

Project: Trash Talk: Workers in Vermont's Changing Waste Management Industry
Narrator: Mia Roethlein, Environmental Analyst, Waste Management and Prevention Division, Vermont
Department of Environmental Conservation
Interviewer: Virginia Nickerson
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Transcribed by: Teresa Bergen

00:00

Nickerson: So, this is Ginger Nickerson. And I am interviewing Mia Roethlein. Am I saying that correctly?

Roethlein: You are. Yep.

Nickerson: At my home in Montpelier, Vermont, on September fifth, 2018. So, could you tell me roughly when and where you were born?

Roethlein: Sure. I was born in Hartford, Connecticut, in August of 1977.

00:29

Nickerson: All right. And what is your current job, and how long have you been in this line of work?

Roethlein: Currently I work at the solid waste program at Vermont Department of Environmental Conservation. And I have been there since July of 2013. So, just a little over five years. And, sorry [stops to answer phone] yeah?

Nickerson: [should I just continue?]

Roethlein: Sure. Yeah.

Nickerson: Just a couple of adjustments. [Adjusts the microphone]

Roethlein: Hello. Is that better? Okay.

Nickerson: That's great. Thanks. And what was, could you tell me a certain point your pathway was to solid waste? Like what sort of jobs have you had over the years?

Roethlein: Sure. Well if I think back, I've always had a lot of jobs cleaning up messes, is one recurring theme. But I remember the first time I really got interested in waste was when I was at U Mass Amherst. And I was a wildlife conservation major at the time, with a minor in fisheries biology, I think. And there was a, everyone called it a trash class. It was actually a pretty upper level class. I remember it was like 450 or something. And so that was always exciting if you could take a higher level class that you were interested in. And it was waste management. And a part of the class was touring the MRF, the materials recovery facility in Springfield. And that was the first time I had ever been in a materials recovery facility. And you know, just saw, wow, this is incredible this operation, and all this recycling.

And in that class, we talked about trash and how it was a huge issue. The amount of trash that we were creating, and how the environmental movement had, you know, made some strides to look at recycling in the '70s. But it still wasn't, it was like, wasn't the sexy topic. You know, everybody wanted

to talk about saving endangered species and preserving land and protecting water and things like that. But no one was really talking about how much trash we were producing really seriously.

And that was like the only class at that time at U Mass Amherst. And that wasn't that long ago, right? (laughs) That was the '90s. like mid-'90s, I guess. That was, yeah that was really just kind of piqued my interest. Like wow, this stuff all has to go somewhere. And it's contributing to the degradation of our earth, and it's impacting our environment. We had Al Gore at that time talking to us about global warming and climate change, as I sit here sweating and it's 92 degrees. So that was, I just remember that really stood out for me.

I also remember going to the dump as a kid. And it really was a dump, you know. Everything went in. And at that time, everything. Like I found a bicycle. I was psyched and took it home and rode it. It was perfect. I mean, they weren't even recycling scrap metal in the early '80s in Stafford, Connecticut. Which to me is like kind of mind-blowing. But that's not that long ago. And of course the smell and, yeah, and just all the stuff. And I remember dumping our leaves in with our trash and our metal and I'm sure our old paint and everything else went there, you know. So. But I also remember loving those trips to the dump with my dad.

And then, fast forward, I worked at the Humane Society for years, cleaning up lots of messes. (laughs) And helping out animals. I was a janitor for a while, too. And then after I'd been at the Humane Society for a while, for obvious reasons, it's a very emotional job. And I was feeling so burned out. And a friend at the time, [Barb Baird], had me over. And we're hanging out on her porch. And one of her coworkers, because she worked at the solid waste district in Montpelier, stopped by. And they were talking about work, and Barb introduced me. And I said "Where do you work?" And she said the solid waste district. And I couldn't even understand, couldn't even really know what that meant. And she explained it to me. And I was like oh, that sounds really intriguing. Like you help people recycle and compost and you run transfer stations? Like little dumps? Wow. Cool.

And she said, "Yeah, well we might be hiring." And sure enough, they were hiring. And I interviewed. And I interviewed horribly. I was so nervous, because it was right before my wedding. But we talked after the interview. And she saw something in me and knew that I'd be dedicated. And offered me the job. And I was at the solid waste district for over seven years. And I helped operate the transfer stations. And helped run the compost program, which picked up food scraps from businesses and schools in the central Vermont area, region.

And also, a big part of my job was running the household hazardous waste program when we had collection events. That collected unwanted toxics and household chemicals and paints from folks and those events were another like super eye-opening experience for me of just how much we buy that we don't use and we don't need. And then we have to get rid of it. And if we can't throw it in the trash, what do we do with it? And a lot of folks are very appreciative of the service. A lot of people were not so appreciative. (laughs) Because they wanted it to be even easier. They didn't want to wait in line. But that was, yeah, those were very hard, the collection days. But I got a lot out of them. Yeah, and you know, hope to try to continue work to not only make collection of those materials easier for people, but really try to get the word out that we don't need to be using the majority of them in the first place.

06:33

Nickerson: So I'm going to go back a little bit.

Roethlein: Mm hmm.

Nickerson: So when were you a janitor?

Roethlein: *I was a janitor at Hampshire College when I was going to U Mass Amherst. So my timeline, that was before I worked at the Humane Society. And that piece was, it was wild sometimes. Because they were students who all lived in communal mods. And the funny thing is--they called them mods, they were like dorms, you know, but they were all shared living spaces, just like as you have housemates now, except pretend you're 19 and you don't care about anything. And they would all leave and we would have to clean everything out during the summer. And my wife, now, actually was living there at the time. But we did not know each other at all. But it's just kind of a funny story because she says oh my God, you probably cleaned up after me. That was gross. But again, like another part of that was people would leave behind usable stuff. So we'd either take it home or give it to other people. Toxic chemicals came into play there, because we had to use Easy-Off oven cleaner to clean the ovens because they were so gnarly. And a friend I was working with, her arm got totally burnt from the cleaner. Had to go to the ER. And another time, I was cleaning a bathroom and I had cleaned the toilet, the base of the toilet and everything with a bleach cleaner, bleach-based cleaner. And then I came in and I started mopping the floor. And it was a little bathroom. And I shut the door while I was mopping the floor. And there's no window or anything. And all of a sudden I was like, on my knees and totally just like what the heck is going on? And opened the door and got myself outside and realized that it must have been an ammonia-based floor cleaner. But like there was no training, no safety training for us to tell us about that. And that stuff still goes on now all the time. Again, like, you know, something that could have been prevented and not necessary. Yeah.*

08:33

Nickerson: You said that the janitor job was gross. So talk about some of the gross aspects of cleaning up after college students.

Roethlein: Lots of vomit that had never been cleaned. Yup. That was the grossest part. Sprayed across kitchen cabinets. Blood. People having fights or something, I guess, or I don't know what. The facilities plant would unplug the refrigerators at the end of the year, probably to save money. And then they didn't bring us in for a week. So there was all this food sitting in the refrigerator. So you'd open it up. And so again, something that like stuff could have been emptied out and composted. I mean, Hampshire College probably now has a whole composting program, I'm sure, actually I know they do. So hopefully they've integrated leftover food from the residents into that. (laughs) Yeah. And then bathrooms. Come on, I mean, a bathroom that hasn't been cleaned for nine months or however long. It's just disgusting.

09:40

Nickerson: So are there ways that being a janitor or working for the Humane Society prepared you for the work that you are doing?

Roethlein: Oh, yeah. Absolutely.

Nickerson: Do you reflect back on those jobs?

Roethlein: Yeah, I do. I mean I think, and especially with the Humane Society, unfortunately I saw some really grotesque things. And yeah, I think maybe it's just being able to not be totally turned off and shut down like when you, I mean, when you go to a landfill, right, that's, I mean in some ways, that seems cleaner than some of these jobs, actually. (laughs)

10:15

Nickerson: A landfill seems cleaner.

Roethlein: Yeah. I mean you go there and yeah, it's kind of smelly. But then they cover over. At the end of the day, they have their daily cover. And they have a very streamlined operation. All these cells are lined that they put the trash into.

Nickerson: The cells of the landfill.

Roethlein: The cells of the landfill, yeah. Yeah, I guess, I don't know, maybe it's because like no one, I think it's the like no one really wants to talk about trash. We don't want to talk about our waste. We just want it to go away. And I think those kind of jobs prepared me for talking about it. Like it's a reality of us. We create things. We create waste. And we create it from our bodies, and then we also create it from all these incredibly enormous amount of products that we consume. Some of which we don't necessarily need. So.

11:06

Nickerson: So you had mentioned earlier household hazardous waste. That that's one of the things that you said you're trying to get people to understand that they don't necessarily need all these things. Do you want to talk about that?

Roethlein: Sure. Yeah. We can talk about, um, I mean I think that, I don't get to directly do it so much now in my job. But I know *when I was at the solid waste district, like trying to always offer people alternatives to their cleaning products. Or making them aware of like health and beauty products. That so many of them aren't regulated, and you're putting them on your body and on your skin. And you want to know what you're putting on your body. And then where does it go? Like where does it go after? Even if you use it all up, when you wash it off your body. And then it goes into our water. And it's in our lakes and in our oceans. And it's having other impacts there.*

But at the same time, I don't want to, I guess I'm always trying to balance, like I don't want to be the Debbie Downer and make people feel guilty. Because I'm, I mean, we're all a part of it. But just that I think if we all could take a step towards looking at okay, what's in this dish detergent? Is there an alternative that I can buy? And now there are. Like even if you don't want to be a hippie and make your own dish soap out of baking soda and lemon or whatever it is, like there are products you can buy. It's getting a lot easier in some ways. And I think that's because we are shifting. Some of us have demanded that and said, I don't want to buy, you know, a nasty cleaner. Give me something else.

12:48

Nickerson: So tell me what your job is now. What do you do?

Roethlein: Sure. So at the solid waste program, there's a team of us. And there are some folks who work in certification, who certify the transfer stations and do the permitting for hauler licensing. And then there's some of us who do outreach and implementation. And one of the main projects we're working on is the implementation of the universal recycling law. Which requires recycling of common household recyclables, like paper, plastic, metal, glass. And then it also requires diversion of food scraps from the landfill. And the law has focused primarily so far on larger generators of food scraps, like hospitals and grocery stores, bigger restaurants. And now it's starting to hit the smaller generators of food scraps. Smaller restaurants. And part of my job is to work with those folks to help them get the tools they need to

be able to divert their food scraps to either composting or anaerobic digestion. Or some people choose to provide it to animals for feed. Also they do food rescue programs that divert usable food to people. And so I'm helping them figure out how to do that, whether it be finding a hauler to work with, training their staff.

Also working a lot with municipalities is the biggest part of my job, on their solid waste plans. Every municipality is required to have a solid waste plan, which outlines what's going to happen with the trash and recyclables and food scraps in their town or city. And many of the towns and cities choose to be part of either an alliance or a district of towns and they all work together under a shared plan. Or there are some towns who choose to go alone and have individual plans. And so all their plans have to mirror our state plan. And I was responsible for working on drafting the state plan in 2014. And now we're renewing it. We're doing another plan revising it. So we're drafting that and all the municipalities' plans will have to convert to that. So I'll be working with them again when they do the rewrite.

And the cool thing, at least we think it's cool (laughs) about these plans is that we've really shifted away from like this huge, big plan that just sits on the shelf and just feels like a lot of busy work, to actually these performance standards that the municipalities commit themselves to based on what we say they should be doing. So the municipality says, "we're going to reach ten schools over the next five years. We're going to go visit the schools in our town or our district and make sure they have recycling programs." If they're not already diverting food scraps, we're going to get them set up to do that by 2020. Because that's when the universal recycling law is banning food scraps from landfill. And so there are these really actionable items on there.

And we touch base with them once a year through reporting. I mean, all the time we're touching base. But they're required to report each year on whether or not they've met those performance standards. So, that's been cool, because it's been like folks are really doing a lot of work, and making it happen on the ground to do all this stuff. And so it feels better than just like well we're going to require you to write this plan and then no one's ever going to look at it again. So I like that. I like being helpful to the municipalities. There are always a lot of questions about our various requirements, or just how to do things.

And then the other piece is the household hazardous waste programs. The municipalities do all the work on that. they run all of the collections. I hear a cat meowing. (laughs) Oh, it's outside. I'm sorry. I was hallucinating. It's the heat.

Nickerson: I think she's inside.

16:58

Roethlein: Yeah. Household hazardous waste programs. Yeah. So all the municipalities, the solid waste district towns, alliances, they're required to either hold three one-day collection events, or provide access to a permanent collection facility for their residents and small business who have household hazardous waste or hazardous waste. And you know, there's always things that come up, like them looking for a new contractor to work with, or to take the waste, or hard to handle items that come up, like spray foam tanks, which are great for reducing how much heat or cold is coming in and out of our house, right? And we're using spray foam all the time. But then we have the cylinder. And to dispose of those right now is like \$150 a pop with a haz [hazardous] waste contractor for an empty tank. So there's always products like that that come out in the districts. Sometimes you are looking for assistance, trying to figure out a way to manage that.

And then just the costs in general of running a household hazardous waste collection program are high. And it's usually the biggest part of their budget for solid waste. And so we at the solid waste program just recently held a stakeholder group where we brought in municipalities and folks from waste management, some folks from different trade associations, and really talked about the issue of [how much] household hazardous waste is out there. Folks have it to get rid of. It needs to be convenient. It needs to somehow be a bit more cost-effective, because it's costing a lot of money right now. And how do we make a better system?

Like we have a pretty good system in Vermont. Not the best in the country, but better than probably a majority of the country for household hazardous waste. And we have really committed folks working on it. But we need to maybe shift a bit more in having some more regional facilities that are open year round and maybe less events. Because if you miss the one-day event, you're SOL. And that's hard for folks if they're moving, or if someone's just taking over a family member's property or things like that.

Yeah, and then just like a lot of questions from again, not as much when I was at the solid waste district, but I still get them. Like what to do with, you know, what do I, how do I recycle this? Can I recycle Styrofoam? Where can I get rid of my Round Up? Where can I bring my paint?

And that's the other part of my job is the product stewardship programs we have for- we have eight different product stewardship programs in Vermont. And paint and batteries, I'm the point person for those. So I work with the stewardship organizations who, the stewardship organizations implement the programs on behalf of either the paint manufacturers or the battery manufacturers. So for paint, it's Paint Care, who I talk with all the time. And then-- (Nickerson sneezes) Bless you. For batteries, bless you, it's Call Two Recycle. And then the other product stewardship programs we have are mercury thermostats, lamps, mercury auto switches, electronics. Bottle bill is a form of product stewardship. Yeah, so we have a good number of them. Which is great. Because we're putting some of the responsibility on the manufacturer, and not on, all on either the consumer or the municipality. It helps a bit with costs. Yeah.

20:39

Nickerson: Great. Thanks. So that was a really helpful sort of overview of all of the things that come under your job.

Roethlein: Mm hmm.

Nickerson: Could you, is it possible, I realize you might not have a typical day. But is it possible for you to walk me through a—(laughs) a pretend typical day?

Roethlein: Sure. Yeah. It's a lot of time in my cube, I think. Or running to meetings. But like today, I came in and it was, we had to get out. We just posted an RFP for some grant funding that we're really excited about, \$975,000, which isn't a huge amount of money, but it's more than we've had before to give out towards implementation of universal recycling and specifically for folks looking to expand organics processing capacity of facilities, or building new facilities. So, just getting the word out. Making sure that everything's right in the press release and in the announcement. You know, my supervisors did the lion's share on that. And then I just had to distribute really, on that one. And then I worked on, I've been working on another grant related to household hazardous waste research. No, I didn't realize it was ringing. [pause in recording for her to check her cell phone] Are you sure it was actually ringing? Um, so, yes, working on drafting grants. And when you work on a grant at the state, you have to get approval from a couple of different folks and make sure everything is written the right way and make sure up the chain that not only do we have the money to do it, but that everybody's in support of it. So sometimes

things take a bit of time. I feel really fortunate that we have this agency that's really, seems to me like really efficient with getting things out the door. So my job, if I prepare a good summary and do a good briefing on stuff, like things really move along really quickly. Like we were able to turn them both around in like two and a half weeks. Get them out the door.

[And then my] phone rings. Someone had a question. A lawyer for a battery manufacturer who's considering selling this battery in Vermont. And wanted to know what they would have to do to be in compliance with the primary battery stewardship law. So explaining that to them and what the law entails and what they would have to do. And then I had a call from a municipality asking about the new state materials management plan that we're starting to revise, and what requirements are going to be on them. And I said well, not entirely, I'm not entirely sure yet what it's going to look like. But they're trying to budget. So trying to look at what their budget is going to, what they need to budget for, predict that. A call from someone, a business, on what to do with antifreeze. I get a couple of calls, and then it's just like a million emails. That's how everyone communicates now. and I think most of the time it's pretty efficient. But often I just find I pick up the phone. Because it's like you can go back and forth trying to explain something in an email. Unless you're trying to like connect people to certain links or documents or whatever. So yeah, I think I do find myself talking on the phone a lot to folks.

I also talked with Call 2 Recycle about the battery program and some different ideas for trying to generate more collection of batteries. We want to get higher numbers. We want to get more batteries in. We've spent years telling people that it's okay to throw your single-use alkaline batteries in the trash. And now we have recycling for them. So we have to undo that training. (laughs) Behavior change is hard. And then we have another, a solid waste report, that we're working on with the legislature right now. So that's a lot of writing then going back and forth and folks looking at it and making sure we're getting out there the good sound bites that we want the legislators to know the facts and making it, giving them enough, but also succinct enough so that they can absorb it.

Yeah, it's just always, always kind of random calls to like "what do I do with asbestos?" and then talking to my colleague about that. I had a call from McDonald's, because we had visited them for outreach. And they are open to, and know they have to (laughs), comply with the law for recycling and eventually food scrap collection by 2020. And they want help doing that. So setting up a time with them and connecting them with their solid waste district.

Yeah, so it's pretty, there's like there's never, I never don't have anything to do. (Nickerson laughs) There's always something. And it's, yeah, the day goes by fast, for sure. Yeah. So even when I'm in the office, it flies by.

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Nickerson: Yeah. And the days that you're in the field, what kinds of things are you doing when you're in the field in this job?

Roethlein: Mostly now, when I'm really only in the field for like for meetings with all the solid waste districts, you know, or a site visit when, you know, there was a new compost facility that just went up recently in Johnson, Lamoille Solid Waste District is operating it and wanted to go and check that out and got a tour of that. I'm not doing inspections of transfer stations, you know, but sometimes I go there to be helpful and connect with the folks working there. You know, "How's it going? Have you been telling people about the paint program? Is there any resources we can get you? How's it going with recycling?" Different things like that. but yeah, I'm not, I'm primarily mostly in meetings or, like I said before, doing outreach to different businesses is another way I get in the field and talk with people out there.

And then workshops, and trainings, and presenting at conferences. It's come down a bit. But I think we're going to have another resurgence. You know, like the first two years, we were just at very single possible workshop and conference in Vermont, talking about universal recycling. And everyone wanted us to come and talk about it, and everyone wanted to know what they had to do.

27:37

Nickerson: The first two years after the law was—

Roethlein: Yeah. Exactly. And that was when Josh [Kelly] and I started. So it was like we hit the street running, or whatever. But we were just saying it's like now it's going to be time again, because the food scrap ban coming in 2020 is going to pique a lot of folks' interest. (laughs) We want people to know about it and have the tools to be able to do it right. So, yeah.

28:08

Nickerson: Yeah. So I realize this is going to stretch your memory.

Roethlein: Okay. That's good for me.

Nickerson: But can you go back in time and tell me what, again, a quote unquote "typical day" at the Central Vermont Solid Waste District was like?

Roethlein: Sure.

Nickerson: I know that you worked on the compost program, and on household hazardous waste. Transfer stations.

Roethlein: So, some similar. You know, definitely with being a public servant, answering people's questions. And probably even more than now, like individual residents or businesses call. Because if the district is doing a good job, that's the first place a lot of folks look to find answers to their what do I do with kind of questions. So that was a huge part of my job. At the time, I was supervising. So there was always just the, "Oh, I'm sick today." "Okay. Who's going to cover at the Barry Recycling Depot?" "Okay, no one can cover. Okay. I've got my boots. I'm running up there and collecting trash and recycling." And sorting recycling. And talking with customers about why their plastic bags can't be recycled. And I know it's a bummer that Styrofoam has a symbol on it but it can't be recycled. It's just a really good marketing effort. And you know, talking to people about what they can do with their hazardous waste was a huge part.

Nickerson: So you would staff the drop off.

Roethlein: I did. Yeah. And I really liked that. I really liked that part. And that's one part I definitely miss with my job now, being out in the field and really connecting with people. You know, my colleagues who are doing that work all the time. And then also you know, just residents and small businesses. And getting to chat with folks. And be physical, and use my body for things, felt good. It was challenging at times, too. And I liked that. You know, even with the weather. When it was five below up at the Barre Town Recycling Depot on top of the hill, and the wind was whipping and stuff like that. It felt like some kind of challenge course or something. And then, you know, at the time, I had to carry a pager all the time because we had the food scrap collection program going. And then on Saturdays, we were also, not only were we running the food scrap collection, but we were hauling recyclables and trash from our own recycling depots. And so the truck was running on Saturday, too, and so Sunday was the only day that I

didn't have to carry my pager. And there was always something going wrong with the truck, you know, something, some issue. Not always like in a bad way, but just the nature of having vehicles and equipment, especially in the winter. Things would freeze, wouldn't work. We'd have to get the other truck, would have to rent a truck. Yeah, and so just like that constant troubleshooting. And while I learned a ton, and I appreciate that experience, I really, really appreciate right now that I'm not getting that call like constantly. Or the pager going off. In fact, my old beagle, now he's deaf, so he wouldn't know. But he hated that pager. My god. He hated it. He just would shake and go nuts every time it went off. And pant and drool.

Yeah, so there was a lot. Folks at the solid waste districts, like with running facilities and doing outreach programs and connecting with towns and having board meetings to go to at night to make sure their towns feel like they're getting everything they need to get to be a member of the district. It was a pretty intense job. And I think that I often, this may be one of those things we may cut out. But folks have said to me that it's nice to have me at the state, because I've been on the other side. And I've always kind of laughed that off. But then, I kind of get it. And like we're not this evil state coming and cracking down on the municipalities at all. We all feel really like we want to help people and we're in this together. But there are times when I see kind of that disconnect of, let's say well, what the hell do they do over there, anyways, at that solid waste district? You know, it's like well, you just go spend a day there, and you'll see. It isn't some light and breezy job where they're getting paid a ton. So, you know. and yeah, I think the other—yeah, yeah, that's like the main chunk.

00:33:03

Nickerson: So can you talk about the food scrap collection program at Central Vermont Solid Waste?

Roethlein: Sure. Mm hmm. Yeah. I did not start it. I was working strictly at the recycling depots and on the household hazardous waste program at the time. But Donna [Barlow Casey], who you know [the interviewer used to work at the district], and Tom and Rick and Lydia and Kate, they were all the folks who were, it was like we had this, they were focused on the organics program. So it first started with a couple of local businesses. And Carl Hammer from Vermont Compost Company, he had made some connections and was taking some food scraps. And I believe it was from like NECI [the New England Culinary Institute] and the [Hunger Mountain] Coop, maybe, at that time. And they got connected with the district. He [Hammer] got a grant from the district, I think, for collection buckets, if my memory serves correctly. And you know, through conversations the district was like, "this is what we want to be doing. This would help us work towards having zero waste. And this makes sense. And we want this to happen in the schools, too." The schools are the perfect place to have food scrap collection because we can be training young folks that this is what we want to be doing.

So the district devoted resources and applied for grants to do training in the schools. And then started picking up a couple of businesses along with the schools, who were willing and excited and engaged. You know, like NECI and the coop, and no offense if I'm forgetting some of the early folks. National Life was on board really early. Blue Cross/Blue Shield. The hospital, Central Vermont Hospital, who wanted to divert their food scraps and felt like this was a good thing to be doing. And the district had grant funding, also, at that time. So they could subsidize the cost of the program for the first few months. In the beginning, I think, we subsidized for like six months. Then we cut back to three months. And then they were on their own to pay for it. But most stayed, because they found a reduction in the amount of trash they were generating, and other benefits, like worker satisfaction. Folks were really engaged and excited that their food scraps were potentially going to a chicken farm, being turned into some beautiful new soil.

The schools were hugely engaged in it, of course, for obvious reasons. And some schools did some really great things, like the Montpelier High School, with Tom Szabo. They use the compost that was made up at Vermont Compost from the schools' food scraps in their own greenhouse. And he really closed the loop on it, and so that was very cool, and it is still happening.

And my job, once some other folks left, I was asked to run the food scrap collection program. And so that meant making sure the drivers had what they needed, their training. Making sure that the trucks were being maintained. I was totally blessed to have drivers who were also interested in truck maintenance. And so they were constantly explaining all this stuff to me. (laughs) It was good. I learned some stuff. And making sure the trucks were maintained.

Equipment, always having to buy new totes to put the food scraps in. And then outreach. Getting more customers on. Because we wanted this to be successful. We wanted to get as much food scraps as possible. Divert them from the landfill and send them to either composting or anaerobic digestion. And so going out and just like doing cold calls and dropping into businesses.

And that was when I first met Josh, because we contracted with him when he was at High Fields Institute to do outreach. And that was really great, because he was really helpful to do that and had a lot of energy. Because he wasn't like, well, because he has a lot of energy in general. But also because he wasn't having to worry about the recycling depots and the truck maintenance and the drivers and the employees and everyone else that I was having to deal with at that time.

37:14

Nickerson: And that's Josh Kelly, who's the [DEC (Department of Environmental Conservation) section] manager.

Roethlein: Yup. He's my boss now.

Nickerson: At the Department of Environmental Conservation.

Roethlein: And so, yeah. Food scrap collection. At the time, we were working with Vermont Compost, Grow Compost, High Fields, which Tom Gilbert founded and he is now at Black Dirt. But High Fields had their compost site out in Wolcott. We were hauling food scraps to there, Grow Compost, Vermont Compost. And then we were working on, at the time, the Vermont Tech digester. And I was not so much directly involved in that. Just kind of, you know, helping with some numbers and figuring out how much the truck can really haul and hold, and how much will we need to make that viable and things like that. And then that project got handed off later on to Vermont Tech. And they now are running that digester.

Oh, and Bob Sandberg. I don't want to forget him. Cookeville Compost in Corinth. He was great. We had a food scrap collection going down in Bradford area. And so our drivers would drive down there, pick up food scraps and bring them to Bob's farm. He now runs the route himself and has his own totes. He got a grant from us for totes. And that was great, to be able to hand that off to him.

And, yeah, you know, that was, it was really exciting at that time. People were really jazzed about food scrap collection. And I think, yeah, I think they are now. I think maybe just like at that time it was still like really new and exciting. We still have a lot more to do here. But especially in like the Montpelier region, everyone kind of knows about it now. Because I think Central Vermont was definitely a pioneer in really focusing funding on that, and subsidizing it. Because it was expensive to do, to do it right.

And I think from that, now like we're looking at the numbers and looking at how much was collected. And we're using that data from the Central Vermont routes of okay, what does your typical Duncan Donuts produce? You know, one that has this many seats. Like we have all these estimates for per pound. But this is actual data that was picked up. So that's really helpful for us now as we reach out to other businesses. So it's cool to see that. and it's helpful to learn like what trucks and equipment worked and didn't work. (laughs) So it's good to see that now.

And, yeah, the idea always was let's figure out how to do this, and then let's find a private hauler who wants to take it on. And that has finally happened. Grow Compost is now running all those routes. And so that's, to me, a huge success. You know, I'm sure there was like some heartbreak for some of the staff at the district, because I am sure that they felt some ownership of that program. Because how could you not? Like if I was still there now, it would definitely probably be a bittersweet. But it's just so great to see it live on, and see it live on in the private sector. And see it work and see them hiring staff and paying them a livable wage and being a good employer. And diverting all these food scraps, you know. So it's great. It's definitely great. So it feels good to have been in on that a bit. Yup.

40:55

Nickerson: That's a very exciting program. So, the opposite end of the spectrum. You were really involved in household hazardous waste collection, diversion. Could you talk about that?

Roethlein: Sure. Yeah. I mean, we had, when I first started, we had a semi-permanent. I mean, it was a permanent facility, but it was located at Casella's CB transfer station on Route 2 in East Montpelier. And basically it was a storage area for us for the household hazardous waste that we collected. And so we would run, our collection events, we'd run some from there. And then we'd also run remote rural events. Like one in Bradford, and one over in Tunbridge and one in Hardwick. And the district now does something kind of similar. But anyways, I'll talk about then. And so we would work with hazardous waste contractors to run those events. We would hire different companies like Clean Harbors or EnPro, or Triumvirate. At that time, it was Clean Harbors that we were working with.

And so your one-day collection event would mean a bunch of cars would line up and bring you their toxic products, and sometimes they're not toxic products, because they just weren't sure what to do with it. And so the day consisted of getting there by seven, putting poly, you know, plastic down everywhere with the contractors making sure all the supplies are there, making sure the contractors sent you enough staff for the day. (laughs) Because it was going to be really busy. And their staff. We always had training. I had training. But, and I potentially could have done some of the packing that they did., but we left the majority of like the chemist duties, because I wasn't a full chemist or anything like that, to the Clean Harbors staff. But I had awareness and knowledge of what they were doing and could kind of oversee and make sure they kind of knew what they were up to, which they very much did.

And so all the materials come in in people's cars. We would always ask people to shut off their car and not everybody would oblige. People would smoke cigarettes. The best and the worst were, you know, in the backseat of the car, this cauldron [of toxic items], it still happens all the time. (laughs) The coordinators always tell these stories of how people thought it would be more efficient to just empty all their bottles of whatever into one five-gallon bucket. And like one time it was open. And there's a kid in the backseat and a dog. And you walk up, and the fumes were just like to knock you over. It was like, "Get out of the car!" "What?" And expletive, expletive. And pulling this [toxic mixture of] stuff out [of the car].

And yeah, and crazy stuff. Some people's great-grandfathers were apothecaries and pharmacists. And so they brought in opium, you know, because that was there. And it was like well, the contractor

doesn't want to take it, because it's federally DEA-regulated. Like pretend you didn't see it and throw it in the trash, you know. Take it back home and just put it in the trash with kitty litter. I mean, there was crazy stuff. Like lots of liquid mercury. People had it. You know, again like someone had it from some profession. So the people used to play with it when they were a kid. And we all have that experience, right. Some scary times where there were unstable materials came in. So materials, ether, picric acid that could be reactive, even if you just so much as like nudge it the wrong way, or go to unscrew the cap to see what's inside. And so like having to like clear the event, different stuff like that.

And so again, this is all stuff we have in our household. So we don't really think of it as a big deal because we can buy it. You know, maybe not the opium anymore, the liquid mercury. But other materials can be bought online or in the grocery store or hardware store. And we don't think about the safety issues with them. So having to make sure that at those events that again, folks were staying in their car, they were shutting off their cars, they weren't smoking. Getting them in and out of there as quick as possible and as safely as possible. So unloading cars the whole time. You know, it would just be like— [shakes head]

And I remember the end of those events. Like the smell when I would come home, my partner at the time would just be like, "You reek." It's just like in your pores from handling stuff. And that's not even, I wasn't even pouring off. So the contractors would sometimes do consolidating into drums for like materials. Like say all the used, all the oil-based solvents or whatever. And I wasn't even doing that. I was just emptying people's cars and was still saturated with the smell.

But again, like I said before, most people were really appreciative to be able to get rid of this stuff. They had been sitting on it for a while. Some folks were nervous about having it around the house with kids and pets. So it feels good to—plus, we all like to clean our houses, too. That always just feels good, right? Yeah. So making sure.

And then once everyone leaves, then it's another four hours of packing up. So the bigger events, like if there were 150 cars, we'd be there from seven a.m. until sometimes six p.m. So it was kind of not the funnest way to spend a Saturday. (laughs) But it felt good. And again, there was kind of that challenge part of it, you know. Having to talk to all the people and help them with solutions. Because you know, they're waiting in line and they want to talk, too. "Well, what do I do with my batteries, anyways? And where can I recycle used oil?" And that was a good way to get information out. Because you talk about a captive audience, right? Yeah. So. Yeah.

And then afterwards, then the bills. Then managing that part of it. Reviewing all the bills and making sure we have all the paperwork for the state, for manifests and for everything else. And then, yeah. Continuing to try to figure out ways to improve the system was a big part. When I was in the district I really wanted to, I had started to say, we had a storage area in the beginning when I first started working there. But then Casella needed to expand their operation. And so they said, "Sorry, we can't least that space to you anymore." And the district, we tried desperately to find somewhere to set up the household hazardous waste storage facility so we would have somewhere to help consolidate waste that we collected so our costs would be better, would be more manageable. And could not find a location. So we donated it to the Chittenden Solid Waste District. And they used it up at their facility.

But that part was a big struggle the whole time I was there. Really wanting to find a way to have a permanent HHW facility, so we could be open year round and consolidate waste from rural events. And was never able to make it happen. We could not find any property, or anyone willing to lease. So, you know, and central Vermont is a main corridor. It's like, we still need something in this region like that.

48:35

Nickerson: HHW meaning household hazardous waste.

Roethlein: Yeah. And [unclear] service conditionally exempt generators. They're small businesses who have a really small amount of waste. So they can use district and municipal events. And that helps them with their costs, as opposed to having to pay a haz waste contractor to come every time to pick up what they have. Yeah. So it would benefit a lot of folks. And hopefully through the stakeholder group now, we can figure out something to make that work.

49:08

Nickerson: So what is your favorite part about working in solid waste management, or your favorite part of your current job, whichever way you want to answer.

Roethlein: Sure. Being helpful. Yeah. Is definitely like, it's always the first thing. If I don't feel helpful, I feel like there's no point in my job. And so if someone asks me a question or has a problem, I want to help them figure it out. And if I can't figure it out right away, I will figure it out and find them the resources. It's like it's extremely frustrating when you can't find an answer. And I feel pretty lucky. It's probably only happened one or two times. But there's not always an answer people like. (laughs) But there is an answer, and a way to be helpful. *And I feel like our requirements in the solid waste program are important, and they make sense. Some may think they're overreaching. But I feel really strongly that we need laws and we need government to keep us, to keep certain things in check, and to have a level playing field for everybody. You know, not only of course a healthy environment, but it's a fairness issue. It has to be the same for everybody.* You know, but that said, my job is to help you figure out how to comply. And it is all reasonable, and we can help you comply. So that feels like the best part of my job is when, not only can I like answer someone's question about what to do with something, but really like okay, let's figure this out. This is what you need to do, and how can we get you there? Instead of just a slap on the wrist kind of thing. And I think, yeah, some people still like, they get nervous. The state. You know. And then they meet me and they laugh, right, so, yeah. (laughs) But, yeah.

And connecting with people, of course, is really nice and feels really good to be able to, you know, meet people where they are. And understand where they are coming from and where they are frustrated. And that part sometimes is challenging, but it feels really good when I can kind of see that through to the end. And, yeah. Again, just meet them where they are and find them a helpful solution. Yeah.

51:42

Nickerson: How about the most challenging, or your least favorite part of this work?

Roethlein: Working in a cubicle (laughs) is really hard for me. Is really, really hard. And on a computer screen all day is really, really hard for me. I don't like the way it makes me feel. It's just what it is. It's what I have to do in order to do this work. And there's no way around it. But then beyond that, I mean, less personally, *the hardest part is telling people they have to do something that's going to cost them money. Because we all know that the majority of folks in Vermont are stretched thin, whether they're a resident or a business owner. And you know, I don't, like I don't want people to think that I don't realize that, and that I'm just, "Well, you just got to do it." That's a challenge, that definitely is a challenge. And often change, in the beginning can be expensive.* As we adjust systems, and new things come into play. And some of this stuff takes time, right, in order for the markets to catch up. And so that part, I think, is probably, is the biggest challenge. If I could say, every single time, "Oh, if you recycle and compost,

you're going to save money." That may not necessarily always be true. Especially right now, with our recycling markets being challenging. It's coming close. So having to focus on the other benefits of recycling.

And I keep saying the silver lining of the recycling markets being so low is that we are, everyone, everywhere in this country is looking at how to clean up recycling. And realizing that a lot of crummy stuff has been getting dumped in China. You know, not illegally dumped or anything like that. But there's a lot of material that really isn't quality, that we've just been taking for granted because someone's been taking it from us. But you know now the reality has hit. And hoping not only that we can clean up recycling, but we can look at packaging design to try to eliminate some of these materials that can't really be recycled or reused.

And then, of course, my hope one day, maybe we'll join Europe and have packaging product stewardship. You know, paper and packaging product stewardship. And so if you want to sell your toothpaste, sorry toothpaste companies that I'm picking on you, but if you want to sell it in a paper box with plastic wrap around it and foil on top of the tube, then you have to figure out a way for all those materials to be recyclable.

And I think that's really, that's going to [?], that and consumer demand. But I just recently read an article about, you know, we often say "consumer demand, consumer demand." And that we can demand this and companies will shift. But I also, I don't think it's fair to put it all on the consumer. I think that the manufacturers know what they're doing, and they have the capability to figure this out and we have to push back. So, hoping that will help. Yeah.

55:13

Nickerson: I just have a couple more questions. I'm trying to think how to prioritize them. What would you say are the special skills, knowledge or training required by somebody—

Roethlein: In a position like mine, or—

Nickerson: Yeah.

Roethlein: I think comfort in talking with folks is huge. Yeah, you have to be willing to talk to people. Like you can't just email. And you can't be, you have to be willing to do some public speaking. You have to be comfortable with taking criticism and being challenged, and not taking that personally. You know, writing skills, like I think I've learned a lot. I think it's a different style of writing than I've ever done. It's a bit technical, but then it's not because you also want to write certain things that are somewhat flashy to keep people's attention. Not that—people will probably laugh when they hear me say that, because we don't really do much flashy. But we're trying.

And I think having on the ground knowledge has been really helpful for me, having actually run the food scrap collection program and the recycling depots. Because again, I've been in certain situations with colleagues, colleagues in the broader sense. Like not necessarily specifically my team. But where people will criticize something or say, "Well, why don't they just do that? Why don't they just collect that this way or that?" The reality is, the tote freezes in the winter, or whatever the case may be. So I feel like that has been really beneficial to have on the ground experience.

The state requires degrees. (laughs) Or a certain amount of years in a related field, like solid waste. And, yeah other skills.

57:31

Nickerson: You said you had special training when you were doing the hazardous waste collection.

Roethlein: Yeah. And so you don't need that for my job now, but I think it was helpful that I had it. That told me like which chemicals were compatible and which weren't. And some safety precautions around OSHA and stuff like that, when handling materials. You know, again, I'm not doing that directly now. But it's nice for me to have that background to basically like understand what folks on the ground are going through, and what's required. And understand when we're talking about, well, what do we need from programming? Well, you need that, you want to have a better HHW program, but that's going to mean more staff and more training and you're going to need this, and your facility is going to have to be heated and grounded to store these materials.

58:20

Nickerson: Because they're handling really toxic stuff?

Roethlein: Exactly. Exactly.

Nickerson: It's to be kept in different conditions?

Roethlein: Yeah. And if I hadn't had the on the ground, I could read about it and I could talk to other coordinators, which I still do, because now I'm learning, because I'm kind of out of the loop, you know? But, yeah. And the dedication. You have to really care about this work. Because sometimes, like I said, folks are challenging, or some of the tasks may feel a little mundane when you're writing a report. But you have to kind of step back and look at the bigger picture that you really are having an impact and this is important to do. So.

59:01

Nickerson: So as you think about sort of the future, what's the most exciting to you about the frontier of solid waste management?

Roethlein: Product stewardship is really exciting to me. I mean, I mentioned that before. Thinking about really, how can we push this? Can we do something like paper and packaging EPR [Extended Product Responsibility]? Can we look at that like as a country?

Nickerson: EPR, is that Extended Product Responsibility?

Roethlein: Yeah. Product stewardship. Exactly. For paper and packaging products. That would impact all of the recycling that we have. That may be somewhat of a pipe dream. But I know there are some states talking about it. and if enough of us got on board, that's something that is exciting for us in Vermont. I am excited about the food scrap ban. It doesn't mean, you know, I always say to everybody, it's not going to mean every banana peel is going to be kept out of the landfill, but it's a huge, it's really going to help us push this forward. It's happening. Folks are diverting food scraps who wouldn't be doing it if we didn't have the law in place. And so I'm really excited as we get closer to that deadline for us to have even more people involved in diverting food scraps.

And hopefully as a result, once there's more diverted, we have more jobs, because we have more facilities and more haulers who are doing this. And that's a job to feel good about, too, which is a great thing. So I'm excited about that part.

1:00:45

Nickerson: So is there anything that we haven't covered that you'd like people to know about solid waste management?

Roethlein: *Just to think about when you're—not to feel guilty—but just trying to think about stuff when you buy it. Like, do I really need this? How long am I going to have this? I found that now like with having a four and a half year old. It's like every time you go to the store, there's some flashy piece of plastic c-r-a-p that she's like, "Oh, Dada, I want one of these." And I'm like, "Okay, yeah, sure. Fine." And the rest of the day she's occupied with it and it's wonderful and she's excited. And then it goes in a basket. And you know, you now have this basket of plastic tchotchkes as Nadine [Roethlein's wife] always says, and like now what do we do with them? We try to schlep them, give them to someone else who just had a kid. Like was that really needed? No. I mean, there's so many things. Yeah. I just could go on forever about that. We just have a lot that we consume that we don't need. Myself included. Yeah. (laughs)*

Nickerson: Thank you so much.

Roethlein: You are welcome. Thank you.

Nickerson: [Thank you for] Sharing all of your experiences - it was really great to hear.

62:06

[End Interview.]