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: Michael Townsend
Date Interviewed: 9/23/99 Date Transcribed: 1/19/2000 Tape: 94 Project Number 20012

Tape FLHP0230

07:01:00
Q:
First of all if you can give us your name and spell it just to make sure its right.

07:01:14
A:
Michael L. Townsend; M-I-C-H-A-E-L. T-O-W-N-S-E-N-D.

07:01:20
Q:
Great. What's your title here?

07:01:23
A:
I don't know. Just got a new one Director of Labor Relations.

07:01:30
Q:
And if you first of all if you could just give us a little bit of background, um where were you born, where did you grow up, where did you go to school, where did you play football?

07:01:38
A:
(Laughing). OK. Where was I born, I was born in Alabama, moved up here when I was five-years-old with my parents and my older two brothers and sister. And I moved to Hamilton, Ohio, the great city of Hamilton, Ohio, the home of just about everything. But going into living in Hamilton, growing up here went right to high school in Hamilton.

07:02:05
A:
Went to Hamilton at Garfield High, which is now a junior high, they changed it and made it a junior high. They changed it and made it a junior high. The high school is now Hamilton High which is a combination of Taft High School and Garfield High School put together under one.

07:02:17
A:
From to there went to the University of, University of Notre Dame graduated from there with a BA in Math and decided that I wanted to pursue a few things better known as professional football. Did that for three going on four years; I played for the Minnesota Vikings and the New York Giants. I guess the reason why they picked me up while I was there I made All-American and then we was champions and things while I was at Notre Dame.

07:02:45
A:
So that's why I had a good view of going to the NFL. After leaving the NFL I wanted to pursue worldwide type things, such as working for a company that was worldwide. First company I worked for was IBM. Since then I worked for Phillip Morris, Ford Motor Company and ended up in the great city of Ross, better known as Fernald, working for Fluor Daniel Fernald.

07:03:11
Q:
Great.

07:03:14
A:
Well that's a quick synopsis of my life.

07:03:19
Q:
Um, tell us a little bit about, uh, about playing football at Notre Dame, what was that like?

07:03:25
A:
If you ever seen the movie *Rudy*, that just about captures it all at about 100 percent. *Rudy* is the epitome of what playing at Notre Dame is. Everybody in the world for many, many years, and the reason why I went there is because my brother went there. My brother dreamed of going to Notre Dame. I did not dream of going to Notre Dame. My mother wanted me to go to Notre Dame.

07:03:49
A:
So it being at what she wanted in her wishes as well as my father's wishes I decided to go to Notre Dame. But playing at Notre Dame gives you experience of a lifetime you'll probably never get to see because you play everybody who is somebody nationally. You play some of the best on the east coast, some of the best on the west coast, some of the best in the south, some of the best in the north. So you get a wide variety of what your talent skills are in relation to them.

07:04:14
A:
Um, we were able to become the national champs my senior year which I was captain of the team so ended up being that I was able to be double indemnity also be captain and also be national champion of the team. So it uh, it's something that a lot of people wish and hope for and I was able to capture that. The very next year I went into pro ball.

07:04:34
A:
If I had did it right I would have signed with Minnesota the first year and I would have been playing in the Super Bowl in less than a year after I played in the National Championship. But I did it wrong with the world football league and came to Minnesota the year after. So that's one of the things I wish I had

gained back. If I had done it right I would have been in Minnesota and been better known as Super Bowl in a year. So that's what it's like to play in Notre Dame. It's like being in a Super Bowl every game.

07:05:05
Q:
That's great. Excellent. Um, so tell us about your first impression of the site when you came to Fernald.

A:
Thought it was antiquated, old and should be brought up to date. I had just left Ford Motor Company, which is very automated. We had computers, um we had robotics and coming here and dealing with everything from hand to foot.

07:05:30
A:
And being lifted by forktrucks and things or being lifted by hand or pneumatically. Brought me back, set me back from the standpoint of production way, way back. Uh, but I found out through the interview that 99.9 percent of the product that went through went through untouched and unharmed and QA checked. So that told me that obviously they had a process that worked compared to Ford where we had automation and robotics.

07:05:57
A:
And we couldn't get 60 percent through and we had one of the newest plants in North America. So at the time relating the two together I'm like if we can't make transmissions at 99 percent but we can make ingots and derbies at 99 percent, that's something that, that automotive company needs to check out about Fernald. So I was obviously impressed on the first time through capability.

07:06:23
A:
That made me want to come here and be a part of it. And knowing what I knew from automation I knew I could add some enhancements and things that would make the process work a lot easier for the personnel who worked with it. And they taught me a lot of things as well. So it's a thing of uh we bring in some enhancement, they showing me some enhancement that needs to be done that I was aware of already.

07:06:48
A:
Coming from a private industry and being able to compromise and come up with the best way to make it work well out here.

07:06:54
Q:
Great. And how did you find out about the job at Fernald?

A:
Interesting thought. Uh, I was at Ford, then at Ford uh they was going back in the late '70's they was going to reduction in force because automotives wasn't selling as well. So uh being _____ you had to look ahead of yourself or you get called at the last minute when you're laid off and don't have a job opportunity.

07:07:17
A:
So I was being interviewed by headhunters and I had a few headhunters out there looking for me and things of that nature. And one told me about this place here better known as Fernald. I had never heard of it and I routinely went past right, supposedly went past it on 128 going to Notre Dame and never saw it. The whole four years I was going to Notre Dame, never saw it.

07:07:40
A:
Go right past 128, never saw it, never even noticed, the only thing I noticed was the big water signs. And uh tanks that was set out there but didn't think too much of a site being over there especially a site of 1,050 acres. But uh my headhunter told me you go out there and it's right off of Willey Road. And I had an appointment at 8:00, I said at 8:05 I'll be calling you because I knew there's no place out there that big.

07:08:03
A:
So I came, got here early and got my appointment and when I turned down the main access road I couldn't believe the size of the plant. And I said this has been here all this time? And once I got here I found out it had been since 1952. So I was like amazed but never saw it. I didn't see it till that day, till I got here so that's how it turned out I got out here and got a job interview.

07:08:28
A:
The guy that interviewed me used to be in Public Relations, Homer Bruce. Interviewed me, did my interview there and talking to him and he knew of me from Hamilton. And we talked about a lot of things but he told me how good it was to work out here. And from there I follow- had a follow-up interview and able to do that. So that's where it all initiated from.

07:08:47
Q:
Great and uh, (loud truck going by and tape was stopped)

Tape restarted:

07:08:55
Q:
He just wanted to see what we were doing. So how much did you know about the process when you got here?

A:
Zippo, uh absolutely nothing. Uh, I had to learn from groundster. I had background in production from being at Ford Motor Company.

07:09:07
A:
I knew all the automation and things about using processes and how you process from one point to another point and getting a final product out. But I had zero input as to the chemical makeup we had here at this site. And I had to learn from grass roots. What I did was I went out to the employees and at each operation I would sit and talk to them about what they did and how they got it done.

07:09:27
A:
Of course we had the production procedures and you know standard operating procedures that went for every operation. But you also need to know what made each one tick because you can't put everything down in black and white on a piece of paper. So you have to learn about nuances about running this operation compared to running that operation.

07:09:45
A:
Why you want to use a fork truck in compared to using a pneumatic lift and things of that nature. So you learn all that. And also in Plant 5 where we initiated from you had some remelt furnaces and some Rockwell furnaces, and each one of them was different in their makeup. So you had to learn about what made those tick.

07:10:04
A:
And then you had the saws and you had the graphite shops so you had a combination of many different various operations, which normally doesn't exist outside in private industry. Because what we do here was so unique that it was the only other area that did it was Russia. And we didn't know about in the free world so therefore you couldn't grasp that information anywhere else other than going and getting bits and pieces of this but where all this is put into one operation better know as the founding Plant 5.

07:10:34
Q:
So what exactly went on in Plant 5, what was your job when you got here?

A:
My job initially was to be the shift supervisor. Initially I started shift supervisor, we was running five days a week, three-shift operation. We had two supervisors on each shift and you had what you called a remelt operation and reduction operation.

07:10:56
A:
Reduction operation was taking the green salt and mixing it with magnesium and also lining the furnace pot with mag fluoride and then dumping that mixture of mag, magnesium with green salt into that lined

pot. And then cooking that in the reduction furnace. The reduction furnace for a period of between, it all depends for between 180 to 240 degrees. It all depends on the enrichment.

07:11:20
A:
You had depleted as well as enriched. And it all depends on the enrichment at that period of time. So you have 52 reduction furnaces going at one time the whole time. So you had operators running those and doing something around them. And they basically just cook, you're making a cake and the cake ended up being a derby.

07:11:38
A:
And you end up being a derby weighing 370 pounds, somewhere around there, and about six or seven inches high and twelve inches in diameter. And no one in this site has ever picked on up individually. So those were the kinds of things you made in reduction. In the remelt end you would take those same derbies that you made, cook 'em in a remelt furnace.

07:12:00
A:
And like I say, same kind of mixture. You put some ingredients in which was made up, and everything was crafted by our, better known as nuclear materials control personnel. And they crafted the makeup as I say of the cake. And what you do, you put the mixture in and you cook it and you make an ingot. Well, we made an ingot better known as an eight-inch ingot and a ten-inch ingot.

07:12:21
A:
And sometimes we went eleven-inch but most of the time we made ten- and eight-inch ingots. Those was long extrusions basically compared to the derby. They were about 40 inches, 48 inches high. And you would take off what they called the impurities which would rise to the top in the mold, cut them off and then you would cut the ingot either in two sets, it all depend on the length of the ingot or just leave it as one.

07:12:43
A:
From that it would be shipped off to Ashtabula, be extruded and then brought back here to the site and sent over to Plant 6 to be cut off into small little cores. So that was the process we did over in Plant 5.

07:12:57
Q:
What was a typical day like when you came to work?

A:
Well a typical day as we do now, you have, sit down and find out how many employees you have. By having, we had at one time when I first came a supervisor you had, if you ran three different shifts. If you was on day shift you had the majority of the manpower.

07:13:19
A:
If you was on second shift you had even a lesser amount and if you were on third shift even a lesser amount. So it all depends on what shift you're on. If you're on day shift you had enough to run all the operations all the way from beginning of the jolters to the F machines and move on down the process to make a derby. And you also had enough personnel to make the ingot and also saw it off, saw off the top crop.

07:13:41
A:
If you was on second shift you may have just enough people to make enough for the reduction area. Or just enough people to do a remelt area. It all depends on what your manpower was and the skills of them. And then if you was on third shift even less so you may only make so much for day shift to get started the next day.

07:13:57
A:
Or make so much ingots or set up for ingots to be started the next day on day shift. So it all depends on what you were doing and how many people you had on what you could do. The biggest problem on second and third shift you didn't have immediate maintenance as of day shift. (Waiting for loud truck to pass).

07:14:19
A:
What was the question?

Q:
What was the question. What was a typical day like?

A:
Oh, a typical day. So um like I say you didn't have maintenance on second or third shift so you as a supervisor be very knowledgeable about what you can move personnel around. 'Cause if you're not running the full gamut of the plant then you got to have the ability if something was to break or tear down you had to call maintenance in.

07:14:44
A:
And if they didn't get here routinely in a fast enough pace you have to move your personnel from one spot to another area to get the most production out of it. In other words you're not allowed to just sit them down and wait until maintenance get here, you would then, you would have to be flexible enough as a supervisor to know what they can do with the personnel.

07:15:00
A:
And second shift like I say had more than third shift but third shift was usually the minimum that you could use. And you had to utilize those people to the best of your ability.

07:15:10
Q:
So it was all a balancing act all the time?

A:
Quite often. It was a lot, it was a lot of chess playing because it all depends on how you was left by the day shift personnel. And you always want to make sure that when you get ready for day shift, third shift get ready for day shift coming which is the majority of the manpower coming on that they had everything running.

07:15:30
A:
Or so close to running that it only took like a half hour to get it started. 'Cause that's when maintenance would come in and then kick it in gear. But you didn't want to, want to leave it down because then you would have no less than 40 people sitting there around doing nothing for a period of X amount of time and that in DOE sites is a loss of funds and a loss of taxpayer's good money. So you had to really be very good at adjusting to being flexible to be able to do all that.

07:15:57
Q:
So how many pieces would you make in a certain, how many derbies or ingots would you make in a certain night?

A:
Okay, you was given a, it all, like I say it all depends, sometimes on day shift you can make 63 in eight hour shift. You could if you could use your manpower right. You could make 42 or 63.

07:16:16
A:
63 could be 21 enriched (laughing, truck going by), he's getting that mileage in.

Q:
After he goes past I'll ask that question again.

07:16:27
Q:
I'll ask that question again, ehhhh. (Comment – okay) So uh how many pieces would you make in a given day?

A:
A given day, a given day you can make, it all depends on like I say your manpower but you could make up to 63 in a eight hour shift. And if you have a smaller lesser group you could make 42 derbies in an eight hour shift.

07:16:43
A:
And uh remelting, the max you could make would be 14 pours of ingots. In other words you have, you had a bank of 14 uh furnaces, you could only run one at a time as compared to the reduction furnaces you could run all 52 at the same time. But in the remelt furnace you had to pull vacuum and do things of that nature so there was a lot more critical type process so therefore you only ran one of the set of two.

07:17:08
A:
You have a tandem set, you run one out of two and then after you run the one out of two you would fire up the next one to run for the remainder of the shift and that's how you got 14. So that's how, you could end up, you put a whole gamut of the plant, possible the maximum you can make with the number of personnel 63 derbies and come up with 14 ingots in an eight hour shift.

07:17:31
A:
And so over a period of a day, 24 hours, if you got all your derbies in you ended up with 63 plus 42 plus 42 that's 84 plus 63 145 derbies and 52 ingots in a 24-hour shift.

07:17:49
Q:
That's a lot of uranium.

A:
That's a lot of uranium. Our tonnage was unbelievable and then we went to, I went to make an area manager and when I was area manager we started going seven days a week, 24 hours. That was, that's when tonnage was coming out.

07:18:05
A:
We were making then was a round ingot prior to we started making the flat ingots and the flat ingots associated with the Star Wars. Star Wars that Reagan had started and that (loud truck going by) want me to stop?

Q:
Here he comes again. When he goes by is it like _____ loud?

A:
Can you hear me?

(Cameraman – its pretty _____)

07:18:28
A:
He just seems to drown me out when I'm talking.

Q:
I know. Like right here. Oh good he's going out. All right he's so noisy. We're off the hook now, he's going out. He's got to go down to the BP station. Fill up with water? He'll be there for a while.

A:
With that mud on his wheels, I know he'll be there for a while.

07:19:00
Q:
It'll just be these guys. Okay, so uh, um a lot of uranium was coming through any way.

A:
Right. Tonnage levels, I don't want to tell, the tonnage as I remember it was unbelievable. It was just unbelievable and when we were making the flat ingot for Star Wars we had to actually, we really did not have any what you call separation area.

07:19:31
A:
We had to evolve a separation area and through the makeup of a lot of employees who worked in Plant 5 area is how we, is how we actually separated the ingots from each other. We had to come up with a way to make, 'cause when we poured flat ingots, there was three of 'em at one time. So when you separated the molds, say like my fingers being the mold, you pull up and you have three ingots standing there.

07:19:54
A:
They have to be standing straight up and that was super high. What was great about the running the remelt area was the fact that in the winter months everybody wanted to be there because we didn't have air condition in the place and there was very little heat as it was. It was just overhead heat and if you was in the remelt area you cooked that at about 2,400 degrees.

07:20:14
A:
In those remelt furnaces and in the reduction furnaces it was like 1,800 degrees so it was a lot warmer around those areas. And when the cold wind came everybody used to like to be around those areas 'cause it would make you a lot warmer. You didn't have to worry about the cold. But uh, they would come out cherry red, the ingots.

07:20:31
A:
They looked cherry red. The mold looked cherry red. It was just that hot, it was just that hot. And then they would have to sit for a period of time. Usually they would last sitting in the cooling booth as we called it for a period of a shift and then by that time they was cooled down enough where you could separate 'em.

07:20:49
A:
So talking about those three ingots and flats you had to, when you pulled 'em out they had to stand straight up. So the operators came up with a way in which they took fingers that would be standing like this on the side of the mold, the mold would be pulled up and as soon as the mold get pulled down they would fall down like that. The operators came up with that thought.

07:21:03
A:
There was no technical engineer, there was no scientist, there was no, the operators thought of that and that's how we was able to separate those ingots. We was able to keep it like that. And what was true and tough was to get all those just right. It took us a while but finally got right and worked, and the operators themselves came up with that thought. So that was outstanding on their part.

07:21:25
Q:
So what were the flat ingots used for?

A:
Star Wars that we hear. It was a security issue. We didn't know what they were used, we weren't told what they were used. We had one representative for the site who always went out to Rocky Flats out in, out west and um he would come back and tell us what we need to change as far as our production operations.

07:21:48
A:
Need to increase this, reduce that, things of that nature. Enhance that or something like that. But nobody knew what it was used for. We ended up finding out later through the right to know what they were used for. They were used for the Star Wars, which is the satellite missile thing. In other words missiles fall in from Russia, they would shoot 'em out of the sky.

07:22:04
A:
So that was the thing. We would shoot 'em out with satellite missiles and that was it. That was Star Wars and as far as I know I guess it still exists. I can't say, we haven't shot any missiles out of the sky but Russia hasn't sent any over here either. So I know we made a lot of tonnage of ingots for that. I remember that but I don't know where they at right now, so.

07:22:29
Q:
Now was that the 4-A Project or (Comment: – the 4-A Project) Okay.

A:
4-A Project, which lasted, I would say a good two maybe three years, two maybe three years we made those ingots.

Q:
Wow, that's interesting. Um, how did it feel to be a part of sort of cutting edge national defense at that point?

07:22:54
A:
Um, when I first came here, the people who worked here, the mixture was I would say 80 percent of people who had been here had a been here at least no less than 10 years, 80 percent of the personnel was on site. And 20 percent was the new people who had less than five years, you wouldn't believe the pride that exists in the people.

07:23:14
A:
The people were just beyond themselves when it came, you know you're making this for the government you know in order to protect yourself for the free world. And their pride just exuded. Like I say, 99.9 percent that was because the operators made it. I told you it was antiquated it was, very antiquated.

07:23:30
A:
Uh, the stuff you had, everything had to be moved by hand or else by a piece of equipment picking it up and moving it over. It wasn't no uh conveying system, nothing of that. Just any slight movement to the left or to the right of something when you sit it down on the floor could cause that thing called an ingot or the derby to be impure.

07:23:54
A:
So all those things was taking, and these people handled this stuff by hand routinely, day in and day out. And the pride was just unbelievable, it really was. And I think it made them feel good that we was putting out that kind of level of ingots and derbies at that high level. And it made you as a supervisor feel good because the quality of work just couldn't be matched.

07:24:16
A:
It was amazing how sometimes um because you know after you get, you do it so often, you get very good at how to cut corners. Even though the procedure may say A, B, C, D, E, F, G you know you could skip C because of this. These operators were so good that when they skipped C you didn't know it. That's how good they were.

07:24:38
A:
And you know when you got the final product that looks just like the product that was if they did the whole procedure, the standard operating procedure. And I knew they skipped but I just couldn't catch 'em. I knew they skipped but they were just that good at it. Uh, the things they did, they had done it for so long, for such a long period of time, they had the ability to just do minor changes, would make it easier for them.

07:25:02
A:
Oh, there was times that routinely that even though we was giving them production by supervision to produce X amount of ingots, X amount of derbies in your eight hour period in your shift. There's times where we did it in six, six and a half hours. For the next two hours or hour and a half it was cruise time. And all we did with operators is make 'em clean up.

07:25:28
A:
'Cause what was requested was we mostly get that production out. We got the production out and I told 'em as long as they don't bother me, I won't bother you. And we got the production out for the next hour and a half we cruised. So that was something too, that's how good they were. They could cut the system, the process down and still make the darn good ingot or the darn good derby at the 99.9 percent first time through.

07:25:54
Q:
So it was a pretty efficient operation?

A:
Very efficient and antiquated but very efficient (laughing).

07:26:02
Q:
Now where did you go from Plant 5?

07:26:06
A:
From Plant 5 I went to Plant 9, which, um, took on the enriched; enriched meant 1.25,when used in Plant 5 you dealt with 0.20 depleted of enrichment of uranium. And when you up to 1.25, 1.0 whatever the level of enrichment we were making at that time. This ingot always went up to Hanford site. So there was a different means of sending out, but we made the derbies over in Plant 5 and shipped them over to Plant 9.

07:26:35
A:
Plant 9, I got to learn about the enriched side and also the process of machining ingots over there and you talking about fires, ingot fires or metal fires. You can sit there and watch an ingot being turned on a piece of equipment and as the metal's being cut by the lead tag of the machine, you can just see sparks going; flames just shooting up four or five feet in the air (laughing). It was something to watch.

07:27:10
A:
It was really something to watch, but that would be the routine day in and day out. And um, Plant 9 like I said we dealt with enriched and also I left Plant 9 and went to Plant 6. Now Plant 6 you took the extruded cores and turned them into smaller units to be sent back as the OD turner, the OD turner and

you did samples on both ends and then you cut then down into certain sections to be shipped off to nuclear reactors for makeup of their reactors.

07:27:41
A:
So, um, those are the three main plants that I worked in. Eventually I ended up being the production manager of all managers and that's how I got to know a lot about the site by being production manager of all three managers, so that was interesting.

07:27:58
Q:
What can you say about teamwork in all those plants?

07:28:02
A:
What I found out in this place is similar to my old football antics. You're going to have a quarterback, you're going to have some team members that get down in the dirt and grind and get it done and there are going to be some half-backs that get all the highlights. And some wide receivers that get all the highlights and stuff of that nature. But it's a lot of teamwork and you can't do it alone.

07:28:24
A:
Um, we found out that no matter who you were and how smart you were and how technically astute you are you couldn't do what you do here by yourself. And, um, being in the old private industry, coming here was a real learning experience of how really teamwork works. Because you took to old people who knew everything and how to cut it out and still get the same product out in a good quality manner.

07:28:53
A:
But you got the new people who want to get it more modern, automated and things like that so you had that good blend and that blend really worked back in the good old days of production. And since we've stopped and are no longer making production and are now in the remediation site it's still working there. Because what you got is a bunch of people who are still pressing for it, taking the initiative to question things and don't just accept it "that is."

07:29:14
A:
They will question it and try to make it, enhance it and make it better and put more quality in and quantity out for a more enhancement process. Because you write it up like this doesn't means that it always have to be like that. That old antics of which was like when I first got here said, "we've always done it like that". There isn't a parlay anymore because we're in remediation; you've never done it this way before so it's really not that old, so.

07:29:34
A:
So that's what's kind of unique about this place, and to tell you the truth I've never worked at a place greater than three years. This is the first one I ever worked at this long. I usually move on somewhere else and gone in and out, had enough of that no moved on, and I've took what I've learned there and applied it somewhere else.

07:29:57
A:
Every day I come here I learn something different and new about this place or something new and different about how the Government works or how we do things here on this site when it comes to D&D. So, it's been a fun time, 17 years of fun.

07:30:10
Q:
Great we're going to take a little bit of a break.

Tape FLHP0224

08:01:16
Q:
So about two years after you got here there was a whole lot going on, uh, there was some dust collector releases that were sort of came to the light and there was sort of a media frenzy; what was that like for you?

08:01:30
A:
Oh, well they, to be very honest, I was already going out in the public. Talking to the public about what we did routinely and I always talked to the local school. Talking to the students talking about the things we do because ya'll ain't going to bring light to what you do here at the site. Because everybody thought we did something very respectable, very unique, kind of hush, hush kind of thing.

08:01:49
A:
So we wanted to make sure we let everyone know and just like the European and especially the French who, who, actually take their students at the young age of fourth or fifth grade and take them to some of their nuclear facilities. We wanted to since we couldn't bring them on site at the time, we had never had an open house during the first few years here.

08:02:07
A:
But later on we did have and it reduced the level of frenzy by the local public of what this site really does. But in the first few years the only way you could do it was by communicating yourself, going out in the public vineyard and tell them what you did and how you did it and as a matter of fact you didn't glow in the dark.

08:02:24
A:
Those kinds of things, so you had to go out and talk to students and I routinely talked to local high schools, um, local boards. So I've been on a few boards around here. So it helps with reducing that sense of feeling that you're doing something so mysterious out here that no one would ever know if something was to really happen, it would end up blowing this place off the map of the United States.

08:02:50
A:
So, by reducing that by going out and talking to and communicating to the public. So, um, from the standpoint of when it first came in when we first had the frenzy of media coming on and we had some of the releases; we routinely monitored our releases. That's why the news media found out about it. We routinely monitored the level of releases, what it was; we had all kinds of monitoring equipment on the pieces of equipment that released to the atmosphere.

08:03:19
A:
So we was aware of things happening when they happened so we were routinely active and we've got a trained group here on site who responds to the levels of radiation that may be exposed to, not only our employees at the site but also to the community.

08:03:34
A:
So we sort of like our own little city of our own. We have everything a city has, we have a fire department, we have an emergency response team, we have a medical department, we have a security department in which to deal with traffic and things of that nature. So we got everything, we got a fire department; we got everything that a city has right here on the site so we're able to respond quickly to anything and everything that happens here on this site.

08:03:55
A:
And by having that level of support we was able to respond. But the level got to some point where as the need of some reaction and Environment Protection Agency got involved and they came up with a path forward and their path forward was to slow reduce the level of emissions. And by doing that the only way you can do that is to stop production or monitor all those to a level that would take tremendous amount of manpower.

08:04:21
A:
When we went to monitoring all those units, all those units that we had that could potentially could exist put us at some kind of atmospheric radiological concern in the atmosphere. We went from having, I think we was having, I was telling you 136 employees to having almost 160 to 170 employees. Those additional people all they did was sit and monitor those things.

08:04:53
A:
That was just in Plant 5 that's not saying all the other plants we have and we have 186 buildings on site. So, that was just in Plant 5 an increase of almost 50 people just to monitor those things on a routine basis, 24 hours a day, seven days a week. So, that's the level of additional personnel put on just to monitor those things and to make sure there is no emissions sent to off site.

08:05:18
A:
So, when they came with that thing we knew that we couldn't add on anymore employees because we would just be sitting on top of each other. So they decided finally to shut down the plants on a systematic format and went into what they call shutdown of the Fernald site. And the producing of ingots, producing of green salt, making derbies came to a halt.

08:05:42
A:
So that was an interesting way of doing it, but, uh, EPA had said what needed to be done and the only alternative was to shut down the site.

08:05:52
Q:
What was it like the day they decided to throw the switch and the day they decided to shut down?

08:05:56
A
Well from the employees took it as slap in the face, a total big slap in the face, because for years and years I had told you before they had made 99.9 percent of their production operation in making a quality format. Had no problems or things, had some problems then of course you know you can't make anything without having some problems.

08:06:20
A:
But they'd did very well in the quality and the skill level of the employees. So it was, a very big slap face in the face as we're incapable of making these ingots, these derbies, um, mixing this green salt to a level that would meet EPA's standards and we thought we could and we knew we could. But you have to realize that this site was built like in like 1950, so some of the as I say automation that needed to be induced wasn't induced throughout the years of the people who was actually contracted running the site.

08:06:53
A:
So from that standpoint they hadn't upgraded the equipment, so therefore, the emissions were far more significant in the later part of years, in the later part of the site being in operation than it was in the first part of the site. In the first part we state of the art. Now you've been at it for 35 or 40 years state of art went out the window. So you need to bring in more state of the art things.

08:07:21
A:
And that's when the problem came up we hadn't introduced new type of equipment, more modern equipment and was out there in the private industry who routinely would do it. By being a government site you don't see it routinely because as said you got a three-bid process, you know, and you go with the low bid.

08:07:35
A:
And going by low bid doesn't always bring you the best. Sometimes you need to pay a little money. When you want a Cadillac you don't want somebody bringing you a Volkswagen wrapped in Cadillac outer sphere, you want a Cadillac. That's why you pay that money to get that Cadillac. So that's what happened I think at this site the period of time I was here they didn't funnel in the money to upgrade the process.

08:07:56
A:
The process was still good but you need to add enhancements that would reduce your emission to the atmosphere rather it be land, air or water. So that's what, it was scary, very scary but we knew we could pull out. A lot of people who had been here for many, many years who had really been the whole production, like my former boss, he couldn't stay, he had to retire.

08:08:26
A:
Because the way in which we did things totally changed when EPA came in. And you had to have rather than have where you used to have one operator there you now had two or three. So now you're managing the two or three people doing the one job you used to do with one. So it's a whole different philosophy of thought.

08:08:48
Q:
So what was it like then in the transition from production to cleanup?

08:08:57
A:
Okay, it was an immediate halt where you didn't do anything; you just basically sat and waited until someone made a decision. And it took a good bit of, um, in some areas it took a good bit of over a year to what they actually did something with. By that time a lot of the environmental laws had changed and things had come up.

08:09:17
A:
Like I was telling you, just to give you a for instance in Plant 5 we made the ingots and the ingots in making an ingot it took four people to make ingots, four people. One person to charge the crucibles and stuff, the next person top furnace operator would take that crucible and run it down to that furnace of that tandem and put in the one that was empty.

08:09:38
A:
Then the third person part of that team that made up that ingot was the bottom furnace operator who would attach the bottom mold tank up to the bottom of the furnace and then seal that with a vacuum. The fourth people that was _____ known as the crucible cleanup person would take the crucible after being used would clean it out by scrapping up the impurities off the bottom of the crucible, off the sides of the crucible, shaking it out making sure it can be used again.

08:10:02
A:
That's all it took but four people to make an ingot. Now to take those ingots down at a later point in time after EPA came involved took 12 people just to do four of them. Then you had to bring in another group, another four to do another four, 12 more people. So when you had to get all those 14 ingots down it took over 60 people when it only took four when we used to do, well it took four before we shut down.

08:10:28
A:
It took 60 to take them down the later part of time. So an increase of almost 13 times (laughing).

08:10:36
Q:
Well, why did they do that?

08:10:38
A:
Well, in that certain period from the time we shut down and we fought it like crazy back in production, yes we got some emissions but the emissions are at a level that we can control so we felt like we could take those ingots down. But they said that management said don't, so we left them. So when we went back to it get them back out it magnified by 13 times the number of people to get out.

08:11:03
A:
Just for instance and that's how drastically it changed and it's all the protection of the employee but I say we may have went overboard. There's times that you put in requirements and restrictions that if you got background information which we have, we capture it all the time we've been here, it proves that no ones being somewhat at risk. Why did you put that level of concern on something in that short period of time?

08:11:34
A:
Like I say, it was a year, year or better period of time where they went from being able to use four. But actually it only took three, that third or fourth person was a crucible person that was after everybody else had taken it out putting it down, moving it all around. All he did was clean the crucible our so you wasn't even cleaning the crucible out and it still took that many people (laughing).

08:11:57
A:
So, its amazing what as the EPA, it is like I say good for the employee and some of the personal protection equipment have really enhanced, it really is state of the art. It's stuff like they use when they go up in the space shuttle because it's just that high level and a high tech stuff we use out here. But, um, we need to make sure we do it at a graded approach.

08:12:25
Q:
That is something that I bring up with a lot of retirees. I say to them what is it like for you and you worked in the short-sleeves, especially in the summer time when it was real hot in there. What's it like to look on TV on the news and see people in full anti-Cs and full face respirators going into those same areas you worked in your short-sleeves.

08:12:45
A:
Well, it's interesting that you bring that up. If you remember the Chernobyl thing and you remember the tape and the people doing the tape, if you remember any of the people just picture just roll the tape in your mind. If you look at the people that was walking through when the guy was doing the taping not one of them had a respirator, (laughing) not one.

08:13:09
A:
And they was in a radiological zone that we on this site would monitor as totally contaminated. But they was walking through with non-respirators, they didn't have booties on their feet. They was just walking through in normal attire and shoes. If don't know or are unaware of about it, it would make emphasis on it but if you're aware about it and your knowledge, and skill level and you've trained on it, then you look at things a little more different, with a little more of a scrutiny.

08:13:42
A:
And I would say those gentleman who previously worked in the '50s, '60s, and early '70s was unaware and equipment was basically unavailable. Because even though this being the government the new innovative things being made at this site are being made in the private industry. So, therefore, we kind of create our own kind of level of protection by the way in which we work the process.

08:14:09
A:
Because only the government could spend that kind of money we spend on personal protection equipment. Where in the private industry they would tell you don't worry we're not going to buy it for you. Where the government can so therefore you get some of the best equipment, some of the best protection for your feet, your hands, your ears, your eyes, your nose and respiration and so therefore, you're getting some of the best.

08:14:30
A:
So, yeah, they worked at those levels and yeah they worked with short-sleeves but you had to realize that it may have not been developed at the time. And by not being developed that was the best at the time and the exposure and information that they've gathered throughout the 40 plus years they have about this site and other DOE sites are similar in nature.

08:14:54
A:
Have gained them to realize that you need to have the kind of anti-C clothing as well as SCBAs and _____ and respirators things of those days are requirements then. And I think that the information that's gained in by doing that by being them and say it goes across the board. So it's sort of like protection even if you're unaware of it.

08:15:15
A:
They make it across the board if you're unaware of a new type of respirator just because it being a government site, it's across the site; you'll get the better one. So in a way you'll gain a lot. But those gentlemen and ladies who were exposed early on to those things of not wearing long sleeves, um, being involved with the green salt spills and things of that nature, they've canceled some of that information in routine absent or not.

08:15:42
A:
On part of the Fernald monitoring thing, whereas if you've been here X amount of years each year you go back for some level of monitoring medical down at (real loud truck goes by – paused). But, um, that's what's good about this site that your being monitored for what may have happened to you.

08:16:11
A:
And, therefore, um, you can give that inside such as the program you got going right now. This kind of information is worth millions to people who are unaware of what went on at this site. So it brings on a whole new light to it, so.

08:16:26
Q:
Great, and, um, there was two different lawsuits, of course, happening near that same time, '86. Well it was actually a little later than that '89, I guess, and one suit was brought by the workers and one suit was brought by the community. During that whole legal battle what was your impression of that whole legal battle that was going on?

08:16:51
A:
Standpoint is combination of many different things, because we was involved in Phil Donahue come out here, we had *20/20* come here, we had *60 Minutes* come out here. It was a bevy of news media; we had people from Europe, Russia standing out there at the end of the excess road. One of them wanted to interview employees leaving the site.

08:17:14
A:
Um, we were the apex of news media for many, many, many years and many, many months. And so, they basically took a lot of the people such as myself who was out talking to the public to a special type of training. So therefore, we could go and therefore, you wouldn't get hookwinked into answering a question by news media or news reporter or just a phone call to your office.

08:17:43
A:
So therefore, you're able to answer with a bit of feeling good about yourself and that what you're saying is truthful and honest and accurate to what you're saying rather than being hoodwinked into saying something that really isn't true about the site. And we had, I remember going to many, many classes on this being able to talk to the media and being in front of the camera.

08:17:59
A:
Saying the right things, how to answer a question without answering a direct question and things of that nature and I thought that was some of the good positive things we did here at the site. Because it's like the McDonald's commercial, you can sell many hamburgers at one stand or you can thousands of hamburgers if you have a lot of them.

08:18:17
A:
So it was a thing of more employees talking about Fernald and the good things that Fernald has done rather than have one or two persons spokesperson or spokesman sort of speaking. Because the more you have people saying good things about you that's going out in the community saying the more people you'll change about philosophy and thought that the news media has put out.

08:18:41
A:
Because they already got the media, um, media splash because once they're on TV they already got that mass audience that does so well for them that just sit there and listen like robots and say that was great, that's the truth, honestly yes. I have seen too many times, especially at this site, where stuff has been construed, ah, by our local news media as something they wanted to make news at six "Fernald, da, da, da."

08:19:09
A:
And it really isn't anything but they just make you think early on that there's something about Fernald that's going on at Fernald. You being the private, the private, uh, employee, or guest or living area in which you live in because Fernald has got this coming on and be there at six because we'll tell you about it.

08:19:30
A:
And then when you wait there at six and you listen, you say oh, there really wasn't much to that (laughing). What are you talking about here, on and on and on. You talking about when you was talking about the level of exposure, especially when it comes to we tell 'em kilograms as compared to millions of a gram (laughing).

08:19:49
A:
There's a big difference if you aren't aware to what kilogram is compared to an ounce or a pound, you can run by the local people and they'll say "oh, my God they're doing something wrong." But if you know of it, you're aware of it, your skilled in it and trained in it and knowledgement about it then it isn't. And that's what I say about the French they're very good, they get their kids involved at an early on.

08:20:13
A:
Let them know about nuclear power and how the effect on it and what they're doing to make sure it doesn't affect the environment, doesn't affect their livelihood. So, therefore, when you're fourth or fifth grade you learned that when someone brings it up on the news media or news you can digest it put it in your mind and reference rather or not even if it has any truth to it.

08:20:34
A:
Whereas, we in America, we have a tendency of if we don't know you scared of it so you tend to run, you want to go over here, and say "oh my goodness they're doing something bad because I heard it on the 6 o'clock news and they got to be telling the truth and they got to be telling the truth because they wouldn't put it on the news unless it was the truth.

08:20:48
A:
Well, even in the sports media they tell you that remember that one guy who said I had dinner with such and such, he even lied when he was on TV (laughing). So it happens all the time you just got to digest it think does it have any flavor to it and whether you want to eat it and if not then kick it to the side. So don't believe everything that you see on TV and only half of what you read in the newspaper.

08:21:12
Q:
I like that. Oh man; let's talk a little bit about the transformation of the workforce from people who made uranium to people who were cleaning up the site. Was that a difficult transition and why did we want to keep production people around?

08:21:30
A:
Okay, it wasn't totally difficult but was a thing of whereas the old thought or philosophy was we've done it this way forever and forever, well, when you turn to remediation we were totally stepping into a whole new bound. Well the only thing we did close to remediation was where you captured your waste

products wherever and you call it, you basically put it as waste products but you didn't really remediate all you did was put it in either a drum or you put it in a can.

08:21:59
A:
You identified and you shipped it somewhere. Where you shipped it, it all depends on where it was being shipped and whether or not it was being controlled or contained or anything, that was back in the old production days. Nowadays, when you want to capture the waste to identify it, you got to have documentation that follow with in other words paperwork to following saying exactly where it was produced and whether or not it had some level of uranium contaminants in there.

08:22:27
A:
Those are far different in the old days of just marking it, identifying it, saying the weight, tear and then ship it (laughing) and then hope somebody whoever receives it was taking care of it where it was shipped to. But now you're "cradle to grave," you ship it and you're responsible for it even though it's being picked up by it being shipped to X amount spot on sight.

08:22:46
A:
You're still responsible until that person receives and says have yes and I have identified. And then responsibility and accountability then fall upon the person who receives to keep track of it, to make sure it's monitored right and being put in safe configuration. And then until its being shipped to where ever it's being shipped to, whether it be Nevada Test Site, or else being repackaged for something else.

08:23:06
A:
Therefore, the accountability falls upon as far more intense than it was in the old days. In the old days you could slip it out to our pits and dump it off. People have gave out stories that we've even taken bulldozers and drove them into the pit and let them sink. That was before my time, I don't know, I can't yes or no but I do know about some of the _____ I used to take right from Plant 5 and take it out to the pit and dump it out there. I know we did.

08:23:34
A:
So was here when that happened. I know we used to take drums of waste material and ship it somewhere. At the time I didn't know where it went I just know I shipped it to Plant 1 and at Plant 1 the drums was going somewhere because they weren't stacked up like they it was when we shut down production. They used to go somewhere from Plant 1.

08:23:54
A:
So, those kinds of things that kind of philosophy and mentality make you realize you no longer just throw it in the ground or throw it in a hole somewhere till a point, whereas everything when it comes to you if you're going to call it radiological waste or else some kind of contaminated waste that you've got to have some accountability as to where it goes as well as it what it is before you ship it.

08:24:17
A:
So that philosophy changed there and the old production people were just market, market, you say what it is you put the weight of the drum, you tear it off and then you got the final product how much the total is and that was the end of it and you ship it and no follow up was needed.

08:24:32
A:
Whereas now the follow up is needed and also to its final resting place whether it be here, to the cell or to the Nevada Test Site. So accountability is far more and there are far more employees, which now support. Where back in the old production days you had many, many employees out here that were we had more people north of the fence than we had south of the fence.

08:24:58
A:
It's totally turned around now, there's less people north of the fence and tons people south of the fence which is basically the administrative part of getting the documentation, the administrative part of what is involved as far as the site. So, therefore, when it used to be four or five to one wage employees to every salaried employee, now it's totally the opposite.

08:25:19
A:
It's four or five salaried employees to every one wage employee. So the mix has totally changed and the reason why the documentation involved in making sure that we do something at site that it's documented correctly and put on the right paperwork and correct stuff is sent to EPA, Department of Energy and also to our leadership here on site.

08:25:42
A:
So that's the change; the mind set has went from and I've visited other sites, I've been to Savannah River which is 560 square miles, I've been to Hanford which is 564 square miles, I've been to INEL which is 640 or something. It's bigger than Hanford and I've been to the South Valley Site, which is down in near Albuquerque, New Mexico.

08:26:06
A:
Now that's five miles underground. That's a unique site; that's a very unique site. That's where they say they're going to send the enriched waste material by products and things of that nature. But those sites in relation to this site, this site is small compared to those, you can put it in one corner and wouldn't even know it was there.

08:26:30
A:
But those sites are huge and, um, the philosophy that's going on here is the philosophy that's going to eventually go on to all those other sites. So what we're doing here will break ground and give them the

baseline of what they need to do at all the other sites. And that's what's so great about this why I've been here for 17 years is that what we're doing here we can apply at all the other sites in a much broader band.

08:26:56
A:
Because if we can hold it here at 1,050 acres we can definitely take it to the 640 square miles and make it happen. But the thing is make it good here and then expand it to those. Because if you take what they do there and try to bring it here it'll never work because it's far too big and far too humungous in order to.

08:27:14
Q:
Dick said something this morning that I want to put to you and get your reaction. He said that here at Fernald we're pioneers in the DOE complex. Can you explain that a little bit?

08:27:28
A:
Okay, that's what I was talking about what we do here is so unique to all the other sites that the _____ site is basically a site that I was telling you about; it's five miles underground. You go down and you're in salt mines and what they do there is basically they trying to take what the waste, the enriched waste and packaging what they call a six pack, just like the beer cans say six pack.

08:27:48
A:
Packaging in stainless steel say six pack and feed it down underneath the ground and sort of like sure it up down there and wrap it with salt and salt down there is underground and it grows. Actually salt grows down there even though they create a cavity out of the salt bed, stick in salt pack and over a period of time the salt will just eventually creep over the six pack.

08:28:12
A:
That's one the places, um, but Dick is saying we're unique pioneers is what we're doing here as far as D&D facility. How were doing it by blowing up the facilities and capsulating things of that nature, what we're doing for PPEs or breaking new ground where never has been before.

08:28:32
A:
A lot of people haven't done this level of building a cell on site. A lot of people haven't went to their pits and dug anything out. A lot of people haven't went into their silos and pulled it out, recaptured it in some kind of process in order to get the good ingredients out as well as get rid of the waste and separate those two. That's unique and that's what makes this place different in every day. There's no other site doing what we're doing.

08:28:59
A:
And Fluor Daniel is by being a very major engineering company has brought some of their real qualified people who have helped generate this. But most of the changes were done by the people who have been here. Not the Fluor Daniel oversight, it's the people who are here see it everyday, work with it every day. Like I told you before back in the old plant, they're generating these ideas coming up with thoughts and ideas how to make it better.

08:29:29
A:
And the technologically stuff we're doing here they using all over the site. I routinely, previously, I was in property and being in property when you ship anything from this site to another site or to any other DOE site, you have, it have to be run through the property manager. He got to sign it and ship it and all that stuff.

08:29:44
A:
And so we've sent stuff to Ashtabula, we've sent it to Savannah River, we've sent it to Hanford, we've sent it to, um, Oak Ridge things that we do here and let them test it out at their sites so therefore they can utilize at some later point in time. And so routinely we are sharing our technology to other sites so like we say is pioneer. We're breaking the whole mold.

08:30:09
A:
And everybody else will follow suite behind us with apex of the peak. We're doing it.

Tape FLHP0225

09:01:08
Q:
O.K., first of all I'm going to ask you just sort of a general question. What kind of person works at Fernald?

09:01:13
A:
(Laughing). A person that's inquisitive, intuitive, profitable, intelligent, got a love for life and a person that wants to do something good for not only themselves, their family as well as the United States of America. Working for the Department of Energy isn't an easy task, is not an easy task. Private industry is far easier than working for the Department of Energy.

09:01:45
A:
You have less documentation, less paperwork, less chasing down this, follow up on that, making sure that's tied, the T's crossed the I's dotted those things are in the private industry, um, they say cut it out

because it cost too much. Whereas here you got to make sure it there and it's done. It's as simple as just getting a procurement record.

09:02:08
A:
Making sure that all the signatures are there, the validation and approval is there. Those simple things are something that in the private industry you don't care about it. You just say go get it, get it done, move on. Where as here you have to have that intuitiveness to know who to make sure you get these things done. Have that intelligence to make sure that when you go see that person, you've already briefed them so they can sign real fast.

09:02:29
A:
Because their time is valuable and so is your time. And you got have the skill to know how to get it through fast if you need it fast. Because if you go through the normal process and any, and anyone will tell you just ask anybody in social security situation. It takes time to get money out the government; it takes time to get anything out the government.

09:02:48
A:
So if you're going to do those things and your working here, you're routinely work here, you have to know that those things affect you every day. And if you think they don't then you probably not working here (laughing). So, um, those are the kinds of people working here. People that know that it takes time to get things through. And those things are things that are critical to making the government as efficient as it is.

09:03:08
A:
Sure the government have some faults, there ain't going to be no lie about it. Um, they have had hammers that cost $200, they have had space shuttle that was built on best cost, low cost, best offered type thing where as the space shuttle blew up. Because low cost, therefore, you're not buying the best, you're getting whatever they give you, which is low cost.

09:03:30
A:
So, those are the kinds of things that are about working for the Department of Energy, makes it a challenge everyday. And the people who work here are people, normal everyday people but they have a drive and a sort of sense of purpose that make them realize that what they're doing is doing something that makes them proud. Not only profit themselves but for their family for the community.

09:03:55
A:
Least by working here you know what can happen before everyone else know. And if you're working at say Ford, or working somewhere like General Motors or working at P&G, if it happens here you'll hear about it through the grapevine. But if you know about it and anybody working here you can get out of site and leave the site.

09:04:11
A:
And have some little up on everybody else. But we don't have anything of that nature that would cause that kind of hazard to the community. But it creates a sense of what you know everyone else doesn't know and the news media knows only so much, they can only exploit so much. But there's a lot of things we do here make you proud of yourself.

09:04:31
A:
The technology we do here, second to none and you're a part of it. Um, building a cell on site, second to none. Nobody else got one. The waste in which we ship it, we ship it, how do we ship it, second to none. We send it to Nevada test site, second to none. We're the best.

09:04:53
A:
The property here, how do we tie in with the community. We've given computers to the community, we given office furniture to the community; we've given a set of units of pumps to state of the art pumps to Cincinnati Technical College. They use it, and they've created, they've taken that and developed it into a training class and they've brought engineers from Procter and Gamble from all around the world, state of the art type things. So what we do here is unique.

09:05:19
A:
And um, that's a sense of self worth that you can't get almost everywhere you work. So I think the people that work here realize that self worth means a lot to them. And nowadays and time when all you do is work, work, work, self worth has a lot of input to as to the people working here and I think that's quality of the level of the people working here.

09:05:40
Q:
That's great. Beautiful, um, what do you think the biggest challenges for Fernald are going to be in the next couple of years?

09:05:50
A:
Meeting the plan. The plan has changed from a 10-year plan now to the plan. The biggest thing that Fernald has to do is to keep the positive innovative things that they have done throughout the years; um, the years in this initial plan was 25 years, now it went down to 10. Somewhere between 10 and 25 is where the final outcome of Fernald will be.

09:06:15
A:
So you're talking about meeting that plan and making sure that everything is in place and the community is involved and the outcome is what initial input went in as. In other words, before we say we're going to turn this into green land and create the cell and break out the administrative area to be given back to the community and put woodland out here with grass all over it.

09:06:41
A:
Meeting that is a challenge. And, um, a challenge with all the constant changes in regulations and requirements that the Department of Energy goes through as well as the EPA when it deals with water, land and air. Those are constantly changing because they're becoming more, more requirements upon them because they find out more and more data about certain situations.

09:06:59
A:
So as quickly as they tighten down on those things makes it tougher for Fernald to meet. And if they're able to meet it that's going to be the major challenge being able to apply the knowledge and the skills and the technology that we have available for us or create the technology that we need in order to meet those ends. And meet those ends at the same time line that we stated that we would meet.

09:07:22
A:
That's the biggest challenge. Because you're going to definitely run across hurdles and all kinds of fences thrown up in front of you to keep from reaching that. And if you're focused and you have a means of making sure that everyone's communicated about what needs to be done and how to get it done, you can do it.

09:07:39
A:
But if you got shortcomings in your communication on how things need to be done you're going to make that timeline harder to be met and Fernald needs to be focused in that matter.

09:07:53
Q:
Great, you mentioned the site coming down pretty fast what would you like to see personally, what would you like to see done with the land here?

09:07:58
A:
Personally – turn it into five or six football fields (laughing) all of them named after me and my kids (laughing). But, ah to be truthful with you, give it back to the community because it once was community. And the Department of Energy owns the land and basically, um, Fluor Daniel is just a sub that the Department has contracted to make sure that things need to be done and committed and processed through.

09:08:29
A:
Um, there's a lot of good area around here whether or not the community chooses to use or not is their option. But giving it back to the community and giving them a building to be able to use. There's a lot of good administration buildings we have here available they could use for a park or things of that nature.

09:08:47
A:
Yes, the cell will be close by but that's part of when you talking about safety of the individual rather than shipping that material all the way to Nevada and creating more of a potential of a hazard to the more than just to this area. The smart thing is to put it into the cell. And, um, so therefore it's not running all over the United States with the potential to someone to hit it by either rail or by plane or by other means that might happen to it.

09:09:15
A:
But, um, I'd like to see the site returned back to the community and let the community choose the option whether or not they want to use it or not. And I think that's the option of the community as a whole. They're very close to what goes on here every day on a routine basis either from us as Fluor Daniel or Department of Energy giving them feedback.

09:09:36
A:
So, I think the community is quite aware of what's going on so there's no need to all of sudden tell them well we got this land for you, you can have it. They will be quite up to date and abreast of what's going on and won't need to approach that subject. They'll have an action plan and path forward they need to go with.

09:09:49
A:
So if they choose to go that way, choose not to, it's their option, but at least you're giving back to the people who were originally here.

09:09:55
A:
Great, I just have one more question, it just came to me (Comment: Oh, Joyce, Joyce, Joyce). (Laughing) You made a lot of good friends working at Plant 5 and working at Plant 6 (Comment: No I haven't, I paid them well.) (Laughing) Um, how are you going to feel the day they finally flatten that building?

09:10:18
A:
About as good a day as when they flattened Building 12. Right now they're flattening Building 12 and they have already flattened Plant 9. A part of you goes down with it if you've been a part of it. When they do 5 and 6 it'll be really hard, because 12 is down, 9 is down and those are the matrixes I've been in and um, 5 and 6 are the only two left and they're next to go.

09:10:43
A:
So, from a standpoint of production, part of you will go down with it, but your memories will never leave. Because routinely you'll run across somebody then and I've got a lot of people I work with on this site who have previously worked as you call chemical operators are now supervisors and managers and all across the site.

09:11:01
A:
So, therefore, whenever I see them I'll think of it. Every now and then I get three or four of them in a room and I'll catch them all together and I'll say you know we need to go back and start production (laughing). Because when you start going this going, because then you had a sense more of a purpose when we was in production you had a final product.

09:11:19
A:
But this being remediation the product isn't all as simple as an ingot or a derby. Um, it's packing of material into a drum, or a sealand container; how is that product if it's called waste. You know and you wonder about that product line thing.

09:11:34
A:
So it's kind of being tougher to be associated with something that you call waste or you're shipping it to some place they're going to identify the waste as compared to them having a product which can be reutilized for some other means, which helps the Department of Energy as well as the government.

09:11:52
A:
It's a tougher line to hold because you as an individual the sense of purpose isn't as strong as it was when you made an ingot or a derby.

09:12:05
Q:
Great, all right. Is there is anything you'd like to add.

09:12:11
A:
And that's all folks (laughing).

09:12:13
We need to get nat sound real quick for about 30 seconds. This is nat sound.