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Transcript

Name: Brenda Perkins

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Tape FLHP0190

07:01:05

Q:

All right, first of all if you could say your name and spell it just to make sure we have it right.

A:

OK. Brenda Perkins. B-R-E-N-D-A P-E-R-K-I-N-S.

Q:

Great. First of all if you could give us a little bit of background. Um, where you uh grew and and sort of your pre-Fernald jobs.

07:01:26

A:

OK, well I was raised in Warsaw, Kentucky, actually about three miles outside of Warsaw. Out in the country, come from a large family, there's seven of us kids, so nine of us altogether. And we're all fairly close in age. Thirteen years separates the oldest from the youngest. So we practically had our own ball teams. But living in the country and not having a lot to do we had to entertain ourselves.

07:01:56

A:

That was before the days of cable TV and stereo systems. You know you just had an AM radio. So we played a lot of sports. Tag football in the winter and basketball and baseball in the summer. And uh I graduated from Gallatin County High. And uh started work right after high school at M&TE, M&T Chemical which is a chemical plant right outside of Carrollton, Kentucky.

07:02:22

A:

And uh they made pesticides. Chemicals that was put into the pesticides, the raw chemicals. We also made pure fluoride that was eventually broke down and put into toothpaste. Uh we had a coatings division that made paraffin that's used inside of your, uh your Dixie cups and your different types of cups. Uh, we made rubber for different companies, used it for gasket materials and materials like that.

07:02:51

A:

Uh, we also had a section that made electrostatic paint for Samsonite for their furniture or for their luggage. And we had another division that made paint for the military; the army gray that was used on naval ships. And I worked there four years and being my age working seven days rotating shifts, rotating every seven days to a different shift. And three out of four weekends I started job hunting. Went through a job agency and landed a job here at Fernald.

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07:03:25

Q:

What were your first impressions of the plant when you came here?

A:

It was really strange when I first came in. Uh, I had come from a non-union shop into a union shop. Going through the security clearance and then when they bring you in the orientation, was about a day orientation, and they just covered so much material. There was no way you would remember everything.

07:03:47

A:

And I was placed out in the Plant 5, was the first area that I started. Plant 5 at that time was operating one shift, I came in as a chemical operator. And uh, I was the only female chemical operator in Plant 5. They had hired another female that was working in Plant 1 at the time but I was the first one in Plant 5. And the average age in Plant 5 was 55 years old.

07:04:14

A:

So it was really a big culture change coming from a place where I was working with a lot of folks my own age and then working with all these older guys. And uh it was really quite comical working with 'em because they were afraid to let me do anything. They didn't want me touching anything uh being the first female to work in the chemical division in Plant 5, they were scared I would get hurt.

07:14:41

A:

So uh I really had to fight in order to get to do the jobs that I was assigned to. So it was definitely different.

(Some discussion between cameraman and interviewer and tape stops and restarts).

07:05:09

Q:

Uh so I'm going to sort of put that question to you a little differently. Uh what was it like being the only female in Plant 5 when you first got there?

A:

Well it was really strange with the older guys because they were scared to let me touch things. Uh, they were afraid that, there was a lot of heavy lifting in Plant 5 and they was afraid I'd either hurt myself or I'd get contaminated.

07:05:35

A:

And so they were just, every job I was put on I always had somebody running up as I'd get ready to perform the work and more or less jump in front of me and start grabbing the tools or start grabbing the

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equipment and do the work for me. And it was a big push to get these guys to let me do my job. My first job at Plant 5 was down at the capping and lidding station.

07:05:59

A:

And a guy named Will was my partner on the job. He would cap the pots after it went through the F machine and they put the green salt in the furnace pots to go into the Rockwells. And my job was to put the lids on and then take an impact wrench and put all the nuts and bolts on it, tighten 'em, torque 'em down before going into furnace.

07:06:18

A:

And as I'd turn around he would take a pot out, sit it on the floor and as I turn around pick up the lid, he'd grab it real quick and take it over and stick it on the pot. And I'd have to get on Will, you know Will, let me do my job. I'm making the same amount of money you are, you need to let me do my job. So it was at the very beginning it was a little difficult to let the guys, have the guys let me perform my work.

07:06:41

A:

They was always wanting to grab at the stuff. And you know the pot lids were heavy, they were about 65 pounds. So swinging them around was a hard chore but I was used to it doing a lot of farm work; puttin' up tobacco and hay. So I was used to that type of work 'cause I used to do a lot of summer jobs living down at home. That was about the only job you could find.

07:07:04

Q:

So they tried to take care of you?

A:

They were trying to take care of me. But it didn't take long that they seen that I was going to do my job along with 'em. And we all got along great. There were only about 20, 22 people in Plant 5 at the time and uh we just all got to be really close.

07:07:26

Q:

So when you first came here you had to get a Q clearance to get your job?

A:

When I first came in they had Q clearances and they had L clearances. A lot of the areas they had dropped the Q clearance and so I was only required to get an L clearance which they still cleared you but you couldn't work with the super-sensitive information.

07:07:47

A:

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And there was only a couple of areas in the plant site at that time, other than some areas in the administrative area, where security and payroll and those areas they still had Q cleared people. But most of the operators they had been Q cleared and they dropped down to L clear.

07:08:05

Q:

And you started in what year?

A:

I started March of 1980.

Q:

Great. So they were still in uh pretty much in operation and they would be for about the next six years really. Um, so you then after your experiences when you first got there you went to the midnight shift to start up a new crew?

07:08:30

A:

Yeah, we went uh when I first hired in they only had the day shift. And in '80, late 1980, early '81 production really started picking up and they were, they were just bringing flocks of people in. And Plant 5 went just it almost seemed like overnight that we went from a first shift operation to a three shift operation. And Paul Ball was the area manager over Plant 5 and Ed Schonegg was the, or Paul was the general manager and Ed was the area manager.

07:09:03

A:

And with all the new people they had brought in and with the seniority of the, the operators that was in Plant 5. At the time they only had one person on second and one on third to operate the Rockwells. So they had asked me because I had gone through and trained on all the equipment and what they called the A area which was the jolters, the F machine, the capping and lidding, and the Rockwells.

07:09:28

A:

If I would go on midnight shift with this new crew to start training the operators on the equipment because they was having to put the three shifts on before they had an opportunity to train everybody. 'Cause they was just bringing 'em all in so fast. So I went to midnight shift and uh we got the third shift started up in the A area.

07:09:48

A:

And then about six months later they started bringing people in on midnight shift to train me in the B area and then we started that up. Which is the remelt furnaces, top and bottom remelt, burnout station, bolt separation and the saws. So after about, I'd say about six months on the midnight shift we started up the B area.

07:10:12

Q:

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What was it like working at night?

A:

Nightshift was, it was actually, it was a lot of fun. You didn't see a whole lot of people, you had the crew you worked with. By then a lot of the folks that come in, we had hired a whole lot of people out of Ralston-Purina and there was just a lot of folks with a lot of chemical background but had never really worked at Fernald, this type of background.

07:10:40

A:

Which is totally different than working at a actual chemical plant. Everybody just really clicked really well. They took care of each other. We ran around together away from work. We, they formed the Fernald Softball League, we all played softball together. We'd go down and play on Wednesday nights and then come in and work all night and it was just a lot of fun.

07:11:03

A:

We all just got to know each other plus we got to know our families. You know I got to know a lot of the guys wives and kids and uh they started bringing several females in at that time. And it was a real relaxed atmosphere where on day shift so many people coming in the building that it was just a totally different atmosphere.

07:11:25

Q:

So tell us about some of the _____ that went on with you guys.

A:

Well in Plant 5 uh there used to be some water fighting that went on over there. Uh, with Plant 5 being more of a refinery type setting, different from chemical, the water fights down there were little water bottles. We'd take the uh, the uh eyeglass cleaner bottles, wash 'em out real good, fill 'em up with water and everybody had their pistols is what we called 'em.

07:11:56

A:

Uh, some of us had two pistols and some of 'em only had one. And we'd just slide 'em in our coverall pockets and somebody'd go walking by and you'd pull one out and give 'em a good shot. And there was one guy that worked down in Plant 5 that I think he couldn't wait to come to work everyday for his water fights. And uh he loved to always steal my water bottle.

07:12:17

A:

The guy's name, the guy's name was Rip and uh so one day I fixed him pretty good. I went in, when I went to fill my water bottle I took the nozzle off and taped it and stuck it back in my pocket to make sure he could see it and then I had my second water bottle hid. So when he grabbed my water bottle it wouldn't fire. He kept spraying it and I was able to get him pretty good on that one.

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(Cameraman speaking and tape stops and starts here).

07:12:47

Q:

OK. So we were talking about kind of the fun you had in Plant 5. Now I know there were some other things you guys did.

A:

But uh you know I spent three and a half years down at Plant 5. And we did, we all got along very well and had a good turn. But Paul Ball made me mad so I bid out of Plant 5 and went to Plant 2/3. And it was kind of ironic at the time they were gearing up to start up 2/3 and they were gearing up to start up the Pilot Plant.

07:13:20

A:

And so I had put in bids for both plants not knowing whether or not I would have enough seniority you know, who all would bid. And with the number of bids it had gone up at that time. And so I put in a bid for both plants and uh I didn't know where either plants were nor what they did in either plant. 'Cause during that timeframe if you worked in Plant 5 that's where you went and that's where you left from and you didn't roam around the site.

07:13:47

A:

And uh so I got a call one day from Industrial Relations and told me that I had my choice, I could go to 2/3 or the Pilot Plant. And the person I talked to really didn't know what either plant did either. So I just flipped a coin and 2/3 won the toss so that's where I went. And I went down to 2/3 then that was really more into the chemical, the type of work I was used to doing.

07:14:14

A:

Uh, and uh there were only seven operators in Plant 2/3 at the time. And they were gearing up to restart production, get into full production. And uh so I started working with guys like Howard Lydel and Jerry Green and Bob James were the three most senior operators in Plant 2/3 at the time. Started out training in the digestion area.

07:14:40

A:

Then I moved down into the denitration area over to the refinery sump, hot raffinate, evaporator and then eventually worked my way into extraction. Which in extraction there were very few operators that got the opportunity to train and learn that process and that was the uranium purification section of the plant. And down there you know being a true chemical the water fights were a lot better 'cause you went from little water bottles to water hoses.

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07:15:09

A:

And uh when we were cleaning out tanks you got to go to fire hoses. So you could really blast somebody good with a fire hose. And so that was a lot of fun but at 2/3 going down there and that plant there I pretty much stayed on day shift until I went into supervision.

07:15:31

A:

But getting back into the nitty-gritty, dealing with sulfuric acid and nitric and dealing with those types of chemicals and those types of processes I just fell in love with the plant. I love that type of work. And uh, the operators down there when we did pick up operations and get all three shifts and the entire plant running it was just great.

07:15:55

A:

We brought in a lot of new people and got to know all the new folks. But then when we got into the shutdown it seemed like the plant just really deteriorated very quickly. Uh, we shut the site down, we just came in one day and got a phone call and said that's it, turn it off. And uh, at that time I was a shift supervisor and Tim Huey was a area supervisor and he was on vacation, I was filling in for him.

07:16:24

A:

And uh, I received the phone call from Bill Britton. And I jus-, I responded by sayin', "I can't turn it off." And uh, Bill got quite irritated at me, and let me know that he was, he wanted the plant shut down, and he wanted it shut down right now. And uh, so I went back and explained to him that if I did that, he was gonna see the biggest fume release they ever saw on this site.

07:16:47

A:

(Chuckling) Because I had everything in full acid. I had the metal dissolver runnin', I had denitration runnin', and he wasn't gonna hear silence on the tower, the nitric acid tower, unless he wanted a big orange cloud. So I did convinced him into lettin' me shut everything down slow. They didn't let us empty the systems, and uh, after we were shut down for, I don't know, I guess it was about six or eight months, the pigeons took over Plant 2 and 3.

07:17:14

A:

So uh, we were in one night, they had scheduled us in one weekend, to try to clean up 2 and 3 because it had gotten to the point it was becoming a health hazard. And uh, we run this real large campaign uh, worked around the clock seven or uh, for the weekend, three shifts and did a good scrub-down, of Plant 2 and 3, cleaned everything up.

07:17:36

A:

So we decided that we weren't gonna let that happen again to our building again, so we built us a nice big scarecrow out of anti-C's. Stuffed it full o' towels and, and uh, coveralls and stuff that we'd found

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over in Laundry. And we hung it out on the north uh, west corner of Plant 2 and 3, where there's a, an old conveyor system, that comes into the plant, and we hung it off o' that.

07:18:01

A:

Well, one night, Doc Cleeter was comin' in off the Plant 1 pad, bein' the utility engineer. He flipped his spotlight on and was just checkin' outside the buildings, and he saw this uh, our scarecrow. And uh, he wasn't real happy with us because he didn't think it was a scarecrow. He thought it was an actual person, that uh, had committed suicide.

07:18:19

A:

So uh, needless to say, the scarecrow went away real quick and the pigeons came back real fast. But uh, it was, it was one of the pranks we pulled that we were, didn't realize we were pullin' at the time. We thought we were bein' creative.

07:18:36

Q:

Can you explain to us exactly what the process in Plant 2/3 was? And some of your responsibilities like, one thing I've always been curious about was "gulping the pots."

A:

Okay, well, 2/3 it, it, everything started on the digestive end, which was down on the uh, in digestion down on the west end o' the plant. You would bring in uh, black oxide, uh, sump cakes, it was stuff that was either processed through the furnaces in Plant 8. Uh, it could be uh, the black so-, black oxide that came out o' the dust collectors out o' Plant 5 through the re-melt furnace and the burn-out station.

07:19:13

A:

And you would bring it in and you would dump it into your digesters. And re-digest the powders back into a liquid form. And then from there, you would have your higher residue and your lower residue content material. Once you digested it, then you would send it over to the hot raffinate building. You would pump everything over, and you went through a filtration system.

07:19:36

A:

And the filtration system in the hot raffinate building is just the opposite of the filtration system in Plant 8. In this case, your cakes that stuck to the outside of your, your filter, it's a rotary vacuum filter, was your waste material that went into a tank, was neutralized, and then shipped to Plant 8, to be re-filtered and go out o' here as waste. Uh, at one time, it went to the Waste Pits, and then we started shippin', eventually started shippin' to Nevada.

07:20:04

A:

Your uh, your filtrate, your liquid that would come through your filters, that would go back out to the combined raffinate pad, and you would run it through an evaporator and condense it, then it would go back into digestion. And in digestion, you did a batch make-up, and then ap-, you would do isotopic

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blending.

07:20:23

A:

You would take higher enrichment material, put with lower enrichment material, blend it to come up with the isotopic that you wanted. Which, the primary process in 2/3 was to shoot for a 1.25 percent U_{235} . Uh, in the latter years, when we didn't have as much enriched material, and we started makin' 1.0 and, well, we started 1.1, and then down to 1.0, and we finally uh, ended the process over makin' .99 enriched material.

07:20:54

A:

Through, once you went through your batch makeup and got your isotopic blend just like you wanted it, then you went through extraction to purify it. You separated what we called "the crud", which at that time was the raffinate. Uh, the impure material from the pure material. And goin' through the process uh, usin' uh, kerosene and t-, uh, tributyl sulfate as a mixture for your solvent.

07:21:18

A:

And through your extraction columns, and pulsating pumps, and deionized water, you got the separation. And you went through a, through a two-series separation, and you came out with a OK liquor that uh, went into the uh, storage tanks outside o' denitration. And once you did sampling and analysis, and all your analysis 're right, you sent that into a boil-down tank.

07:21:43

A:

And you would start condensin' the material, boilin' the water out, boilin' the acid out, and condense it. Then from the boil-down tanks, it went into a sparge tank, and in those tanks, you condensed it even more. And it was almost like a multi-salt. And uh, you maintain hot temperatures, because as soon as it cooled, it would, it would uh, crystallize and turned almost like concrete.

07:22:07

A:

From that it went into the uh, denitration pots, and you would cook it into a powder. So you would cook your, your uh, UNH at that time, it went from a, from what they called your uh, "okay liquor" to a UNH, and uh, you cooked it into a powder. And then the "gulping" was uh, about 4 inch circumfort (circumference) stainless steel hoses, hooked to a handle that uh, once this pot was cooked down to the powder.

07:22:37

A:

And there were tests that you run in the plant, you ac-, you did a lot o' your own sampling and, and testing in the plant. And once you had cooked enough in the nitrates, the nitric acid out of it, and your, your self analytical tests showed that the material was ready, you would shut the heat off, and you would start gulping this material at 1200 degrees.

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07:22:57

A:

You would throw your gulping tube in, which was actually just a vacuum hose, like a big sweeper hose, and you would uh, vacuum it out o' this pot, into a surge hopper and then run it through a mill. And then that material was sent to Plant 4, and through the reactors over there it was converted into green salt. And then from Plant 4 to Plant 5 where it was converted into metal.

07:23:20

A:

So Plant 2 and 3 was really a repository type recycling plant. Uh, back during the production days, you didn't throw anything away, just about everything was recycled. Uh, you used it and reused it and then stripped all, as much uranium out of it as you possibly could before it ever went to the waste pits, or into the silos, or out to Nevada. Which we didn't start shipping to Nevada until the latter years.

07:23:45

Q:

Uranium was valuable (laughs).

A:

Yes it was. Yes. It was very valuable then.

07:23:53

Q:

Tell us also um, the process in Plant 5, too.

A:

The plos-, process in Plant 5, if you start out on the south end, uh, you had the jolter area. And the jolter area, you had the furnace pots that you put magnesium oxide in the pots, and then you had a tube that run down in the pots, and you (demonstrates by moving her hand quickly up and down, flat with the palm downward) would through a jolting process, bouncing up and down.

07:24:19

A:

You would add the powder and it would pack it in real tight. And then from there, you would take it to the F-machine. And then in the F-machines, you would remove that, that cylinder so you had about a 2-inch liner molded, packed tight inside o' this furnace pot. And at the top o' F-machine, you had a little blender.

07:24:41

A:

And you would add two cans o' green salt, which was equivalent to, in most, most charges if you were makin' depleted, derbies, then it was equivalent to 500 pounds o' green salt. And then you had magnesium oxide uh, magnesium that you added in, that's what was gonna be your firepower inside o' the furnace pots. You blended that material, and uh, after you had a 2-minute blend, and then you dumped the material into the pot.

07:25:10

A:

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And then from there it would go to the capping and lidding station, and you'd put a magnesium oxide lid on, cap on it which was about 4 inches deep. And you would pack that really tight and then place a lid on it, and then you had serial numbers welded, etched into the, the lids. That information went onto your IBM cards so you could track each charge through the rest o' the process at the plant.

07:25:37

A:

'Cause at that point, you went from, from powders and stuff to actually firin', firin' the uh, pots off, and makin' the conversion from powders to metal. It went into a Rockwell furnace, and uh, at high temperatures, it was electric furnaces, and at high temperatures, over several hours, it would eventually get the material hot enough that the magnesium would ignite, which would ignite the green salt.

07:26:04

A:

And it would melt in, it would, it would fire off, and then as it cooled, it would just kind o' sink to the bottom and melt into a metal. And then the, the circumference of the pot is what give it it's round feature. And then from there, you went into a cooling bed where it was like a air cooler, and you would allow the material to, to uh, the pot to sit in there for a couple hours and then you moved it into a water cooling bed.

07:26:30

A:

Which, once the, you put the pot into that water cooling bed, it was still hot enough that the water immediately started boilin' as soon as the pot would hit it. And then after several hours of cooling, it would go up to the breakout station, and you would take the lid off the pot, and through the uh, what they called the jolter system, you would jolt the slag and the, the derby out of the, the pot.

07:26:58

A:

Then you run the pot through a reamer to clean out all the magnesium that gets hung up in there, and all the slag that gets hung up. And then you had a person there with a jackhammer bustin' all your slag up removin' the slag from the uh, the derby, and you would run that through a jawbreaker. Send that back out to Building 55, re-mill it and re-use it, back at the very beginning of the process.

07:27:22

A:

Then the derbies were weighed and then they went down in through batch makeups, they were put into crucibles that went through the re-melt furnaces and converted the derbies and other metals into ingots. And then you would take the ingots, uh, you had, had a separation booth where you'd separate the ingots from the crucibles. And then you'd take it to a saw and they would cut off a piece that would go to the laboratory for the sampling of the metal.

07:27:49

A:

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And then they would cut up the metal, based on whatever project, you know, whether it was a Y-12 program, wherever the material was goin', there was dimensions that you cut these ingots up, and from there, it all went to Plant 6. Uh, if a derby wasn't slated to go through the re-melt area, uh, there were some derbies that left out o' here as derbies.

07:28:08

A:

But they were sent to Plant 6 and they were pickled, in nitric acid. Which was really kind o' cool, 'cause a derby is, is a gray-lookin' material, but once it's pickled, it has this bluish-greek, uh, green tint to it, it has a pretty neat-lookin' color to it.

07:28:25

Q:

So the final product then at Plant 5 were, actually were derbies.

A:

Ah, the final product was either derbies or ingots, you know, it was a combination of both. And we shipped both derbies and ingots out o' here, dependin' on whatever site they was, they was goin' to, and what the use of material was gonna be. Which we never knew, you know, we might've, you know, we knew that we were runnin' like a Y-12 program, and we knew that was Oak Ridge. But we had no clue where in Oak Ridge this material was goin', or what it was gonna be used for.

07:29:01

Q:

Do you wanna pause? We're gonna pause and change tapes.

A:

Okay.

Q:

You're doin' great.

Tape FLHP0191

08:01:03

Q:

So you were talking about the processes in the different plants. Um, when you worked there, what kind o' PPE was available to you?

A:

During the production days, uh, they provided all the clothing necessary, you had all the under clothing provided. Coveralls, uh, respirators were available. You didn't see very many worn, but they were available. Uh, you would wear 'em if you went inside of a dust collector, or say goin' inside the separation booth where there was a lot of visual uh, black oxide on the floor (clears throat).

08:01:36

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A:

And that was all an enclosed type area. Uh, leather-palmed gloves over in chemical, they were the chemical gloves. But you didn't have um, for the most part until ya got into the, the right toward the end of production, uh, there was, it was actually after Westinghouse had come in, that uh, and probably within the last maybe year, year and a half o' their contract, that they started bringin' in the PPEs.

08:02:03

A:

You didn't see hand and foot monitors, the uh, the friskers, you just didn't see that type o' stuff back then. Um, there was a lot more dosimetry worn, uh, for example, over in Plant 5, depending on what job you were assigned to, you had your normal dosimeter badge, which was also your security badge. Had your picture badge on it, it was all one badge. You had uh, wrist dosimeters.

08:02:30

A:

If you worked back on the uh, separation booth and those types of jobs, you had ring dosimeters. Uh, some o' the jobs, they had pocket dosimeters if they were workin' up around the thorium buildings. You didn't see to awful much o' that. But uh, most o' the areas did, Plant 5 was really big, and it was probably, a lot o' the people at that time felt that Plant 5 was probably the most contaminated, or the area where people uh, were getting the higher doses, was.

08:02:58

A:

You saw, you saw an awful lot of wristbands, which uh, looked like the little hospital bands, but they had a microfilm in it like the dosimeter badges did.

08:03:09

Q:

So what were the ring dosimeters? What did those look like?

A:

The ring dosimeters looked like a ring that comes out of the bubble gum machine, the plastic, uh, had a little opening in 'em just like they would pinch ya, if you weren't careful. And uh, and you were say, workin' with uh, a crane or somethin'. If you weren't careful you'd get your end o' your, or the back o' your finger pinched with 'em. Because of the plastic they'd squeezed together, but they looked like somethin' out of a bubble gum machine.

08:03:41

Q:

And do you have any idea how those things worked?

A:

We knew that they worked real similar to the uh, dosimeter badges themselves. They would uh, they would come and collect 'em every month. Just like they did the regular dosimeter badge, they would change it out every month. And they would read uh, read your dosimeter. Uh, you were told on your wrist dosimeters and ring dosimeters, those you did not take home with you.

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08:04:04

A:

You had to, they had uh, shelves that was, that was hung up in Plant 5, and they were uh, like your little tools shelves that you open up and you put the, the screws and things in? These were mounted to the wall, and they had your badge number on it. Your dosimeter, ring dosimeter, and your wrist dosimeters had your badge numbers on it.

08:04:25

A:

And you would place 'em in that, that little container every night, and when you come in the next morning, you'd hit your timecard. First thing ya do is go get your ring and wrist dosimeters and put them on before you went down to get your job assignment. And uh, they would read them and compare them with your dosimeter.

08:04:43

A:

And if ya saw, they saw a hot point, you know, a moment there was a hot point, then the rad safety, and that was about the only time we ever saw or heard of rad safety. They would come out, uh, interview you, find out what jobs you had worked to find out, try to find out why you were getting high readings on your uh, your dosimeters.

08:05:05

A:

And if your, if your per, if your badge come up high, but your wrist and ring dosimeter didn't, then they would ask questions like you know, "Did ya leave it in the car?" because it would pick up the radiation from the sun. And uh, it could change your readings on your, on your dosimeter. And I have seen where some people's dosimeters come up hot but their ring and uh, wristbands didn't.

08:05:28

A:

And come to find out uh, in one case, come to find out a guy had a dish that he had at home, that was a real old dish, and it had been coated with uranium. Some type of a uranium product, and he was puttin' his badge in it every night. And didn't realize that it was coated with this uranium-type, laced paint or whatever, and he was gettin' readings off o' this dish onto his dosimeter.

08:05:54

A:

And every month his dosimeter was comin' up high, but his wristbands and, and they were followin' him around tryin' to track where he was workin', to find out why, why he was showin' these hot points. And uh, finally, they went to his house (chuckling). And they found this dish that they uh, the monitors, the got some high readings on, and his dosimeter was pickin' it up.

08:06:17

Q:

Orange Fiesta-ware (laughs). Uh, so also sort o' nuclear jewelry. (Comment: Yeah.) You're the first one to tell us about rings and, I didn't realize that they had the different things. I knew that they had

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the pocket, 'cause I've seen those around here, but I haven't seen the.

A:

Yeah, I haven't seen the ring and the wristbands, well, I haven't seen 'em since Plant 5 days. Which I left Plant 5 in '83, September of '83. But uh, wore 'em all the time down there.

08:06:49

Q:

So where did you go from there?

A:

2 and 3.

08:06:52

Q:

Okay. That's right. Now, in about '84 through '86, Fernald ran into some like pretty um, hard times because of a lot o' media coverage about of dust collector releases out in Plant 9. Tell us what your personal reaction to all that was.

A:

(Sigh) During that time, yeah, '84 I was still an operator, and um, April of '85 I went into supervision. And it just got to the point that I was sick of watchin' TV, I was sick o' readin' the news. Well, matter of fact, I even sub-, cancelled my subscription to the newspaper because I was sick o' seein' the stories all the time.

08:07:36

A:

You know, when it first started, when all the talk started, all the, all the articles was hittin' the newspaper, and the news media, you know, every night there was a different story. Uh, I think a lot o' people were absorbing all that information, especially a lot o' the employees because they really didn't know what was goin' on.

08:07:56

A:

And uh, people readin' the stories and startin' to scratch their head, at least I did. It was like, "Holy cow! You know, what, what've I been workin' with all these years?" And then as the stories become more and more frequent, and then you start readin' things that, that you knew that you had personally worked in that area, you'd seen what happened, and the stories, they didn't, you know, they didn't connect all.

08:08:23

A:

And uh, it started to become very dishearting, and, and very depressing. Because you seen this stuff hittin' the papers and you, and it was gettin' to the point you knew that most o' the stuff was in it wasn't true. And you know, the stories you started seein' on the news every night, it was like, you knew it wasn't true.

08:08:42

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A:

That there might've been bits and pieces, but it was so blown out o' proportion that I, I just got to the point where I quit watchin' the news. I cancelled my paper, I quit readin' the paper. Uh, it was tough, you know, you'd go to, like back then I was still playin' a lot o' softball. And people that knew I that I worked here, you know, they would corner ya, you know, "Aren't ya scared?"

08:09:05

A:

And you know, and uh, you couldn't hardly go anywhere that people didn't know ya, cornered ya because they was readin' all this stuff and seein' all the, the news media. And uh, tryin' to convince people it wasn't true, you know, you're sittin' there, you don't know if they believe ya. They don't know if they think that you're brainwashed, or, or what's goin' on.

08:09:227

A:

I didn't lose any friends durin' that time, you know, I didn't have any body that scared to sit down next to me, that knew me. Now if you go out and people heard that you worked at Fernald, and it was people that didn't know ya. You know, they kinda looked at ya funny, or kinda scooted their chair over a little bit in public, like they were afraid you were gonna touch 'em, but um, we survived it.

08:09:51

Q:

What are some the examples of some o' the stuff that they reported on that just really wasn't factual?

A:

Oh, gee. It's been so long ago (coughs). Well, a lot of it, you know, they, there were reports about you know, people bein' exposed, and you know, and they would name off names and it'd be people I've worked with and it was like, I know better. I worked right next to 'em. And um, exposures to people, and uh, uh, that everything, the three-eyed frogs, and the odd-lookin' fish.

08:10:26

A:

You know, I'd seen the fish in the lime pond. They, they didn't have big lumps on 'em. It, those types o' stories. You know, they would, they would come across and they would show a drum, and they would, it was almost like they would video a drum on a foggy morning to make it look like some type of a mist, was comin' out o' the drum or somethin'. And uh, you know, some o' the video, some o' the tapes and stuff almost look staged.

08:10:54

Q:

That's wacky. Do you remember when the national press visited this area?

A:

I can remember when they were around, I don't remember, you know. I avoided a lot o' that. I mean I can remember when the media was comin' out here and they would be around the parkin' lot. And the protesters on the end o' the access road, you know, holdin' up their signs and you know, "Fernald's killin' babies" and all that type o' stuff.

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08:11:21

A:

And, and uh, I just tried to stay away from it and ignore 'em. If I saw somebody from the news media in the parkin' lot, I'd walk around, uh, to avoid 'em. You know, there was no way I wanted to talk to 'em.

Q:

And the Donohue show came to town, did you attend that show at all? (Comment: No. Wasn't interested.) How did you feel about him comin' to town and doin' such a big exposé on it?

08:11:44

A:

I didn't even watch it, didn't see it. You know, just didn't have no interest in seein' it. Um, I did see the *60 Minute* tape; the uh, the uh, full tape and then the cut version. And that was just enough to turn me off to the news media period.

08:12:04

Q:

What did they report on the *60 Minutes* uh, report that just kind o' rubbed ya the wrong way?

A:

A couple o' the sections that uh, that I seen is, and you could almost tell it was cut tape, was they would ask a question, and say they were talkin' to maybe Weldon Adams or one o' those folks. They would ask a question, and in the full version, there would be an elaborate answer, but on the *60 Minutes* show, they would ask a question like uh, "Did you know you were exposin' uh, your employees to high radiation?" or somethin' like that.

08:12:41

A:

And their answer would say, "Yes we knew that people were bein' exposed, however we had records and da-da-da-da, you know, went through the full series. But on the actual show, all they show was the answer, "Yes." and then left everything else out about the medical monitoring, and what they've been doing, and, and where they've tested people, you know.

A:

So they just put what they wanted people to hear as the answer, and then cut all the explanations out.

08:13:12

Q:

How about in the local papers? What kind of uh, things were they reporting at the time that just kind o' rubbed you the wrong way?

A:

(Sighs) Well, they were reporting, they were, they were printing out the reports like this whole site was grossly contaminated, that people were just operatin', doin' pretty much what they wanted to do, takin' uh, nothin' in consideration as far as uh, the safety of the folks, the property, the neighbors. And uh, you know, and workin' in the plants, you know, I know what kind o' housekeeping we did in

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those plants.

08:13:47

A:

I know that you know, whenever a report would come up that they had gotten maybe a sample, air monitoring sample out close to the property line that was showin' a little high, how they would come in and try to find where that was comin' from. And you know, seein' processes bein' shut down while they went out and try to fix what was causin' the problem, whether uh, whether it was emissions comin' from a dust collector.

08:14:11

A:

You know, when they, when had discovered that they were emitting stuff from the dust collectors, they shut 'em all down. They put uh, filtering systems on. And you know, by that time I was in supervision. And I know what we did every night, workin' the third shift operation, rotatin' shifts every 2 weeks, you know, that was one of our top priorities.

08:14:28

A:

Is any time we started the dust collector, we went out there and checked those samples. You know, it just had a little wing-nut on it, you'd pop it off and you had a filter pap-, filter paper in there. And if you had the least bit of, of skim or powder. You know, if you were uh, say it was a dust collector in Plant 4, the least bit of green, you know, that would indicate there might be a leakage of green salt.

08:14:51

A:

Shut that sucker down. And you didn't start it up until that dust collector was thoroughly checked, dye-tested and everything else. You know, I s-, I spent a whole night, the entire shift, in Plant 8, inside of a dust collector tryin' to find a leak. And we dye-tested that thing about, I would say about seven or eight times that night. And then we'd open it up, and with our black light, we would find one or two specks inside this huge dust collector.

08:15:16

A:

And we didn't start up, until we found out where those one or two specks were comin' from. We'd go in, wipe it down, change another bag, tighten this up, tighten that up, check this gasket, check that O-ring. And we'd dye-test it again. And then we'd spend another two hours in there with a black light, and if we found one speck of this, of the dye, you know, we didn't start up.

08:15:38

A:

And uh, to make these allegations that people were just out there, that productivity was the name o' the game, you know, I, I knew, I knew it wasn't true. Because I was one o' them that was tryin' to get the productivity out, but I was also one of 'em that was shuttin' myself down because we had a little dye show up inside of a dust collector, or we had a flange leakin'. Or uh, you know, we had a seal on a pump that started leakin'.

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08:16:04

A:

And we shut down. You know, we didn't have backup equipment to, to switch over, then we shut down.

Q:

And how about that whole story that hit like in the mid '80s about the guy with the salt furnace?

A:

(Sighs) I was on the search team uh, I was down at 2/3 at the time and uh, Bill York was the area manager, and he had uh, had assigned a crew. He had split us up into different groups and had assigned us to go out. Because 2/3, there was just an abundance of tanks, you know, there was probably a couple hundred tanks throughout that, that, um, that Plant 2/3 com-, area.

08:16:45

A:

And uh, my job was to go into two or three of the different areas, searchin' into tanks and behind I-beams, and anywhere that you might think that there might be somethin', a person could disappear, or sit down and maybe pass out or you know, whatever. And then uh, the news come out that they found somethin' odd in the salt bath over in Plant 6.

Q:

Can we just hang on just for a second? We're gonna let.

(Tape stops)

(Cameraman: Alright, we try again).

08:17:12

Q:

Okay. Ah, so you were on the search team. If you could just go back to that point again and tell us ah, first of all what was your impression (interviewee coughs) when you first found out this guy was missing and ah, and then what about the subsequent fall-out where you had to do; in the search team?

A:

Well, when we were first formed to go search we weren't told that a person was missing. We were told to go out and look for anything odd or unusual and to ah, if we found anything to stop and immediately re-, report back in. So we didn't know if we were searching for a bomb or if we were searching for a person or what the odd and unusual thing is.

08:17:52

A:

And you know, a lot of us asked, you know, what exactly are we searching for? And pretty much our orders were is don't worry if you see it, you'll know it; you know, type thing. So, it was several hours

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into the shift before we knew that there was a person missing. And ah, we had practically, matter fact ah, we were in the process of searching when we were ah, all assembled back together and told that ah, we could stop the search. That they thought they had found what they were looking for.

08:18:22

A:

And, you know, we proceeded to ask the questions, you know, what are you looking for? And there was even a person in our group even mentioned, you looking for a body? And the area manager, I thought he was gonna pass out. Well, what do you know about it, you know. And that's when we figured out; that they were looking for a body. You know, they were looking for a person, but we still didn't have a clue who.

08:18:42

A:

And ah, so finally the area manager said, "yeah, you know" and he named off the guy's name and said that ah, he didn't go home the night before and, and ah, or it might even been maybe a day before and that ah, they were looking for him 'cause he was still showing up on the clock and there had been no signs that he had left the site.

08:19:00

A:

And it was ah, it was either later that day or it could have even been the next day, is when we had heard of what was going on in Plant 6. That ah, they had gotten some ah, a spike in the ah, where the temperature had dropped in the, the salt bath furnace. And ah, it was a pretty significant temperature drop and it came back up and that ah, there was some odd smells in the building.

08:19:27

A:

And so, they had shut the furnace down and, and they had to wait some time for the salt to cool off so they could go in and start jackhammering it out, and start sifting through things. And then as the time when on, then the reports started coming in, you know. They found eyelets off of work boots and they found pieces of the _____ and radios and keys, you know, and that type of stuff.

08:19:48

A:

And ah, that they had found what appeared to be bone, but they didn't know if it was human or non-human, you know, and that type of stuff. And then the, the rumors started really running rampant. And ah, folks on midnight shift were a little say ah, on the, on the edge. Ah, they weren't real comfortable. And ah, you know, I, I still have ah, mixed emotions about it. Ah, as to whether or not I actually believe whether he went into the furnace or not.

08:20:21

A:

Ah, I don't know. It just, there were, there was a lot of squirrelly things going on at that time, and I really have some mixed emotions ah, I personally don't think he did go in. Ah, I mean, there was some indications that something went in there and ah; where he went I don't know. But ah, I never did totally believe that that happened here.

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08:20:48

Q:

So, I had heard some things about um, as far as that whole situation, that there would have been no way that the lid could have been lifted and then put back on.

A:

I'm not that familiar with Plant 6, I have been over where the salt bath furnace is. I have seen it ah, my understanding of that furnace, it would have been possible to take the lid off. Ah, and put something in and put the lid back on. It would not have been possible for him to do that ah, you know. Whatever went in that furnace was not put in by the person, you know, there's no way that that person could have went into that furnace on his own.

08:21:37

A:

If he went in, he was put in by somebody else. It, I don't see how it would be humanly possible for a person to have put himself in and ah, the way, the way it looks to me when I looked at the lid is, you've got an opening in the lid. And then it's like a slide that comes down and then another opening. So when they place the derbies in, it would slide down and go into the molten salt and that would prevent back splashing to the operators working.

08:22:05

A:

And the heat of that furnace, to have set down and slide down to slide yourself in; his shoulders would have barely fit the opening and he would have had to wiggled his way in. And at that, that heat you couldn't have set on that lid and done that with ah, without dying of shock or, you know, it just would have been too hot.

08:22:28

A:

And ah, you know, we had heard that an FBI agent had tried to do that after the fact who was about the same size and built, you know, whether that happened or not I really don't know. And that he couldn't wiggle his way through on a cold lid, let alone one that's approximately 3,000 degrees.

A:

Ah, but, you know, I can't believe that anybody that worked here at that time ah, could have been behind anything like that and ah, there's no way that I can believe that he went on his own. And that, I just don't believe that he ever went in.

08:23:05

Q:

Do you think it's possible he could have thrown his clothes in and then taken off?

A:

I think it's very possible that that could have happened.

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Q:

What did you think about the *Unsolved Mysteries* show that they did later on that year, I think it was?

08:23:18

A:

I've watched it and ah, I've watched it a couple of times ah, there was a lot in there I didn't believe. There was a whole lot in there I didn't believe.

Q:

So tell me now about switching into the cleanup mode. We've talked about the day that they threw the switch and ah, shut everything down. How did the workforce generally feel about it that day? I mean, what was that day like? I know, you know, from your personal perspective, you were like, "we can't shut this down, just like that." But what were most people's reaction to that day?

08:23:55

A:

A lot of people were, were really scared. They really didn't know what was comin' um, uh, the initial reaction is you know, it's kind o' the flavor of the day, they'll shut us down today and we'll start back up next week. The next week came and we didn't start. Then next week came and we didn't start, next week came and we still didn't start. And as time went on, people really started to get nervous.

08:24:16

A:

Um, you know, they knew that the site couldn't survive you know, even, you know, if it is a government-funded site, that they couldn't survive for a long duration with no productivity bein' performed and maintain the headcount that they had. And havin' people just goin' around inspectin' things and makin' sure nothin' was leakin' here, and, and doin' housekeepin'.

08:24:42

A:

You know, there was only so much housekeepin' that you can perform. You know, it's like you know, clean your house, you're not gonna go in and mop your floors every single day. And that's about what we were doin' here, we were scrubbin' the floors every day. And uh, as, as the time went on, people started gettin' extremely nervous because uh, uh, there was a lot o' talk that you know, we are shut down and we will not start back up.

08:25:06

A:

And, and there was no talk at that time that this was gonna be turned into a remediation site and there was gonna be any cleanup. And uh, and a lot o' the stories uh, started floatin' around here because there was a plant, which I've never been there or seen it. But there's a plant up around St. Louis up in that area that uh, supposedly is about, just about identical to this site, that back, I guess in the '60s or '70s they did shut down, and when they did, they went in and they just sent everybody home.

08:25:38

A:

Uh, some folks that, that worked here that went up there on a cleanup project said the, the lunch trays

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were still settin' on the tables. You know, some of 'em that just, you know, you could tell, they still had food in it and they just closed the doors and told everybody to go home. And a lot o' people feared that was gonna happen here; that they were just gonna walk away from it, put a padlock on the gate, and, and uh, that would be it.

08:26:03

A:

Uh, as time went on, then they started talkin' about feasibility studies and remediation. You know, even though there were some pretty humongous layoffs, as time went on, uh, the older folks, the more senior people started relaxin' a little bit, and feelin' a little more comfortable that there was, there was gonna be some, some longevity in what they were gonna do here.

08:26:30

A:

But uh, I mean, you still got folks out there that believes, they don't believe the Ten Year Plan, they don't believe the 2006, and they think they're gonna be here forever. And uh, and I truly hope that they wake up, because all they have to do is look around 'em. And it's, it's comin' down pretty quick. You know, the buildings are, they're droppin' pretty quick, and uh, if they just take a look around 'em.

08:26:54

A:

Some o' these folks, the uh, the areas they came in in, is no longer out there. You know, Plant 9's gone, 4's gone, 7's gone. Uh, Building 12 is just about gone, the old Boiler Plant's gone. Uh, it won't be long that you're gonna see Plant 5 crumble down, and then Plant 6 will probably be right behind that. But uh, it's goin' down quick.

08:27:21

Q:

So how do you feel having had uh, good experiences with the people and with the job and Plant 5? How are you gonna feel when they start takin' Plant 5 down?

A:

Plant 5 uh, I really don't know. I don't know that uh, there was really, I did have some good experiences in Plant 5, but uh, Plant 2/3 was my home? That one's gonna bother me.

Q:

What are the kinds of thoughts that go through your head when you start thinkin' about what it's gonna seem like when they start takin' that building down?

A:

Plant 2/3? (Pauses, then makes the "timeout" sign with both hands, then wipes tears from her eyes with one hand).

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09:01:02

Q:

I won't even ask you the question because you know what it is (laughs).

A:

You know, how am I gonna feel when Plant 2/3 goes down. It's gonna, it's gonna bring back a lot of old memories of a lot o' friendships that just not here any more.

09:01:19

Q:

Tell me about moving into the cleanup phase from process. Um, that had to be kind of a different experience (Comment: Oh, man!) to go from everyday processing into, "Hey, we're shuttin' down," and to, "Hey, we're gonna clean up."

A:

When they started cleanup, they really, when it really got started, it was a lot of uh, the Plant 1 Pad. Uh, goin' through restructuring, you know. We wasn't, we were doin' a lot o' shipping, but the shipping was basically to Nevada. And uh, I moved up to Plant 1 uh, it was uh, the Spring of '89, out of 2/3, had been supervisin' 2/3 and 8. And with them shut down, I was asked to go up into, to Waste Management.

09:02:00

A:

And then at that time, they had just separated Waste Management from Chemical, and then they still had metals. And uh, so I went up to, to Plant 1, started workin' for J. T. Grumshi . I got my first taste of uh, of uh, Mixed Waste. That's when we were uh, first goin' through the Waste Characterization process where we were, we were doin' a lost sampling that they called the materials that was suspect RCRA.

09:02:26

A:

And as we got the characterization in and the materials were declared RCRA or delcared non-RCRA. Uh, we were doing a lot of overpacking and uh, re-labeling, putting the RCRA. We had so much time to get the drums labeled and into the RCRA warehouses, and at that time was 79 and Building 80. That was before they had even built Building 81.

09:02:49

A:

And uh, we had started usin' KC2 warehouse where we had been storin' the ignitables and the flammables. And uh, so it was, that was a really heavy process, and the shipping was, was really hot and heavy that year. And along with that uh, we got uh, slated to restructure the entire Plant 1 Pad. Which at that time, had an inventory of somewhere around, uh, the best I can remember, about 72,000 deteriorated drums.

09:03:20

A:

That we began work on 'em in June, and had until the end of September to complete the activity. And

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I can remember uh, EPA in here quite frequent, sometimes daily. Ray Hanson was the DOE rep on site at the time, and uh, I got to spend time with him almost daily on the Plant 1 Pad. Uh, he was quite concerned whether or not we were gonna meet these uh, milestones that they had negotiated with the EPA on, on the Plant 1 Pad to restructure.

09:03:54

A:

And this was the days before they had resurfaced the Plant 1 Pad, so there was more gravel and chuck holes than there was pad surface at that time (chuckling). Or at least it seemed that way when we were movin' those drums around. And uh, been involved in that, in that whole arena. I was involved a little bit with some o' the preliminary talks of, of starting the remediation in the site.

09:04:20

A:

They had uh, developed a sampling crew that went in did the RI/FS sampling inside the plants. And uh, that data was all startin' to come back in and then they started formalizin' the Safe Shutdown activities. It was just, the remediation of the buildings, goin' in and removin' all the holdup materials and all that. But I pretty much stayed with Waste Management up until Fluor came in.

09:04:48

A:

And then when they came in, they separated everything again. And uh, they were getting geared up to run the UNH process down at Plant 2/3 and Plant 8. And the fact that I had spent so many years in that area, uh, when Fluor came in, NFS was the primary, basically, their folks was runnin' the operations portion of the site.

09:05:13

And uh, so I was sent back down to Plant 2/3 and Plant 8 to uh, to re-start Plant 8 and start the UNH processing. Which I, I worked there until the end o' that program, and uh, workin' for Don Paine, and I was moved over to be a direct report to Don to start dealin' with a lot o' the labor issues, and tryin' to, uh, to work with all the projects. That's about the time we started projectization, and structurin' the projects.

09:05:45

A:

Um, you know, we were goin' away from the O.U. concept and gettin' more into the projectization concept. And so I worked directly with Industrial Relations through Don Paine, in structurin' our, our labor workforce. And I did that up until we went into negotiations two years ago, and we negotiated the five-year Collective Bargaining Agreement. And I come up, when I came back from that, I'm back in Waste Management again, makin' shipments to Nevada, and uh, Portsmouth, and.

09:06:21

Q:

Two things about Waste Management that I think deserve clarification. First of all, RCRA. What is

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RCRA Waste, and what is not RCRA waste? (Comment: Well, you have.) What does RCRA stand for?

A:

Okay. Resource Conservation Act is your RCRA. Uh, RCRA, we have onsite, you have RCRA material and ya have mixed waste. Mixed waste is either uranium contaminated or thorium contaminated. Yeah, you take, uranium or thorium that has a RCRA constituent in it. Um, a lot of things can be RCRA, and RCRA has different definitions, as far as how to classify different materials.

09:07:11

A:

You have your car-, carcinogens and your non-carcinogens, and materials like that. But if you have say for example, uh, you can have uh, enamel paint. And in a factory setting such as this, you can have a 55-gallon drum of enamel paint, uh, maybe it's a flammable type paint. If you don't use a certain percentage of that over a certain period of time, then it's considered waste.

09:07:39

A:

And the fact that it has one o' the constituents that's governed under uh, EPA and under the RCRA laws, then it becomes RCRA. It's governed under the Resource Conservation Act. So you have to go through certain types of treatments, or processes. And uh, under Westinghouse, we were uh, we were getting pretty good at trying to avoid uh, some materials out here from becoming RCRA, and paint was one of 'em.

09:08:05

A:

Uh, but I can remember back uh, it was around uh, I would say around 1990 or 1991, I got a call from the paint shop. And they had a couple 55-gallon drums o' paint that the uh, the environmental compliance people had called 'em and told 'em that if they didn't use this paint within this certain time frame that they were gonna declare it RCRA. And they would have to move it into the RCRA warehouse and then pay for disposal.

09:08:36

A:

And uh, and Paul Raab was the uh, maintenance supervisor at the time, and he just could not see payin' for disposin' of somethin' that he was gonna use some day, he just wasn't gonna use it that quick. So he asked me if I had a bunch o' white metal boxes that we could paint on the pad so he can get rid o' that paint. And I told him no, I said you know, I've got a few, but I don't have enough to take up you know, 100 gallons.

09:08:59

A:

And uh, so we got to talkin', I talked to a couple o' the folks that I worked with, and so we decided we decided we would do aisle spacing on the pad. And uh, because at that time, they were bein' very

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strict in the areas that we were stagin' materials that was goin' through the sampling program to find out if they contained these, these uh, organic and, or these different constituents, that would declare it RCRA. We had a three-foot aisle space that was required.

09:09:27

A:

And they would literally come in with a T-bar that was exactly three foot and walk through there, and if it hit somethin', then we got wrote up for it, we were non-compliant. And then the other materials had to be spaced two feet, and so they had a two-foot T-bar that they walked through. So I had Maintenance come up and in my suspect RCRA area, I had 'em measure off and paint three-foot aisles, so if our skid was sittin' on the paint, we knew that (chuckling) we were non-compliant.

09:09:54

A:

And then for the rest o' the Pad, that we, we had the room, we did the two-foot aisles. And so the driver knew that when he went through, if he set the skid on the paint that he was too close to the next skid. And uh, actually he saved us a lot o' work, kep' us out o' trouble, and I used up his paint in the process, it didn't get declared RCRA that I would've had to manage. So it all worked out.

09:10:20

Q:

(Laughing) That's a great story. (Comment: We got creative.) Oh, man. That's amazing. Now you know, a lot o' people that we talk to always say, "Well, why 're you guys shipping waste out to Nevada?" You know, why, is there any, you know, they're kind of saying, "Well, shouldn't it just stay here since this is contaminated ground? Why should it go all the way out there?" And uh, what would you answer to somebody who asked you that kind of question?

09:10:45

A:

The, the stuff we're shippin' to Nevada, is, some o' the materials the contamination levels are high enough, I really don't think you wanna store 'em here. You know, you uh, you still have an aquifer that runs under this property that you don't have in Nevada. Uh, you, you've got much more controls due to the atmospheric you know, differences than what you have here.

09:11:06

A:

Uh, as far as tryin' to remediate this site and put it back to uh, cleaner than your backyard, and uh, still maint-, some -tain, maintain you know, an on-site disposal cell and some type of controls. And you gotta have controls of what you're puttin' in it. You know, it would be a lot easier for, for myself and you know, the folks that work in my area, and everybody if we just threw it all in the cell.

09:11:32

A:

But that's not, that's just not practical, and it doesn't make a whole lot o' sense. You know, if the ultimate goal is to clean up the site, then you've gotta put stuff in the cell that you can manage, and that

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you can control for the next however many years that you know, we're all gonna be here. And the next generation and the next generation. And uh, some o' the stuff we ship to Nevada, it just doesn't meet that criteria. I wouldn't want it in the cell.

09:11:59

Q:

Tell us about the cell. Tell us uh, what, how big it's gonna be, (Comment: Oh, I don't.) and what's going in it. I mean if you, just what you know from Waste Management.

A:

I really don't know how big the cell's gonna be, I mean I've seen the dimensions, and I've been to the meetings, uh, we've got some different categories of material that's goin' into the cell. Um, your scrap steel, you know, like from the plant teardowns, that's goin' into the cell. But you know, you gotta remember too, that when Construction goes in and prep the buildings.

09:12:27

A:

You know, it's like your uh, your uh, transite that's on the outside, they spray a sealant on it because that does have asbestos in it. So that's got an, an a fixative spray to it to seal that. Uh, there's washdowns that's done in the facility before they tear 'em down, so you're dealin' with a lot o' low, residual type uh, fix, more or less fixed type contamination.

09:12:51

A:

You know, the loose contamination would be pretty minor in that area. So that's goin' to the cell, a lot o' debris and wood. You know, and it doesn't make a lot o' sense to ship a lot of, of low-level radioactive debris and wood to Nevada, if you can put it in the cell, because you can manage that. Uh, a lot of our compactable trash that used to go to Nevada, is now goin' to the cell.

09:13:14

A:

Uh, there will be some levels of asbestos go into the cell, but uh, the stuff that won't go to the cell will go to Nevada. Unless there's some other treatment found somewhere else between now and when it gets shipped, uh, the higher, more friable type stuff will go to Nevada. Um, there was one more category they're puttin' in out there. I can't recall what it, oh, the transite panels.

09:13:45

A:

They're gonna put some o' that in the cell. Which, that contains asbestos. But that's all, that's all been sealed, uh, a lot of it, the vast majority that I've seen, anyway, has all been wrapped and maintained uh, from the time they tore the facilities down until they get ready to place it in the cell. And the type o' stuff that we're shippin' to Nevada is crushed drums that there may still be some residuals in it.

09:14:11

A:

Uh, we've shipped residues. You know, we've shipped the uh, sump cakes and stuff that used to go

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into the pits that we're now diggin' up and gettin' ready to, you know, we haven't started diggin' yet, but we're gonna be diggin' up and processin' and shippin' to EnviroCare. Uh, we've got uh, oh, concrete's another process that goes to the cell. We're shippin' the concrete out there.

09:14:35

A:

Um, we've got you know, your higher contaminated wood and scrap steel. Where you got a lot higher counts that's bein' packaged and goin' to Nevada. But when you look at what we've shipped to date to the cell versus Nevada, we've shipped a lot more to the cell than what we've shipped to Nevada.

09:14:57

Q:

You read my mind; I was just gonna ask you that (laughs).

A:

Yeah, we've shipped a lot more.

09:15:03

Q:

In the coming years, what do you think the biggest cleanup challenge is here at site?

A:

I think the biggest cleanup challenge will be Silo 1 and 2; um, I think that's the area that there's the most unknowns. You know, I'm not sure which process that they're gonna use, but uh, that'll be the toughest, and next to it is cleanin' out the pits. Those're the two biggest challenges left on the site.

09:15:37

Q:

Now in 1980 when you came to site, and in subsequent years, um, you were in Plant 2/3, were they still sending waste to the silos from 2/3?

A:

No, they had stopped uh, they had stopped sending the stuff.

(Off camera sun screen blows over toward interviewer)

Q:

Oh, hang on (laughs). One big gust. Ow! A bug just flew right into my eye. (Cameraman: We are rolling). So you've worked in both the process years and in the cleanup years; how are they different?

A:

Oh, from a work standpoint, uh, people shuffle around a lot more so you don't have uh, you know, you still got a lot o' people that're extremely close. But you don't seem to have that same closeness that, what you had during the production days where you worked with the same people for years. Where, once now that we've got into the cleanup process, you may work with the same person for a couple months and they're off doin' somethin' else.

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09:16:43

A:

And so you don't, you don't build the bondage you know, with the workers as much as you did back then. And you know, you, you see so many new faces. And uh, you know, now that we've gotten into the, especially the latter years of the cleanup, you're startin' to see a lot o' people either retire, take voluntary leave, or go ahead and take other employment, and it just seems like a constant revolving door, you know.

09:17:11

Q:

How about safety? How has safety changed in those years between uh, process and cleanup?

A:

Oh, safety's changed drastically. Uh, you know, as far as the rad safety, environmental safety. Uh, back durin' the process days, you felt honored if ya got a new hammer. And today if ya got a chippin' hammer, it's gone and you got a new hammer, you know. Tools are a lot easier to get; uh, the protective clothing it's just, it's in an abundance. Uh, the type of clothing and the requirements to go into an area.

09:17:46

A:

You know, durin' the production days, you wore your coveralls, you went over, uh, showers were mandatory, you took a shower, and you put on your street clothes and you went home. And today, you go through multiple uh, monitors to go from the plant. You can wear pretty much what clothing you want, but then you've got the anti-C's, the double anti-C's.

09:18:08

A:

And then you go through monitors in the plant. Then you go through monitors again before ya get to the locker room. And uh, respirators are a daily thing now, which back then, it was a periodic. Uh, when I worked down in 2/3, we were uh, much more experienced at puttin' on a SCBA than we was a respirator, uh, 'cause we knew what the fumes would do to ya.

09:18:31

A:

But uh, we wasn't real scared or didn't worry about what the UO_3 would do to ya, or what the dust would do to ya. But ya get a good sniff of no-, nox fumes, you put that SCBA on pretty daggone quick. So I think safety has uh, has drastically improved on the site, as far as worker protection, worker right to know.

Q:

Let's let this truck go by.

(A loud truck approaches and passes).

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09:19:12

Q:

Um, now how has um, the communication between management and uh, the workers changed throughout the years, sort of from a union standpoint and from a general standpoint?

A:

The uh, the supervisors are with the people all the time now. Uh, durin' production days, it was nothin' to be assigned a job and, and maybe not see your supervisor again until the end o' the shift. Uh, you know, you may pass 'em once or twice durin' the day, and today, most work evolutions, especially in the operations end, you know whether it's packaging waste in ISOs, or whether you're uh, bulking for a mixed waste shipment.

09:19:55

A:

The supervisors, and in a lot o' cases, the managers, are out in the field with the people throughout the whole, the entire process. And uh, so there's a lot more working relationship between the workers and, and especially the immediate supervisors.

09:20:14

Q:

And how has the DOE changed throughout those years? More of an open-doy, door policy? Can you sort of address that?

A:

(Chuckles) Uh, there's definitely a lot more DOE on site today than what there was durin' production. Uh, durin' production, we knew what DOE meant, uh, we didn't see 'em very often. When we did see 'em, we didn't really know who they were. Uh, today, you know who your DOE counterparts are. You know who's involved in the safety versus uh, the uh, project oversight.

09:20:47

A:

Uh, I think we've gotten so many DOE people on site, that sometimes they conflict with each other. You know, and just to give you an example. Back just a couple years ago, the general laborers were under me uh, along with the laundry and the porters, and, and a couple of the other areas, decontaminators and those groups.

09:21:09

A:

And uh, I had gotten a call from my DOE counterpart, who wanted me to stop cuttin' grass. He said that we were spendin' too much time and effort into cutting grass. At the same time, from another DOE person who was not my counterpart, was sendin' me uh, DOE field observations that I needed to cut the grass. And, so there was a conflict of interest there.

09:21:36

A:

I wasn't sure which DOE counterpart to listen to; the one that, that I dealt with on budgets or the one

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that I dealt with on safety. So uh, at times, there seems to be a little conflict about you know, what direction they expect us to go in, talkin' from one DOE person to another. Because they've all got, they got their programs to run, so they've got things that're important to them, which sometimes conflicts with us tryin' to get our work schedules done.

09:22:06

Q:

And how do you feel that uh, the uh, communication with the public has changed throughout the years?

A:

I think it's, uh, it's drastically improved uh, and I, I think the, the news media itself proves that because you don't uh, you don't have those folks going to the news now and, and voicing concerns. And I believe that if they were unhappy with us, that they wouldn't hesitate to do that. And uh, you know, just, I don't deal with FRESH, and those different Fernald citizens committees, that's out there.

09:22:42

A:

But uh, some o' the folks that I talk to are friends with some, some o' the public people that're in that, those different committees, uh, have given me feedback that they seem really pleased, that they feel that Fluor Daniel has been very open and honest with 'em. And uh, they seem to be very pleased with the progress that we've made to the site.

09:23:09

Q:

Now you said earlier that the buildings are coming down awfully fast. What would you like to see done with the site once it's, once it's pretty well done?

A:

I think the best thing for this community, you know, in my own opinion, is to bring in some other type of industry, to keep this community alive. You know when you look at the number of employment that work at this site, and how they frequent. You know, whether it's Ross or it's Miamitown, uh, goin' out to Harrison, uh, I think if a lot o' folks, if they don't live in this area, they still frequent the area as far as maybe a quick stop on the way home to fuel up, uh, grab a candy bar or pop.

09:23:54

A:

You know, when this place is gone, a lot o' that'll stop and I think a lot o' the small businesses will be hurt by this site goin' away. But if you brought in some type of other industry, you could keep these little towns, towns goin'.

Q:

Great. Is there anything that we didn't cover that you wanted to cover? Anything you wanted to say that you didn't get a chance to say?

09:24:20

A:

I guess about the only other thing I'd say is that uh, you know, I've uh, all the years I've been here, you know, I'd like to stick it out to the end, and uh, see it put to bed, and see the history, you know,

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the Fernald site, a complete package. That's it.

Q:

Great. All right, do we need to get nat sound? (Cameraman: Yeah, I'd like to.) We're gonna get a little bit o' nat sound, so if we could have quiet on the set for just a few seconds here. This is nat sound.