew down, circled the site, and were about to circle a second time to get more photographs when we thought, "Oh, maybe it's too risky, that we may experience some kind of something happening to the aircraft." So, we decided to fly up to circle the Mound site, which we did then, also. And, we were very grateful to the pilot, and he became very interested in what we were doing, helped to tilt the plane so that we were able to get good photographs. And, it was quite a revealing experience.

**110440 Interviewer:** How did you use the photographs then? What was the purpose?

**110444 Velma:** We used them in our educational programs at the various churches and, then, our own district conferences to show people what the plant was, looked like. We talked about what happened, what processes took place at the site. Uh, we also developed ... I wrote up several pages of material information not only about Fernald, but about the nuclear power plants with the description of the different types of power plants, made quite a packet of information. And those we distributed for a small fee of two dollars for our costs to the churches for their information. We also planned a seminar in which we were able to invite interested persons from

other districts across the United States, and, uh, we set up that seminar, covered three or four days in which we provided information for those folks.

**110604 Interviewer:** O.K., we've talked a lot about the different activities that your committee did. Can you kind of tell me what were the goals of the committee? What were you all trying to accomplish? You know, by taking the photographs, by collecting information, by getting to know the FRESH members, what were your goals?

**110622 Velma:** Well, as we started, it was a learning process for us as well. I mean, we had to learn what it was all about. We, as we gathered more information, we learned about the other major weapons sites across the United States. We learned somewhat at that time about the subcontracts and where some of those were located. These sites were all involved in the production of nuclear weapons. We also gathered information on the locations of the power plants and the promotion that was being done about power plants at that time, that those that were under construction and so forth. Uh, our principal concern was with the weapons production, uh, and as we learned more about the power plants, our concern also became the spread of nuclear materials all across the United States with the construction of these sites and also the transport of the fuel, the spent fuel and so on.

**110754 Interviewer:** Was this a major issue concern within your church, the Church of the Brethren?

**110800 Velma:** Well, as we, going back to the Monsanto shareholder meetings, I think we attended only about four of those shareholder meetings. Well, let me mention at this point that I think being able to speak at the shareholder meetings, even though we were given only three minutes, we did a tremendous educational task, uh, project for the shareholders. They began to realize how Monsanto was involved, and I even took the liberty to investigate and to mention in my last speech the artifacts, or the art items that had been donated by Monsanto to the art gallery in St. Louis, that those could be destroyed should there be use of any of these nuclear weapons. And, it sort of began to dawn on people that, hey, we are in danger as well as anyone who might be in another country that would select to drop the bombs on. So, in 1985, I believe it was, Monsanto withdrew from being operator of the Mound site. Um, as to Fernald, I think becoming acquainted with persons in the community by going to the meetings, conversations, that the ... I think maybe we were encouragers for the formation of the FRESH group, which started taking over and doing what we were doing; and I was so glad to see that.

**111021 Interviewer:** Have you seen a big change in just the general public's awareness of this issue from the time you started until now?

**111029 Velma:** Uh, yes.

**111032 Interviewer:** Can you characterize that?

**111033 Velma:** Particularly, while the war efforts were going on between the United States and Russia, yes. With the Cold War, the stoppage of the Cold War, that there's kind of been a

decline, I think, 'cause everyone assumes that the danger is over, which is not quite true. This is because there's all of these sites that need to be cleaned up. There is nuclear waste at all of these sites, and the problem is not solved yet as to what to do with all of this to provide a safe environment for people. Not only that, but we will be facing the same problem with the dismantlement of nuclear power plants in not too many years.

**111134 Interviewer:** At what point did you get your ministerial degree?

**111139 Velma:** Oh, I started my Master's program, Master of Divinity in 1980, completed that in 1984, and, then, through, well, because of my age, perhaps, but through, because of my interest, the faculty decided that I could go on with my Doctoral Degree, which I did then following. And, usually, the seminary asks that you have a three-year break between Masters and Doctorate, but they gave me permission to continue since this was my subject; and I completed that in 1987.

**111224 Interviewer:** O.K., so let's talk a little bit about how these two interests interacted then. You know you were working through the Church of the Brethren, you were working through the nuclear study committee, can you talk a little bit again about was it a major concern within the whole church or just your committee? How did this work relate to the larger views of the church?

**111247 Velma:** Well, the Church of the Brethren is one of the three historic peace churches. So they have a history of interest in peace, and they have policy statements written throughout the years in regard to peace. That was, maybe I should say, a basic... though, for me it was more than that, it was all the people that were affected by all the activities in regard to, for example, the nuclear weapons production. It gets more into the ethical issues, the imposition of these contaminants upon the population without their consent or knowledge. Um, the health effects that will go well into the future. It's not just my generation, but it's my children and my grandchildren and anyone else who was exposed. It's the future generations that need to be thought about, as well.

**111417 Interviewer:** So, part of your goal was to educate the church members that this wasn't just about peace or not, but also about contamination and health effects?

**111427 Velma:** Health effects, the effects upon the environment which goes on and on into the future. Many of the radioactive materials have long half-lives, and I mean by half-life, the decay period. For example, plutonium has a half-life, plutonium-239 has a half life of 24,000 years, that means that half of it will have decayed out in 24,000 years. In the next 24,000, another half of what remains will still be there. Only half of what remains will have decayed out, and it goes on. Generally, the way we calculate it is that we add a zero to that figure for the total decay period. In other words, some of that plutonium will be around for 240,000 years. That's only one element. Now, there are some with shorter half-lives, but there are some with longer half-lives as well, and those are in the environment now. And, we have to think about what it can do.



**111604 Interviewer:** And this is the type of information that was in the educational materials that you prepared?

**111608 Velma:** Yes.

**111610 Interviewer:** How was that message received within the church? You know, did they understand, did they know what you meant, and has that changed over time?

**111619 Velma:** I think, yes, I think there was an increase in understanding of the materials, the process, the sites in Ohio. It also had the effect of people feeling “this is beyond me, this is more than I can understand,” um, and it is a pretty hard subject area to absorb. The science is complicated, and it is difficult; but I do feel we made an influence. We did create an awareness that wasn’t there before.

**111711 Interviewer:** And that applies to both your church community and the community surrounding the site?

**111717 Velma:** Yes, yes.

**111719 Interviewer:** What about, how did your activities within the Church of the Brethren relate to other denominations? Were there other denominations that were addressing this issue that you coordinated activities with?

**111730 Velma:** Well, in 1990, we, um, started working with the United Church of Christ, and that’s how we came to change the name to Neighbors in Need. And, we described our purpose as working together as helping families, neighbors and around nuclear facilities to understand better what was going on there, and to organize, and to address the issues, and to work at protecting themselves.

**1118115 Interviewer:** What about any ecumenical, you had mentioned the Ohio Council of Churches ...

**111819 Velma:** Yes, I did. I was, served on the Issues Caucus Committee of the Ohio Council of Churches for awhile, and while doing that, introduced a paper about nuclear materials in Ohio and hoping that that would help the Council reach out to other churches with this same, with this material and our concerns.

**111851 Interviewer:** What would you describe your successes have been in terms of trying to educate people about health effects and environmental pollution that result from nuclear weapons production. What have your successes been?

**111906 Velma:** Uh, it’s hard to point out a specific thing or event. I think it’s been a gradual education process. A gradual realization by people that, hey, this is a different toxic thing we’re dealing with. Also, helping people to realize the cost and the money that has been put into all of this. And helping people to realize the effects of nuclear weapons that is, this what they spent

the money on, tax money has gone into this. Um, not only that, but helping people to realize the dangers from the power plants and the contaminants that they also add to the environment and um, helping people to realize that, yeah, we don't have the solution either for any of these most highly radioactive materials.

**112030 Interviewer:** Can you kind of describe a, the spiritual or moral perspective on nuclear weapons production?

**112040 Velma:** Well, as I mentioned a little bit ago, it's the fact that we have imposed this contamination on the population without them knowing. I think it has to do with a person being entitled to be born in, with a healthy body, in a safe environment. I think it has to do with the fact that industry does not have a right to impose this upon the population, I mean the contaminants, upon the population and the environment. Um, there's the implication of the costs, the taxes that have gone into this. And there's the thought about how can you write off people, and that kind of goes back to the realization after the Nuremberg trials, how a person's humanity had been taken from them. This is part of that same thought, the denial of a person's humanity. So, I think that pretty much covers, uh, I don't have figures in my head about what a single bomb could do at the size of what they are now. So, I do have, well I know the whole city of Pittsburgh would be destroyed by one bomb, out to twenty miles circumference would be death, and beyond that the, all the health problems that would occur.

**112319 Interviewer:** Do you think the church's thinking on environmental affects and health affects, do you think that thinking has evolved over time with efforts such as yours?

**112334 Velma:** With some, I think there's a denial. It's hard to believe, it's hard to accept, so, it goes toward the denial side, you know. Um, I think there are some who do have a sense of the catastrophe that it could be. Sometimes, I'm discouraged with the church's responses. But, on the other hand, I think as a member, a community member, I've been able to see some changes, changes in the management of processes of the sites, changes in the Department of Energy's attitudes toward the populations around and also workers. The more recent willingness by the U.S. legislature to pass a bill which would compensate persons who were suffering from cancer or similar other effects of radiation, also, compensation for families where family members were lost over the years because of radiation. This is quite a change and only this very recently have I been granted, myself, as an individual, a quite detailed tour of a local, of Mound, I will say that, with Mound, to be able to ask for detailed questions and to see the processes, that is, particularly the environment, environmental places where that could be affected or could have been contaminated. Also, I now have access to the monitoring results, different monitoring results.

**112615 Interviewer:** At Mound?

**112616 Velma:** At Mound, yeah, I can't cover Fernald and Portsmouth any more. I have to limit myself to Mound now.

**112625 Interviewer:** Can you tell me how many years you covered all three and when you switched to just focusing on Mound?

**112634 Velma:** Well, Mound, throughout the years from 1978 up to the present; Fernald, like from '79 or '80 up to about '85 I think or '86 in there. Portsmouth, that, well' that went from early '80s up through early '90s.

**112708 Interviewer:** What satisfaction have you gotten personally from being involved in nuclear issues and trying to educate people?

**112716 Velma:** Well, of course, recognizing the story checked out. We should be doing which we were originally assigned to by our creator. Being able to get at the how-to's in this age, at least somewhat, to be able to bring some of that stewardship to the consciousness of not only church members but the larger population. Um, to grasp more deeply our responsibilities for the environment, I mean, now our stewardship for people and the environment um, and I just feel that I've done what I can and that's ...

**112825 Interviewer:** Then what advice would you leave for future generations from that? You've had quite a bit of experience, you've worked with so many groups, gone to so many meetings, what advice would you leave future generations that you learned from your experience?

**112841 Velma:** I would say get involved. Know what's going on in your community, know what's being built there or what's happening, not only nuclear materials but toxic chemicals as well. Know what's going on. Um, request sampling results, request any environmental information that you need from various governmental agencies. Keep tab of any laws that are passed or any requirements that are reduced to benefit industry. Keep tabs, be up there, keep your eyes and your ears open.

**120022 Velma:** ... I we spoke earlier about the denial of one's humanity. Yeah, if, let's see, I can't quite remember how I stopped.

**120028 Interviewer:** Uh, we were talking about future generations and you were saying stay involved, get studies, know what it is. I'll just ask about the spiritual angle again. O.K. Can you describe for us a little bit more about sort of a spiritual perspective on this particular issue?

**120052 Velma:** Well, going back to the Nuremberg situation where it was concluded that that whole event was the denial of one's humanity. Um, this denial does not exist only with war making activities. It touches lives wherever there is oppression or isolation, denigration, hunger, illiteracy, margination, exploitation, nuclearization and so forth. Human beings are both spiritually and materially interdependent with one another. This interdependence is made up from with our very existence, it's part of our very existence. We are living bodies, each born of another, each fed, clothed, and housed by the cooperation of many others working in many different ways. It is integral, an integral part of the realization of the truth of our being to be aware of the physical universe and the ecological interdependence of the living beings and the inanimate resources. Moreover, it is an integral part of our being to accept the responsibility for

stewardship, which is implicit in human intelligence and the human capacity for creativity, adaptation, invention, and planning. A change in values, not a destruction of values, can change a pessimism about culture from an ethic-free society to an ethically responsible society. From a technocracy which dominates people to a technology which serves the humanity of women and men. From an industry which destroys the environment to an industry which furthers the true and basic needs of women and men in accord with nature. And from a legal form of democracy to a democracy in which freedom and justice are reconciled. The crisis that is the loss of morality and blinding ethical norms must be seen as an opportunity, and a response must be found in a positive answer to the question of a world ethic.

**120346 Interviewer:** Can you tell us a little bit about the statement you were just referring to, when was it ...?

**120351 Velma:** Oh, this this was part of my doctoral thesis. I had studied the theme of peace and peacemaking and had concluded um, had worked in or discovered the total involvement of ourselves and our environment as all part of peacemaking. So, that, this is kind of the summary or the outcome from that.

**120425 Interviewer:** From your doctoral dissertatuion? What year was this written?

**120428 Velma:** 19, it came out in 1987, finished.

**120433 Interviewer:** Wow, thank you for reading that to us. Can you think of anything else that you wanted to mention about your experiences with Fernald? That we haven't covered so far.

**120444 Velma:** Well, I'm aware that they're in the midst of a clean-up process, um, and I'm aware that they had decided to use cells on site for disposal of their low-level radioactive waste. Um, I know that they have gotten rid of the metals that were piled, the pile of metals. They've gotten rid of the depleted uranium that was on site and the thorium that was there. I don't know where they sent it to, but it's not there any more. I'm aware that they plan to return some of the land to recreation or to a natural habitat type of a plan. Um, of course they will be shipping a good bit of the materials, some of it, to Enviro-care in Utah and the most severely contaminated to the Nevada Test Site for burial. It's a big, big task for them now to clean-up the site.

**120620 Interviewer:** Can you think of anything else?

**120621 Velma:** It's going to take monitoring for many hundreds of years because it's long-lived uranium that they're working with. That's it.

**120644 Interviewer 2:** Yea, about the potential of nuclear weapons. When you first started to do this work, before you really knew, what did it feel like and what was the process that you went through to kind of not deny it yourself because you know a lot of people do that denial and it's such a hard thing, you know, you don't want to look at that? Could you describe to us what it felt like?

**120710 Velma:** Well, an incident might describe it pretty well. (From off screen: go ahead and speak to Jenny, yea, I'm sorry go talk to Jenny.) Um, I had been at a meeting at the very beginning in 1978 at the Mound facility, we met with three persons from the Mound facility. The shareholder group from New York City that was teaching us and was working with us plus the uh, well that was our nuclear committee that did this, and uh, sitting at the table one of the DOE persons said, "There is no proof that plutonium causes cancer." So, that was really something that really stuck in my mind. Later, then, one of those three DOE people were, yeah, Department of Energy people at that time, arranged to take us to see a little bit of the processes. And one of those processes, one of those, one part of that tour really struck me and that is when the DOE person laid the detonators out in my hand. And, I could see the six parts. I could see the hair, the wires that were the size of one's hair. And, I really, I don't know, I, my stomach cramped; and that's what really grabbed me. I think that's what maybe hit me the deepest inside of me because I thought at that time I was remembering what one of these, one weapon, using this little set, could do to New York City. I had just read that, and that's what clicked it for me. I, yeah, so and that's what ...

**120953 Interviewer:** Thank you very much. That was a great story.

**End of Velma's interview, but there were some pictures videotaped from Velma's home and some narrative and voice over from crew:**

**12:10:02:24 Velma:** This is like the first site that we had from, as we were driving around trying to locate the Feed Materials Production Center. This is what we saw from the driveway. You notice the Purina tower, water towers. The creek, Paddy's Run Creek, which I mentioned and which we saw along the edge of the site, essentially, uh, let me mention the process buildings. Different processes took place at the different sites. The uranium tetrafluoride was done at one site, and the hexafluoride done at another. And, here's a picture of the wastes, which I mentioned, the barrels stacked out here (this is not a very good shot?) Yeah, the barrels stacked out here, and the metals that were just scattered out here along the edge of the site. This is a burial area that had been covered with trees. And, some of the holding ponds are here, which held waste water until settlement could take place. Here's the surge lagoon--what I want to mention are the three silos down here. These silos held waste from the production of the first nuclear bomb. And, this is the one that we saw previous, we saw from Paddy's Run Creek that was leaking at that time. Now, it's been covered up with soil along its sides. The, uh, here's another view of those silos from the air, and that's pretty much it. These are just processes and ...

**12:12:54:16 Interviewer:** And what year is this from?

**12:12:57:12 Velma:** This would have been about 1987.

**12:13:01:01 Interviewer:** O.K., great. Alright.