

Office of Legacy Management
RFS RETIREES VISIT

Oral History Project
Interview of Clyde Christman
October 6, 2022
Interviewer: Taylour Whelan

TAYLOUR WHELAN: (music) This is an oral history interview conducted on October 6, 2022, by the [U.S.] Department of Energy Office of Legacy Management in conjunction with the Rocky Flats Retiree Tour that occurred yesterday, October 5, 2022. My name is Taylour Whelan, T-A-Y-L-O-U-R W-H-E-L-A-N, and I will be conducting this interview. To start, would you please tell me your full name and spell it for me?

CLYDE CHRISTMAN: Clyde Edward Christman, C-L-Y-D-E E-D-W-A-R-D C-H-R-I-S-T-M-A-N.

WHELAN: All right, Clyde, could you tell me what your positions were at the plant?

CHRISTMAN: Initially, a chemical process operator then a radiological control technician — um — radiological engineer, a trainer, and principal health physicist.

WHELAN: And when did you get started working at Rocky Flats and how did you get started?

CHRISTMAN: February 28, 1983. I was living in Colorado Springs, [Colorado], and answered an ad in the paper, was put in there by CEDA — uh — said we needed some — um — operators for a — uh — a weapons — uh — facility. They didn't really say what the name was, Rocky Flats, they just, so we were supposed to meet in Colorado Springs in an auditorium. I went down there, and there must've been 2,000 people there. They only had 13 openings. (laughs) And so I nearly gave up and turned around and went home, so, but I stayed. And so it was a week of testing in math, science, everything you can think of, and I was selected. So I thought that was it, but no, there was another week of testing. They took (laughs) they sent us to do some practical testing that involved drafting and soldering and things that I'd never done before, but primarily — uh — I made it through that. So we were, they selected 13 of us. They sent us to — uh — training up at the — uh — Rocky Mountain Energy, Environment, and Technology Center — uh — with all the chemical process — uh operating equipment — uh — you know, miniaturized (knocking) models of it, taught us — uh — how to be chemical process operators, and then said, "We'll call you when we need you." So that was probably in (sighs) September. Well, in November, they called and said, "How 'bout, would you like to be a metallurgical operator?" I said, "Metallurgical operator? No, I took a training for a chemical operator." (laughs) So, (inaudible) so it was February before they finally called me.

WHELAN: Could you give a little bit of detail into the responsibilities you had for the positions? You can go into detail on either one.

CHRISTMAN: Well, the chemical process operator was really kind of boring. You just sat around and watched processes and made sure everything ran smoothly. When the glovebox would fill up with fluid or overflow, you

put on PPE and decon. Now, you'd pour off this decontamination solution all over the floor, get down on your hands and knees, and wash the floor. Other than that, there was not much to do. It was really kind of boring.

WHELAN: You were talking earlier about the 881 radionuclides health concern. Want to describe that again for me?

CHRISTMAN: Well — um — 881 ended up being the biggest surprise. You know, I, like I said, everyone when I started there referred to that side, everything south of Central Avenue, as the cold side. But it was anything but that. Uh — (laughs) there were radioactive materials and — um — high levels of contamination in every building that was over there. Uh — a lot of uranium, residual plutonium contamination — uh — and, especially in the critical mass lab, building 886. They had a fully commissioned reactor in there. (laughs) But — uh — who knows how many activation products were present, you know, from all the 2,000 documented experiments that they conducted over there. Um — it was — uh — a gravity-fed reactor, which used highly enriched uranyl nitrate solution, and they had no transfer capabilities. So once they stopped operation, they left the reactor basically full of fluid. There was a three-inch Tygon tube that connected a couple of the parts that they could tell how much liquid was in it, which over years, the — uh — uranium precipitated out and started to form (laughs) a solid in the bottom. So it was — uh — kind of like that, you know? Kind of a — and — uh — well, that type — really, it's dangerous to me, you know, so — uh — eventually they — I was a RAD [radiological] engineer over there. They shut down the building. They — uh — kept everybody out of the area, wouldn't even let people go in, so. Plus they had a lot of high-activity sources in the room next door to it. Um — so much so that when you had to do the six-months inspection, you couldn't really pull a source out to check it. You had to check the rod. (laughs) So (sighs) then — um — 889 next to that was — uh — you can always (inaudible). That building was used to decon some of the equipment that was contaminated during the 1976 fire. Um — and there were high levels of contamination inside the health physics vacuum pump that was — uh — you know, in what was an uncontrolled area. 865 had uranium operations, 883. It was so bad that 444 when — um — radiological engineering had a moratorium around a stand-on — uh — before operating with radioactive materials. They continued to operate because they did not know that depleted uranium was radioactive. (laughs) Luckily, I had — uh — a RAD ops foreman there with me that says, "Oh yeah, so the — um —" You know, it wasn't because they were trying to do anything unsafe. They just didn't know. Um — but like I said, the building that surprised me the most was 881. That building was supposed to be a completely cold building, had been released, submitted controls, and there were offices all over the place in there. However, in the high-bay area, where they did a lot of the machining — um — they still did some machining over there. You could see in the ceiling above — uh — circular impressions where the furnaces used to be. Um — north and south, there were four larger — uh — furnaces that, as I was told, used to use, you know, were used to catch uranium. I didn't — uh — east and west, there were three smaller ones. They said, "We're plutonium furnaces." This is what the RAD ops people (laughs) told me, that, and so — uh — I thought, "Holy cow, what has (laughs) you know, how could they call this the cold side?" So — um — the first job I had over there was to — uh — replace the — uh — filters in the plenum, which was a single-stage plenum, but it had filters back to back to simulate a double-stage, although, the story was in the paper. That was actually one of the stories that made the paper, that — um — plutonium contamination had been discovered in the — uh — chase in the concrete stack. That was — uh — a gigantic concrete stack on the south side of building 881. So, I don't know, it was about 90 or 100 feet tall. And so when I got in there — um — I could see why. The filters were just tilted and — uh — corroded and — uh — they weren't lined up (laughs), so we replaced that job. Uh — so we thought, 'Well, if there's contamination in the stack and in the filters, it must be the ductwork.' (laughs) So we started taking some samples of the ductwork. You couldn't (inaudible) anything out of there. It

didn't show anything. So we come to find out, we took some core samples. Well, it was resin from a lot of the acids and — uh — materials that they used in the lab had solidified in, and you can remove it. You can scrape it off as a resin and send it in, and sure enough, there was — uh — plutonium present there. As I discovered later, in the — uh — scrubber, there were stickers on it that said, "Plutonium contamination (laughs) internally." And we had — uh — a contractor come in, you know, with some more (inaudible). We had discovered there were, was not only plutonium, but there were recoverable amounts of plutonium in this thing. So — um — so — uh — not only wasn't it a cold building, there were all kinds of — uh — radionuclides — uh — involved in that building. Um — uranium, plutonium, and (laughs) who knows what else? So it was, it seemed like an easy job, and it had people in there one at a time, you know, for year after year, became incredibly difficult — uh — discovering the types of — uh — contamination were present, how to safely remove 'em — uh — 'cause none of the people who were there were experienced in that sort of thing. They were office workers.

What else did we have other there? Um — the ductwork resin, the furnaces, scrubber — uh — contamination downstream of the plenum. But the strangest story and probably the most interesting and possibly the scariest was the birdcage room which was referred to as the dead body room by a number of people. Um — I don't really know what happened in there. Allegedly there wasn't even a room there, but I obtained the help of a couple DOE persons, personnel — uh — Paul [Somis?] and Charlie [Colfer?]. They went down to the federal center. They started investigating and found maps that did actually show a room there, and — uh — the funny thing was when you walked down the hallway of the [exclusion knock?], you could see about four feet high the outline of — uh — two double windows and a double door about — uh — right between 'em, which probably were smooth when they first (laughs) covered them up, but — um — after time, concrete settles, and you can see the outline of the room. So — um, uh — I thought, you know, 'I wanna call some people that have retired recently, that I, that I've met.' Well, I'd been there for just a couple years, so I got some names and, from relatives and contacted people in Florida and California, Texas, all over, and they go, "Oh yeah, there was a room there." And you walked down an incline — uh — It was called the birdcage room where they — uh — received partial rework. So — um — I thought, 'You know, these people know where they worked. So (laughs) there was obviously a room there.' But — um — that's one of the biggest mysteries that — uh — I just — uh — came across while I was there. I just always wondered how they dismantled that building and what kind of controls that they used — uh — 'cause I was no longer there at the time.

WHELAN: Where did the dead body room ...

CHRISTMAN: Well, the reason they called it the (laughs) dead body room was, allegedly, they received too many parts in there, and one of the stories was that a bird was in one of the cages. They were in cages. The parts come in the cages, so you could keep them spaced, and it got loose and flew around in there and got it contaminated, so they shut the room down, and — um, they just sealed it because they no longer needed it for storage. Well, they needed all kinds of area for storage there, so I didn't really buy that story. The other rum, the other rumor was that there was a lot of, the story that a lot of people told is, "Well, that became known as the dead body room." They said that they got too many parts in there and there was actually a criticality, in about 1956 or 1957, and they sealed the room with the people in there. They didn't want anyone to go in there. So (laughs) that seemed a little outrageous to me, but — um — so I contacted the people from DOE and told them all these stories that I'd heard from all the people that I talked to. So they went and found — um — (clears throat) diagrams of buildings at the federal center, which indicated there was a room there. And they also told me that there was a team in Oak Ridge, [Tennessee], that all they did was go around



to sites and — um — investigate criticalities, and in 1957, they came to Rocky Flats. But there's no documentation as to what they did.

WHELAN: Very interesting.

CHRISTMAN: So (laughs) not only were there a lot of buildings, but, and a lot of areas to, but — uh — address in a lot of ways, but it was just overwhelming for one person. One person could not possibly cover (laughs) that much area. Um — I did my best. It was six days a week — uh — and sometimes 12 hours a day, sometimes Sunday — uh — because I wanted to know what kind of area I worked in. But it was amazing to me that everybody on the site referred to it as the cold side. It was anything but that.

WHELAN: So from start to finish, how did an ordinary day go for you?

CHRISTMAN: It was hectic. I'd — it — there were so many things going on. I walked along, and this one guy would stop in and say, "Well, what's the status of this?" And I'd tell him, and he'd go, "Okay. What's the status of that?" And I'd tell him. And, you know, on occasion, I would give tours to the other RAD engineers. And this was constant all day long, and how do you remember that many things (laughs) and the status of? I don't know, but I'm glad I do — uh — 'cause otherwise, you couldn't, you know, you just didn't have enough time to look up the — uh — notes and documentation. You had to — um — you had to keep a — uh — a running track of everything that was going on because there were, like I said, numerous buildings, and they were all operational at that time.

WHELAN: So we've heard that carpooling was a big thing with Rocky Flats. Were you

CHRISTMAN: No.

WHELAN: involved in a carpool?

CHRISTMAN: Nope.

WHELAN: No?

CHRISTMAN: I lived 18 miles away and I drove myself because I spent a lot of long hours there. Even as an hourly person, they would offer a lot of overtime, and if you didn't take it, they'd put down what they called an R, which meant you refused it. I never got an R. I worked (laughs) all the overtime. Uh — spent probably more time there, more hours there than anyone that started the same time I did.

WHELAN: Did you typically work days or did you work nights?

CHRISTMAN: Well, I, you know, when you're new, you don't get your choice of shifts, so initially I worked nights. And I was able to get on a jump shift, which nobody likes. Paid the most, so that's why I took it. We were a week of days and then a week of p.m.s and a week of midnights. You get three or four days off, start over. (sighs) Finally, whenever I was able to get a day shift, I took it, but it took a while.

WHELAN: What was it like working in such a secure environment?

CHRISTMAN: I liked that. (laughs) I, there were, you really trusted people more because you knew everyone was (inaudible) and — um — and so there was no horseplay going on pretty much, and — um — everything was — um — routine. And there was a procedure and a method for doing everything. It was real, really well controlled. Um — in fact, the last nine years that I was there, I worked for Wackenhut and I worked for security. Not providing security, but as their — um — principal health physicist. They had — uh — 300 radiation workers. They had dosimeters and plus I went through all the buildings and made sure they were safe for them, and — uh — because the guards really had no radiological training or experience to speak of, so they had to have someone watch out for 'em.

WHELAN: Were you part of any social organizations at the plant?

CHRISTMAN: Social organizations?

WHELAN: Like — uh — yesterday we heard there was a ski club.

CHRISTMAN: No, I wasn't part of that. I was a member of several committees, like the [ark?] (inaudible) organization, and I — uh — committee. The — uh — JCUSC — um — Joint Safety — (inaudible) — uh — Joint Company Union Safety Committee. And — um — the (inaudible) Protection — uh — Advisory Committee was — uh — some organization at the ARPAC. I was also in the radiological systems team, which they called the RAT team, and we would respond to any off-site radiological emergencies.

WHELAN: Did you spend — uh — time with your coworkers outside of work?

CHRISTMAN: Yes.

WHELAN: What would you do?

CHRISTMAN: Uh — (sighs) play pool — uh — go play basketball. We played a lot of basketball, softball, bowling. That sort of thing. Golf.

WHELAN: We heard a lot about the family environment that Rocky Flats had. Everyone felt like they were a big family. Did you feel that as well?

CHRISTMAN: Yes. Yes, we had, we communicated and did things — um — off-site all the time together.

WHELAN: And what do you think that — uh — what do you think brought on that feeling of — uh — familial relationship at the plant?

CHRISTMAN: (Sighs) I'm not sure. The fact that everyone worked together and got along well together. (clears throat) Just made you wanna take it outside of work, yeah.

WHELAN: Did you have any influential mentors during your time at Rocky Flats?

CHRISTMAN: Did I have any, what was that?

WHELAN: Influential mentors.

CHRISTMAN: Yeah, several. Um — primarily in radiological engineering — uh — some of the trainers. Um — I wouldn't even know where to begin. Jerry Haynes. Um — probably the (clears throat) the biggest radiological safety — uh — Sarah Buckey. Um — Willy Warling. Um — Norm Warling. Several of the RCTs [radiation control technicians] that really knew how to do their job well. That's where I learned how to do it.

WHELAN: Could you describe a little bit more about how your relationship with them was and how they influenced you after your time at Rocky Flats?

CHRISTMAN: (Sighs) Well, you know, they were very professional, but not to the point where they were — um — stick-in-the-muds or boring. You know, they were fun to be with, but they were serious about everything they did, and — um — when they were on the job, they made safety number one every time.

WHELAN: Could you talk a little bit more about the culture of safety at Rocky Flats?

CHRISTMAN: Well, (sighs) they were very concerned about — uh — keeping people safe — uh — especially with regards to contamination. Um — but even outside of that — uh — outside of the radiological contamination, chemical exposures — um — slips, trips, and falls. Just any kind of safety-related — uh — item, they were real, real dedicated.

WHELAN: What were some of the most memorable aspects of your time at Rocky Flats?

CHRISTMAN: Most memorable aspects. (laughs) Where do I start there? (laughs) I really liked giving people that had not been on the south side tours of the area, because it was just such an eye-opener to them. They hadn't spent any time over there. They had no idea what was present. They were just flabbergasted by (laughs) what I would show 'em, and over, you know, they were overwhelmed. They said, "How in the world can you address all these buildings and issues? And remember all the people in it, the status of the items or?" I enjoyed that, giving them tours. Didn't get to do it very often, but that was one of the most enjoyable things.

WHELAN: Do you have any other memorable stories you'd like to share?

CHRISTMAN: Not that I can think of right hand, right offhand, but, you know, if I had a little while, I probably would think of some. But that wasn't my focus. (laughs)

WHELAN: Uh — just to confirm, you said you started working at Rocky Flats in 1983. What year did you leave the plant?

CHRISTMAN: 2003. I started February 28 of '83 and left — uh — December 31, 2003.

WHELAN: And what did you do after you left Rocky Flats?

CHRISTMAN: Well, I didn't have a job for a while. My daughter was in elementary school at — um — really close to where I lived, and so I volunteered — uh — to teach math and science initially. Actually, while I was

still at Rocky Flats, they let me go down there. When I was at Wackenhut, they let me go down on Tuesdays and Thursdays and teach math and science — excuse me — and even though there was a classroom shortage, I actually had two classrooms, one that I shared with a person in the building, and they had the temporaries outside. The kids always wanted to go out there, and they would make up stories about how they got cheated out of being with me just so they could go out there and (laughs) and so, of course, I had my daughter there. Um — and so it was — um — just a fun thing. I did that for several months after I left Rocky Flats, even. And — um — after I left, I was down there four or five days a week — uh — taking them on tours — uh — out to — uh — museum, the zoo, that sort of thing, field trips. And then I got into commercial nuclear power and, finally, radioactive waste disposal.

WHELAN: Why do you feel it's important to share the history of Rocky Flats?

CHRISTMAN: Because there's just so many things people don't know. Uh — (laughs) and a lot of things that they'll never know because it's gone now. You can't — uh — go investigate it or prove 'em or disprove 'em. But — um — but there were just so many things that I discovered that people didn't know, or if they did know, they were (laughs) keeping to themselves and pretending that they didn't know.

WHELAN: Yesterday during the tour, there was an overwhelming sense of pride in the work that the retirees did at Rocky Flats. Do you feel that same pride? And what do you feel is the source of that pride?

CHRISTMAN: Yes, and I'd still be there if I could. You know, it was — uh — you walked into the building, it was so, people complained about how much of a hazard it was, but I tell 'em, "When you walked into the building and you walked into the area, you were dressed out completely in white, spotless, and the floor was so bright you could hardly stand to look at it, that glare was so bright, coming, that was how clean it was.

WHELAN: How has your life been influenced by Rocky Flats?

CHRISTMAN: Well, it's probably, maybe — um — uh — have an outlet more for safety, you know? Uh — in fact, I became a health and safety manager for a while, and — uh — and now I'm still with radiation safety, radiological safety, so, I think that's probably one of the biggest influences.

WHELAN: Do you still spend time with people that you worked with at Rocky Flats?

CHRISTMAN: Every once and a while, I'll see some. There was one (laughs) that — uh — worked at Rocky Flats when I was there. I didn't know him. I met him — uh — during a refueling outage at a commercial nuclear power plant, and — um — (clears throat) spent some time there working with him. And — uh — now he comes back. He actually lives here again. We go to Vegas all the time — uh — three or four times a year. Um — my former boss when I was at Wackenhut, Jerry Haynes — uh — he still lives in Longmont. I'll call him every year for his birthday, but we don't, he's — uh — 80 years old, so he doesn't get around too much anymore, so. Other than that, I hardly see — uh — that many people. Jim Langsted, I got him to be one of the consultants for, health physics consultant for — uh — Clean Harbors, where I work, so I'll see him occasionally.

WHELAN: How did it feel yesterday to be back at the site?

CHRISTMAN: (Laughs) Well, it was kind of sad, yeah. (laughs) You know? It's like we can make an entire city disappear. (laughs) And that postcard really shows it, where you — uh — you know, the picture. You flip it. So yeah. You know, but even that picture doesn't do it justice. When you're out there, you just can't imagine — uh — all the buildings that were there. You just can't imagine, or I can't, anyway, you know, having been there for 21 years. Uh — I never in my life thought that they could get rid of all that.

WHELAN: Out of all the jobs you had at Rocky Flats, was there one that you preferred or an area of the plant that you favored?

CHRISTMAN: Well, my favorite job was radiological engineering, and — uh — I was basically that while I was at Wackenhut — uh — the last nine years. That also were around three years with — uh — EG&G [Edgerton, Germeshausen, and Grier]. So that was my favorite position.

WHELAN: Why was that your favorite position?

CHRISTMAN: Uh — because I was able to do a lot of investigation that I wasn't able to do as an hourly worker. We were just told to go do these jobs, and then when you're done, that was it. You know, you went from one job to another. You did something else. But, when you're at engineering, you get to investigate a lot of situations and find out (clears throat) exactly what you'll be exposing people to, if you — um — approve work on it, for instance, so.

WHELAN: What were some of the procedures you had for contamination?

CHRISTMAN: (Exhales) Procedures, if you found it, you — uh — posted the area right away, you made an announcement. If it was — uh — you covered it if you could. If it was bigger than that, you made an announcement for people to evacuate, posted the area, went back in. You did surveys. Uh — let the people decontaminate, and then you resurveyed. That's primarily what you do. (laughs)

WHELAN: Did you have any other stories you wanted to share before we wrap up?

CHRISTMAN: No, I think that's it.

WHELAN: That's it?

CHRISTMAN: There were several, but those ones that I — uh — disclosed were the most surprising and shocking and (laughs) mysterious, in some cases, so, things that I could never imagine, really.

WHELAN: Well, thank you so much, Clyde, for talking with us today, and thank you for your work at Rocky Flats. And if you have anything else you wanted to share, then that'll be the end of our interview.

CHRISTMAN: Okay. Thanks. Thanks for having me.