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1
                   UNITED STATES OF AMERICA
 2
                 NUCLEAR REGULATORY COMMISSION
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     In the Matter of
                               : Docket No. 72-22
     PRIVATE FUEL STORAGE
 5
                              : ASLBP No. 97-732-02-ISFSI
     L.L.C.
 6
                               : Deposition Of:
     (Private Fuel Storage
                              : DAVID C. LARSEN
 7
     Facility)
 8
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 9
           Deposition of DAVID C. LARSEN, taken at
     the law offices of Parsons, Behle & Latimer, 201
10
     South Main, Suite 1800, Salt Lake City, Utah, on the
     12th day of May 1999, at the hour of 9:00 a.m.,
11
     before David A. Thacker, a Certified Shorthand
     Reporter, Registered Professional Reporter, Utah
12
     License No. 22-105417-7801 and Notary Public in and
13
     for the State of Utah.
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22
23
24
25
        ASSOCIATED PROFESSIONAL REPORTERS, L.C.
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1 PROCEEDINGS 2 DAVID C. LARSEN, being first duly sworn, was examined and testified 3 4 as follows: 5 **EXAMINATION** 6 BY MR. GAUKLER: 7 Would you please state your full name for 0. 8 the record. 9 Α. David Curtis Larsen. 10 David, my name is Paul Gaukler, and I'm Q. going to be asking a series of questions this 11 morning. If at any time you don't understand a 12 question that I ask you, would you please ask me to 13 clarify the question? 14 15 A. Okay. 16 What is your current position and employer? 17 I'm an environmental scientist with the Utah Department of Environment Quality, Division of 18 Solid and Hazardous Waste, Chem Demil Section. 19 20 Very specific. How long have you been an Q. 21 environmental scientist with the Department? 22 Α. About ten, ten and a half years. 23 Q. So you joined them about 1989? 24 Α. August '88. 25 Q. August '88. Okay.

```
until you joined from '87 to '88?
 1
 2
              Well, actually, I was in school while I
     taught school. My wife was finishing school at BYU.
 3
              Very good. Since you have joined the State
         Q.
     in August 1988, what have been your positions?
 5
              Same position.
 6
         Α.
 7
         Q.
              Environmental scientist?
              Uh huh (affirmative).
         Α.
 8
              At Solid and Hazardous Waste?
 9
         Q.
              Right.
10
         Α.
11
              And what duties have you had at Solid and
         Q.
12
    Hazardous Waste throughout that period of time, from
    August 1988 to the present?
13
              Connie could answer that question.
14
15
    used to be my boss.
16
         0.
              I didn't know.
17
              MS. NAKAHARA: Don't volunteer any
18
     information.
              MR. GAUKLER: We'll ask you, Connie.
19
              THE WITNESS: Permit--RCRA permit writer,
20
21
     and evaluate closure plans, do hazardous waste
22
     inspections. That pretty much generally covers it.
23
              (BY MR. GAUKLER) What type of inspections
         0.
24
     did you say?
25
         Α.
              Hazardous waste inspections.
```

	1	Q.	Hazardous waste.
	2	Α.	Yeah.
The same	3	Q.	Those are hazardous waste under RCRA?
	4	Α.	Right.
	5	Q.	And for what facilities have you done work?
	6	Α.	Dugway, Tooele Army Depot north and south.
	7	A lot of	different ones throughout the state. Just
	8	I can re	member a few, Trojan, IRECO, Thiokol.
	9	Q.	How much have you done at Dugway?
	10	Α.	That's what I've mainly worked on.
	11	Q.	That's what you've mainly worked on?
	12	Α.	Yeah. For the last, I don't know, six or
	13	seven ye	ars.
	14	Q.	What's your position with respect to
	15	Dugway?	Do you have a special title with respect
	16	to	
	17	Α.	No.
	18	Q.	Are you the lead person at solid and
	19	hazardou	s waste assuming Dugway?
	20	Α.	Yeah, uh huh.
	21	Q.	And how long have you been the lead person?
	22	Α.	Same amount of time. Six or seven years.
	23	Q.	Six or seven years?
	24	A.	Yeah.
_	25	Q.	And prior to that time you have worked on

1 Dugway as somebody on the staff? Just Dugway and other projects, yeah. 2 3 Q. Okay. Before that time we were kind of 4 Yeah. split into permitting and compliance, and I was in 5 6 permitting, and so it was -- and now we all sort of do 7 inspections and permitting. 8 So before you were kind of organized by 9 task? 10 Right. Connie was the permit section Α. 11 manager. 12 Q. And permit section, you did permits for 13 Dugway and other facilities? 14 Α. Right. Uh huh. And now you're organized by facility? 15 Q. 16 Α. Right. 17 And your assignment under this organization is Dugway? 18 19 Α. Right. Are you familiar with the Private Fuel 20 21 Storage project at the reservation at Skull Valley? I'm familiar they want to build a nuclear 22 23 waste storage. 24 Q. What's your familiarity? 25 Α. That's pretty much it. The location and

they'll pick that up and take it to Igloo G. 1 In not, then they'd get an emergency permit 2 from you and --3 Blow it up. Α. 4 We'll get to that later. Okay. 0. 5 Is there any other chemical munitions б stored at Dugway other than those stored at Igloo G? 7 Not to my knowledge. Other than, you know, 8 buried in the ground. 9 That would be stuff that is not found yet Q. 10 would you say? 11 Right. Α. 12 That's unexploded ordnance that may 13 not--that's undiscovered? 14 Uh huh. Right. A. 15 So everything within Igloo G, other than 16 Q. the chemical agent you talked about, would be a 17 hazardous waste. Is that true? 18 I'm sorry, say that again? 19 Everything in Igloo G--Q. 20 Except the product agent, yes, is hazardous A. 21 waste. 22 So all the chemical munitions in Igloo G Q. 23 are hazardous wastes? 24 Yes. A. 25

Now, Request for Admission No. 4, I take it 0. 1 that you--that the storage of chemical munitions in 2 Igloo G would not pose a hazard to the PFSF? 3 A. Right. That's correct? Q. 5 A. Right. 6 Because you regulate that under RCRA, and 7 Q. you ensure compliance. Correct? 8 Yeah. Right. Yeah. 9 Α. Now, what disposal of chemical munitions 10 Q. takes place at Dugway? 11 Just the emergency destruction of rounds 12 found on the range, or rounds that are evaluated and 13 shown to be too dangerous to store in Igloo G. 14 Okay. So how are they--let's take the 15 0. first one. 16 On the range. Α. 17 Let's take the ones found too hazardous to Q. 18 store in Igloo G. How are they disposed of? 19 They're removed from the Igloo, taken out 20 Α. to an area where it's believed to be safe, and 21 detonated using usually C4 plastic explosive. 22 Now, I've heard open burning and 23 Q. detonation, is that --24 Open detonation, no open burning on rounds. 25 Α.

not directly regulated by the state but still in 1 you're saying the Igloo with the munitions, would 2 that pose a threat to the Private Fuel Storage 3 Facility? 5 A. No. Do you know if they store a chemical agent 6 anyplace else in Dugway? 7 At the chem lab. Α. 8 Where they're actually using it? 9 0. Right. Α. 10 Would the storage of the chemical agent at 11 Q. the chem lab produce any hazards, significant 12 hazards, to the Private Fuel Storage Facility, as 13 far as you're concerned? 14 No. Also the material test facility is 15 another area where they test agent, so that would be 16 a place where they'd store it too. 17 And would the storage there present any 18 hazard to the Private Fuel Storage Facility at the 19 material test laboratory? 20 No. A. No. 21 Going back to the disposal of the chemical 22 23 munitions. Okay? Uh huh (affirmative). A. 24 Any disposal of chemical munitions, 25 Q.

therefore, takes place under emergency permits issued by the State?

A. Right.

- Q. And what type level precautions are taken in the disposal of those chemical munitions?
- A. First of all, we don't--we won't approve an emergency permit unless the army explosive people declare that munition to be unsafe to manage in any other way except detonation.
 - Q. Okay.
- A. Because that is not our preferred method for dealing with those.
 - Q. Okay.
- A. And so if it is declared an emergency by the army, we don't question that, and we'll approve the permit. But before we do that, they do a, sort of a risk evaluation, and they determine, you know, like the—a good location to do it, make sure nobody is around there, do it only during certain wind direction, wind speed type of thing. And then they use a certain amount of explosive to make sure that the agent is totally destroyed when they blow it up. And EOD usually uses a five to one ratio of agent to explosive. Five times the agent for the amount of explosive.

A lot of

Is that sufficient to destroy the agent? 0. 1 And they basically define what they 2 Α. call I think a kill zone, and, you know, you have to 3 be a certain distance. You know, if you're 4 within--you don't want to be within the kill zone is 5 what I'm saying. So they define where that is, and 6 then, you know, make sure nobody is there. 7 times Dugway doesn't--most of the operation, they 8 work Monday through Thursday, so they'll do it on a 9 Friday or Saturday when nobody is there. 10 So they define a particular zone where 11 people are evacuated from? 12 Right. Α. 13 Make sure there's nobody there? 0. 14 Right. 15 Α. How big is that zone? 16 Q. The last one was, let's see, think just one Α. 17 round, and it was detonated about, I don't know, 18 about a mile I think to the east of Igloo G at one 19 of these cleanup sites. And that one had a kill 20 zone of about--this is just approximately, okay? 21 I understand. 22 Q.

23

24

- Like 3,000 feet or something like that. Α.
- Where is Igloo G, first of all, on this Q. map, Exhibit 1?

Let's see. Here is CARR over here. A. 1 Where is my map. Q. 2 Do you want to get out the colored copy? 3 Okay. Q. 4 This is--let's see. Here is CARR facility 5 over here. 6 Where is that? A little bit just south of 7 the big number 207 on the map. 8 Sounds good. Yeah. And the detonation was 9 Α. at SWMU No. 79 I believe. So it was kind of like 10 that. 11 SWMU 79? Q. 12 Uh huh (affirmative). The kill zone, so to 13 speak, the area of--that they made sure was safe, 14 that they thought the agent might go in that 15 direction, was to the north of there. 16 North of there. Q. 17 Right. Α. 18 About 3,000 feet? 19 I believe that was the number, yeah. 20 Α. 79. Q. 21 We've got the report and so on. And 22 they're going to do another one, too, here pretty 23 soon. Same area. 24 And what agent was involved in that

Q.

explosion? 1 I can't remember. I'm fairly sure it was a 2 G agent, but I'd have to check. GB. 3 GB? 0. 4 They didn't sample it or anything. Right. Α. 5 They have to use non-intrusive methods to figure 6 out. 7 What's the biggest kill zone or evacuation 8 that--are you present when they do these emergency 9 detonations? 10 I have been, yeah, but I wasn't present for 11 that one. 12 Okay. But you review the permits, and Q. 13 permits identify--you review--14 Actually, I didn't review that one. I'm Α. 15 just familiar with it. 16 Do you review the permit applications? Q. 17 Yeah. Right. 18 That identifies in there what the zone of Q. 19 evacuation is? 20 Yeah. Α. 21 And what's the largest zone of evacuation 22 that you can remember for these emergency permits? 23 Usually just one or two rounds, so a 24 similar type of thing to that. 25

So roughly 3,000 feet? Q. Yeah. A. 2 Maybe a mile max? Q. 3 Probably. Α. 4 Okay. 5 Q. Like I say, there's another one that Α. 6 they've just sent in for some munitions that they've 7 determined are unsafe to store in Igloo G, and I 8 think there's three or four of them, so we'll do 9 those. And I'm not sure what the area, evacuation 10 area, is going to be like for that. 11 But you expect it to be on the order of a 12 mile at most? 13 Probably. A. 14 How far--you were identifying on this map 15 the southern part of the reservation along this road 16 here. And how far is the southern part of the 17 reservation approximately from the nearest point of 18 Dugway? 19 Well, up here it's, I don't know, where is 20 the--is there a scale on here? Let's see, one inch 21 equals 1.6 miles. So I'd say that's about a mile 22 maybe. 23 That part of it. How far do you--Q. 24 Let's see. The reservation actually cuts 25 A.

```
off over here. So maybe a couple of miles.
 1
              How far is the Igloo G from the
 2
     southernmost point of the reservation?
 3
              Just a ballpark guess, I don't know.
 4
     ten miles?
 5
              What did you say?
 6
              I'm sorry. She's an engineer.
 7
         Α.
     guessing ten miles.
 8
              Ten miles at least or so?
 9
              Yeah.
         Α.
10
              Okay.
11
         Q.
              I mean, we like to--we wouldn't want to
12
     approve something that's going to impact anything
13
     off the Dugway facility.
14
              Right. So you wouldn't approve something
15
         Q.
     unless the impact stayed on Dugway?
16
              We wouldn't. We wouldn't.
17
              Okay. And also you wouldn't approve
18
     anything that, in fact, would go to English Village
19
     on Dugway?
20
              Right. Right.
21
         Α.
              They're Utah citizens as well. Right?
         Q.
22
              Yeah.
23
         Α.
               Well, do you think that the disposal of
24
         Q.
     chemical agents under emergency permits issued by
25
```

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the State, posed any hazard to the Private Fuel
 1
     Storage Facility?
 2
              No. As long as it's on facility, you know.
3
     If they found one off facility near the PFS, then
4
     yeah. But, you know, that hasn't happened so far.
5
              They haven't found any off--
6
              There have been some found off to the
7
     south, but none to the north.
8
              None off to the north off facility?
         0.
9
              Right. Right.
10
         Α.
              So they found some off to the south, is
11
         Q.
     that kind of down in this dark area on this below
12
     Dugway here?
13
              Right. Right. These 127, 128 on this map.
         Α.
14
              What area is that called?
         Q.
15
              126 is called Yellow Jacket, it's also a
         Α.
16
                And 127 is called the Southern Triangle.
     FUD site.
17
              Southern Triangle?
         Q.
18
         Α.,
              Right.
19
              So that's where you found some munitions
20
         Q.
     off site?
21
         A.
              Right.
22
               Okay.
23
         Q.
               In fact, one of our own guys found one
24
     right there at Yellow Jacket.
25
```

Q. At the 126 off the site there? 1 2 Uh huh (affirmative). 3 By the same token, therefore, you believe Q. that unexploded ordnance on Dugway would not pose a 4 hazard to the Private Fuel Storage Facility? 5 6 Yeah. That's all in a different location on 7 8 Dugway? 9 Α. Right. The chemical agent, okay, we talked about 10 chemical agent being stored, you said there would be 11 no hazard from storage of chemical agent. How about 12 the testing of chemical agent at Dugway? 13 14 foresee that posing potential hazard to the Private 15 Fuel Storage Facility? 16 Α. No. 17 0. Again, that's done inside laboratories? 18 A. Right. 19 .. With protections? Q. 20 Exactly. Α. Like we have in a fume hood, for example? 21 Q. 22 Α. Yeah. Carbon filtered system. 23 Q. Carbon filter? 24 Right. A.

Negative pressure?

25

Q.

Right. Α. 1 The building is at negative pressure so 2 things don't go out? 3 Sucks through the carbon filter. Right. Α. 4 Now, the name of the laboratories where the 5 chemical agent is tested, you identified two, you 6 said one was the material test lab facility? 7 Right. Α. 8 And what's the other one? 9 The chemical lab. Α. 10 Chemical lab. Are those the only two 0. 11 places that you know? 12 And then they have another facility, it's 13 where the MMD is right now, it's Building 3445. 14 34--Q. 15 It's the old test facility, the MTF 16 replaces that. But there are still some activities 17 going on at 3445. 18 You don't see any hazard posed from testing 19 at that location? 20 No. No. 21 Α. Now, in terms of biological agents. Q. 22 biological agent testing takes place in the Life 23 Sciences Laboratory? 24

Right.

Α.

25

Well--

1 Life sciences facility, is that --Q. 2 All testing of biological agents that are A. 3 dangerous. 4 Q. Okay. But I believe there's simulant testing that 5 Α. 6 goes on outside. 7 But simulant testing--Q. 8 To the best of my knowledge. It's not 9 something that's going to hurt somebody. 10 Q. And you don't foresee any potential hazards in the testing of the Life Sciences Laboratory to 11 12 the Private Fuel--13 Right. Α. They're done under strict procedures and 14 Q. 15 control? 16 Right. They have the same kind of filter Α. 17 system and so on. 18 Q. Negative pressure? 19 A. Yeah. Right. 20 Q. The testing and firing of weapons. Okay. 21 What's your familiarity with the testing and firing of weapons, the -- strike that. What's your knowledge 22 with respect to the various training activities that 23 24 take place at Dugway?

Well, the training activities aren't

25

Α.

Okay.

- Right. And then that's all that I know of A. 1 for sure. I'm not sure whether they fire to the 2 north or not. 3 But again, they fire away from populated 0. 4 areas? 5 Right. 6 Α. Do they have any special procedures they 7 Q. take to protect the firing of these, any training 8 exercises when they use live ammunition? 9 Well, Dugway has a pretty sophisticated 10 Α. what they call range control center, and the range 11 control guy is kind of familiar with everything 12 that's going on out in the desert areas, and you 13 have to get clearance from him before you can go to 14 a certain place. And they have a gate at Ditto, and
 - And so basically the purpose of that Q. control is to make sure what?
 - That somebody doesn't get accidentally Α. blown up.

you can't get out that gate until you get cleared

0. Okay.

from the range control guy.

15

16

17

18

19

20

21

22

23

24

- And they keep, you know, security too.
- So they have to check out where the weapon is aimed and the direction the weapon is aimed?

I'm not familiar with the National Guard's 1 procedures, so they--they probably do. I don't 2 know. 3 Okay. Do you foresee any hazards to the Private Fuel Storage Facility from the training 5 exercises of the National Guard and other training 6 exercises? 7 I'm not that familiar with it. I mean, I 8 know once in a while, you know, an accident could 9 happen, could shoot the wrong way or too far or 10 something like that. But the only--the thing I 11 would think of, is a lot of the firing that they do 12 includes I think occasionally white phorphorus 13 rounds and other rounds that can cause range fires. 14 And so--15 Q. Guard activities could easily cause a range Α. 16 fire. 17 So you see that being the primary hazard Q. 18 that may result? 19 Other than a really accidental, you know, A. 20 probably I'd say unlikely misfiring, yeah. 21 You think it would be unlikely for them to 22 have a misfire toward the Private Fuel Storage? 23 Α. Yeah. 24 Opposite direction? 25 Q.

And pretty far away. Α. 1 Do you know what the ranges on the 2 Q. munitions they shoot are? 3 I'm not sure. It depends on how much Α. 4 powder you use, propellant. Several miles. 5 Several miles? Q. 6 Yeah. I think so. 7 Α. Do you know whether they would go 15, 20 8 Q. miles? 9 I don't know. 10 Α. So it's unlikely for any hazard to come 11 from these training exercises in terms of the 12 Private Fuel Storage Facility. Is that correct? 13 Right. Yeah. Yes. Based on what I know Α. 14 about it, you know. The army could probably tell 15 16 you more. What testing of weapons, army weapons, 17 Q. takes place at Dugway, if you know? 18 I know rockets, they do have a facility at 19 CARR where they occasionally get in a certain number 20 of rounds of certain type of munition, and they'll 21 fire a certain number of them off to--as like a 22 quality assurance type of thing. 23 Okay. That's in the CARR facility? 24 0.

25

Α.

Right. It's a testing. Munitions testing.

Q. Test facility. 1 2 Α. Yeah. 3 That's in a controlled laboratory type 4 situation? 5 A. No, they fire them down range. 6 Q. I see. Okay. 7 Right. Α. 8 Q. And that's again at about 207 on that map? 9 In that area. Yeah. Right. Α. 10 Q. And what direction do they fire them? They usually fire--I believe they fire to 11 Α. 12 the south and then to the west. 13 Q. South, southwest. Okay. 14 Α. Uh huh (affirmative). 15 Q. And do you see any hazard to the Private Fuel Storage Facility from that activity? 16 17 Α. No. 18 Any other testing of weapons that you're Q. 19 familiar with with respect to Dugway? 20 Α. No. No. That's it. 21 Okay. Hung bombs. What's your familiarity Q. 22 with respect to the airplane traffic in and out of 23 Dugway? Do you have any familiarity with that? 24 Α. I couldn't give you any numbers. I mean, every time I go there you see jets flying around and 25

So do you see any hazard to the Private 1 Fuel Storage Facility from explosions of unexploded 2 or hung bombs? 3 I mean, unless one dropped before it 4 Α. got there. But yeah. No. Not for my involvement. 5 6 Do you know what route they take when they 7 fly for --Α. I don't. 8 You don't know? 9 0. I assume they just come off the range, but Α. 10 I don't know. 11 I assume they come off the range and stay 12 over military space. But you don't know? 13 14 Α. Yeah. 15 Let's talk about this map here. This map you brought, Exhibit 1, which is called the SWMU 16 Monument Sites. Now, these are--can you tell me 17 what these sites are again now? 18 SWMU stands for Solid Waste Management 19 Α. 20 Unit. And are all the circles and triangles and 21 different figures that you see on this map, do they 22 represent Solid Waste Management Units? 23 They do. Areas where wastes have been 24 disposed or treated or something like that. 25

Evaluate them in terms of where they 1 were--where Dugway sampled, the parameters they 2 sampled for, and then take that information and 3 determine whether soils need to be removed or not 4 type of thing. Or treated or whatever. 5 clean it up. 6 Does the cleanup of these sites pose any Q. 7 hazards to people in Dugway, the people that live on 8 Dugway? 9 Α. No. 10 Do you see the cleanup of these sites, No. 11 Q. or any of these sites, posing a hazard, any of these 12 215 sites--13 I mean, they've got signs around all of 14 them that says keep out. So if somebody went around 15 and dug in there, yeah, it's going to impact your 16 life. 17 If they follow the precautions--18 Q. And they followed precautions. Α. 19. And stay away from the do not enter signs. 20 Q. Right. Right. 21 Α. So I take it you wouldn't see any of these 22 Q. .215 sites posing any threat to the Private Fuel 23 Storage Facility? 24 You know, other than if there was No. 25 Α.

something we don't know about. You know, we find 1 2 new ones all the time. And new ones, have you found any new ones 3 Q. off site? 4 5 Α. No. 6 Q. No? 7 Α. No. 8 Okay. And are there any to the--you have a Q. couple down in the south part of the site. 9 10 A. Right. These two. I guess you have--I see only one north of 11 Q. 12 Dugway. Is that correct? Right. Actually, though, we really haven't 1.3 Α. looked that much off site. So--yeah. 14 15 Why haven't you locked off site? 0. 16 Because there's so many on site that, you Α. 17 know--18 And because you don't expect--And also it's difficult to get ahold of all 19 the army's old test documents and stuff like that to 20 21 do a good evaluation of it. I don't have as good an 22 access to information. 23 Q. Do you expect there to be any off site, 24 many off site or not?

I expect there to be some more sites we

25

Α.

1	Q. They're transporting some chemical agent
2	from
3	A. From Tooele to Dugway for the tests.
4	Q. Right. And isn't it true that this
5	document shows that their proposed route, look at
6	the last page, has a Bates number on 32158, the
7	proposed route is over the Pony Express Trail south
8	of Johnson's Pass?
9	A. Yeah. Yeah. I don't know if that's the
10	route they use, but that's what this says, yeah.
11	Q. Do you have any reason to believe that
12	that's not the route they would use?
13	A. Well, no, I don't. I don't.
14	Q. And you're talking about munitions. You
15	would expect them to use either Johnson's Pass or
16	this route here, the Pony Express Trail?
17	A. You would think that's the closest route.
18	Q. You wouldn't expect them to use Skull
19	Valley Road?
20	A. I wouldn't think. But like I say, they're
21	pretty sensitive to security issues when it comes to
22	moving agent around. So
23	Q. But they've identified this in a published
24	plan here, the proposed route?
25	A. Right. Right. They have.

Q. 1 You have no reason to believe that's not 2 the route they would use? Α. I don't. 3 In terms of transportation of other 4 Q. hazardous wastes. What's your familiarity with 5 that? 6 It would just be the transfer of hazardous 7 waste off site from Dugway to the disposal facility. 8 Or occasionally, like if they found a round down 9 here at Yellow Jacket, site 126 on this map, and it 10 went back onto Dugway for disposal. 11 Okay. And so they would transport wastes. 12 0. Let me ask you a question. How do they dispose of 13 14 the chemical agent that they use in the testing? How do they--it's decontaminated in a 15 Α. solution, usually bleach or sodium hydroxide. 16 17 So that's down in your RCRA facility that's 0. licensed on the--18 19 Α. That's done at the test facility. Test facility? 20 Q. 21 Right. And then that waste becomes Α. hazardous waste. 22 So they take the chemical agent to use in 23 Ο. the testing? 24 Right. 25 Α.

Dugway goes through that facility. Anything from 1 agent waste to, you know, waste they would generate 2 at a, like a vehicle maintenance facility or 3 something like that. 4 So anything, oil, for example, would go 5 there? 6 Yeah. Α. 7 So it could be decontaminated chemical Q. 8 agent or it could be oil? 9 It could be anything, yeah. Α. 10 And again, the State regulates this central Q. 11 waste facility? 12 Right. Α. 13 And you have procedures in place to--Q. 14 We do annual inspections and so on. A. 15 Annual inspections. And you have Q. 16 requirements in place to protect the public health 17 and safety? 18 Yeah. Α. 19 Do you envision any hazard to the Private 20 Fuel Storage Facility from this central RCRA 21 facility? 22 No. 23 Α. Do you envision any potential hazard to the 24 Q. Private Fuel Storage Facility from the disposal of 25

chemical agent? Α. No. 2 Then I take it they have this central RCRA 3 facility. Do they transport any of that waste 4 someplace else? 5 Yeah. Then that waste goes to off site Α. 6 permitted RCRA disposal facility, the treatment 7 facility. 8 Such as? Q. 9 Such as Safety-Kleen in the West Desert of Α. 10 Utah or incineration facilities in Texas. 11 Why in the West Desert of Utah? 12 APTUS? 13 I believe they probably send waste to Α. 14 APTUS, yeah, for incineration, and across the road 15 to Safety-Kleen landfill, USPCI. It's changed names 16 a lot recently. 17 Is that also known as Grassy Mountain? 18 Grassy Mountain. That's a good name. 19 Yeah. 20 Just trying to use constant names in this. 21 Everybody knows that name. Α. 22 That's what we've been using so far in this 0. 2.3 case, so we're trying to do that. 24 Yeah. Α. 25

And where is that waste transported, do you Q. 1 2 know? What roads are used? Skull Valley--To the best of my knowledge, yeah, the 3 Α. Skull Valley Road to I-80, and then out I-80. 4 Do you see the transportation of those 5 6 wastes causing any risks to the Private Storage Facility? 7 8 Α. No. About two miles off the road? 9 0. Right. I mean, if a nuke truck and a 10 Α. hazardous waste truck hit, that's it. Other than 11 that, it's some kind of a catastrophic thing. 12 yeah, other than that. 13 You don't see any--14 0. 15 Α. No. 16 Has the State taken any precautions--I take 0. 17 it the State takes precaution in terms of regulating 18 the transportation of the hazardous waste from Correct? 19 Dugway. Right. The waste has to be sent by 20 Α. manifest and tracked, you know. 21 Tracked, and you have procedures for the 22 23 shipment of that waste, in terms of what type of containers it has to be packed in? 24

It has to be in DOT containers.

25

Α.

Right.

So they have to be in safety certified 1 containers. Is that right? 2 Right. Right. 3 Α. What activities -- you talk about various 4 activities that you haven't seen proposing any 5 hazard to the Private Fuel Storage Facility. What 6 activities do take place at Dugway that you would see posing any hazard to the Private Fuel Storage 8 Facility? 9 None. Α. 10 None? 11 Q. I can't think of anything. Α. 12 Okay. 13 Q. As far as hazardous waste goes. 14 Α. Well, in terms of the other activities--15 ο. And testing too, yeah. 16 Α. Training exercises, testing for biological Q. 17 agents? 18 Yeah. Huh uh. 19 Α. The things we've talked about today? 20 Q. Right. Yeah. 21 Α. So you don't see any, you don't know of 22 anything else other than what we talked about today, 23 that would cause a hazard to the Private Fuel 24 Storage Facility? 25

1 A. No.
MR. GAUKLER: Let's take a break.
Oliscussion held off the record.)
(Whereupon, a 5 minute break was taken.)
Q. (BY MR. GAUKLER) Are you familiar with the
X-33 space plane?
A. Only from reading the EIS on that.
Q. You have no information beyond the EIS?
A. I really don't.
Q. Do you see that posing any hazard to the
Private Fuel Storage Facility?
A. No.
MR. GAUKLER: Okay. I have no further
questions.
MS. NAKAHARA: I have a few.
MR. GAUKLER: Okay.
EXAMINATION
BY MS. NAKAHARA:
Q. Dave, let's see. You indicated that Solid
Waste Management Units, that there are a number of
Solid Waste Management Units on Dugway Proving
Ground and off of Dugway Proving Ground. Is that
correct?
A. Yeah. Uh huh.
Q. Have any of the Solid Waste Management

MR. GAUKLER: Objection, leading question. 1 (BY MS. NAKAHARA) Let me rephrase it. 2 0. there any circumstances in which the storage of 3 agent or the treatment of agent, could impact the 4 Private Fuel Storage Facility? 5 I don't see anything. I mean, if the whole Α. 6 Igloo blew up, I don't know, maybe. 7 If any safety procedures that the army has 8 in place fail, is there a potential for agent 9 release? 10 To the environment? 11 Α. Yes. 12 Ο. Yeah, there is. 13 Α. Is there a potential that an agent release 14 Q. could reach the Private Fuel Storage Facility? 15 I don't know. You'd have to do like a 16 modeling study and stuff like that. 17 MS. NAKAHARA: That's all I have. 18 FURTHER EXAMINATION 19 20 BY MR. GAUKLER: You don't have any reason to believe that 21 Igloo G will blow up. Correct? 22 I don't. No. I mean that's why they 23 re-evaluate them sometimes. And like I say, these 24 two rounds they have in there they think might blow 25

up, so they're going to get rid of them. 1 And the Army has procedures that they 2 follow to provide protection at Igloo G and other 3 stuff pursuant to your RCRA permit. Right? 4 They have the what now? 5 The Army has procedures that they follow to 6 Q. provide public health and safety pursuant to your 7 RCRA permit? 8 Right. Right. 9 And you inspect to see that they follow 10 those procedures? 11 Right. Α. 12 You referred to some chemical munitions 13 potentially blowing up in place. If chemical 14 munitions blew up in place on Dugway, that would not 15 pose a hazard to the Private Fuel Storage Facility, 16 would it, because of the large distance, miles away? 17 You know, unless it's right on the border 18 of something right on the site, no. 19 And in terms of--talking about biological 20 Q. rounds at CARR. What were those biological rounds 21 at CARR that you referred to? 22 They were some biological munitions that 23

came to the surface when Dugway was doing an

investigation of a contaminated site, and turned out

24

1	A. No.				
2	Q. Do you see any of the other biological				
3	agents you referred to, the biological munitions				
4	referred to, do you see them posing any potential				
5	hazard to the Private Fuel Storage Facility?				
6	A. No. Other than like the one we don't know				
7	about type of thing.				
8	Q. But that would have to be right next to the				
9	facility?				
10	A. Right.				
11	Q. Right next to the Private Fuel Storage				
12	Facility?				
13	A. Right.				
14	Q. So it's safe to conclude as you said				
15	before, that you don't see any hazard posed to the				
16	Private Fuel Storage facility from Dugway?				
17	A. Right. Right.				
18	MR. GAUKLER: No further questions.				
19	(Where upon, at 10:35 a.m., the deposition				
20	was concluded.)				
21	000000				
22					
23					
24					
25					