APPENDIX G

ı	DRAKE CHEMICAL SUPERFUND SITE SITE HEARING
2	SILD HEARING
3	
4	
5	TRANSCRIPT OF PROCEEDINGS
6	
7	•
8	PRESENT: ROBERT MARTIN, Ombudsman
9	GREGG CRYSTALL MIKE WELCH
10	BILL HUDSON DAVID MODRICKER
11	MIKE OGDEN GEORGE DUMBOR
12	DAVID POLISH
13	DATE: MARCH 3, 1998, 1:45 P.M.
14	PLACE: DRAKE CHEMICAL PLANT LOCK HAVEN, PA 17745
15	LOCK HAVEN, PA 17745
16	
17	ORIGINAL
18	
19	
20	
21	
22	- NICOLE L. MATTERN NOTARY PUBLIC
23	NOTARI PUBLIC
24	

MR. MARTIN: This is the meeting on the record with the national ombudsman in connection with the Drake Chemical superfund site in Lock Haven, Pennsylvania.

. 6

1.2

I am Robert Martin, the national ombudsman, and I am meeting with Gregg Crystall of our Region 3 offices and also representatives of the State Department of Environmental Protection with Pennsylvania and the Army Corps of Engineers, our partner at the Drake Chemical site.

There may be issues that these gentleman wish to raise with me, but the essential issue which I wish to raise with them are the allegations made by a former employee here at the Drake site, I believe a contract employee of the Corps of Engineers, Mr. Kurt Davis, who submitted an affidavit to legal counsel for review not only by my office, but by EPA as well.

What I would like to do is go over, I guess, point by point the issues he did raise. And I don't know who the most appropriate party is.

MR. CRYSTALL: Before we start with the actual point by point, I just wanted to make a comment for the record as well, that Mr. Davis met with the Department of Justice, Office of General Counsel, myself, Mr. Yowell, Welch, and some attorneys from DEP.

1.	They were with Commissioner Bottorf, Bill
2	Smedley, and Mick Harrison. And we had the regional
3	managers, Tom Voltaggio, Abe Ferdas, and others on a
4	conference call to discuss the specifics of Kurt's
5	affidavit. So we have contacted him, and we understand
6	the issues he raised.
7	MR. MARTIN: When was that meeting held?
8	MR. CRYSTALL: Last Friday, the 27th of
9	February.
10	MR. MARTIN: And that meeting was held in
11	MR. CRYSTALL: In Williamsport, Pennsylvania,
12	in an attorney's office who was associated with Mick
13	Harrison.
14	MR. MARTIN: I don't have the actual
15	affidavit before me, but I do have the regional and
16	Corps of Engineers responses.
17	MR. CRYSTALL: Do you got that, Mike?
18	MR. MARTIN: You have the actual affidavit?
19	MR. OGDEN: I have a copy. Let's make a copy
20	of that.
21	MR. MARTIN: Let the record show we'll be
22	reviewing a copy of the affidavit that Mr. Davis
23	submitted for consideration to EPA and the Office of

MR. OGDEN: Do you need a copy of this as

Ombudsman.

24

well because that was attached? It's the letter to Carol Browner from Congressman Peterson, Senator Santorum, and Senator Specter.

MR. OGDEN: A point of clarification, Mr. Martin. You mentioned that Mr. Davis was a contract employee, that's not totally accurate. He was what we call a term employee. He was a federal employee hired for a particular term. It was a 13-month term.

He doesn't work for us now primarily because that term expired, and we chose not to bring him back when that expired in November, I believe, of '97.

MR. MARTIN: Okay. What was he hired to do for the Corps during his tenure?

MR. OGDEN: We have -- the responsibility to provide oversight is one of the responsibilities here.

Mr. Davis' responsibility was initially to be what we call the lead construction representative on the night shift.

That short description would be, he was the highest graded construction rep that we had. We had three people on that shift. And what we did was ask Kurt to be the liaison, if you will, between the night shift crew and the day shift supervisors.

His responsibilities, as would be anyone's, in that quality assurance construction representative

24_.

. 5

3

5

6

7

8

9

10

11.

12

13

14

15

16

17

18

19

20

21.

22

operations at the field level, anywhere from operation of the waste water treatment plant, the excavation in the exclusion zone itself, transport of the material up to the feed prep building, the processing through the plant itself, up to the ash handling building, and then once that we got test results back, the disposition of that back to the site as a backfill material.

I noticed in the affidavit, and I tried to clarify a little bit in our memorandum of the record, is that Mr. Davis was not really a supervisor. That has a particular connotation in the government.

He did not have any supervisory responsibilities. He was a construction representative, a supervisor in the sense that in our role as a Corps of Engineers, we have a supervisory role over the contractor.

MR. MARTIN: Did he have any staff which reported to him?

MR. OGDEN: No.

MR. MARTIN: He did not, okay.

- MR. MODRICKER: There were two lower grade employees that worked on that same shift.

MR. MARTIN: Okay.

MR. OGDEN: Now, he was on the night shift,

and I don't know the exact dates, for a period of probably two months or so, Dave, and then he was reassigned to the day shift and worked -- and at that point, he had no one working for him at all.

He actually worked -- he did not even have any of the lead responsibilities. That was a responsibility of Mr. Ricard, I don't remember the exactdates, Dave, do you?

MR. MODRICKER: No, but we can find them easily.

MR. MARTIN: What are Mr. Ricard's responsibilities?

MR. OGDEN: Mr. Ricard is really the -- he is the lead supervisor -- not supervisory, he's the lead construction rep for all the shifts. He works the day shift. He would be responsible to collect the shift reports from all the different construction reps of all the different shifts and to consolidate those reports into one daily report that we -- that documents all the activities that are occurring on the site.

We use that to supplement our contractors reports for all the different activities that are occurring as well as all the chemical analyses and chemical sampling that's occurring.

MR. MARTIN: And how many shifts are there?

17.

:	7
1	MR. OGDEN: We have three shifts, 24 hours a
2	day, seven days a week during the trial burn. We
3	anticipate that we're going to continue to do that, you
4	know, mirror that during the production burn as well.
5	MR. MARTIN: And for each shift, a report was
6	prepared?
7	MR. OGDEN: Yes. We have each
8	construction rep would be responsible to prepare his
9	portion of the shift report. Those would be
10	consolidated into one what we call a daily quality
11	assurance report.
12	MR. MARTIN: And the shift reports and the
13	daily report were all prepared by the Corps of
14	Engineers?
15	MR. OGDEN: We prepared a report, those shift
	t e e e e e e e e e e e e e e e e e e e

MR. OGDEN: We prepared a report, those shift reports and quality assurance reports, and our contractor prepares an independent report, what he calls our -- in our term or vernacular would be a quality control report.

So we marry the quality report with the quality assurance report, and they become the activity reports for the day.

MR. MODRICKER: I'm just going to make a clarification that at times we have assistance from Montgomery Watson. And during those times, if they act

in a quality assurance role, they will also prepare and i attach a quality assurance shift report. 2 MR. MARTIN: The contractor you mentioned, 3. . would that be OHM? 4 5 MR. OGDEN: OHM, yes. 6 MR. MARTIN: Okay. I just wanted to make 7 that clear. The shift reports and the daily reports, the daily report is a compilation of the QA and QC --8 MR. OGDEN: Say that again. 10 MR. MARTIN: Is the daily report a compilation of the QA and QC reports for the day? 11 MR. OGDEN: 12 13 MR. MARTIN: Are those reports here at the 14 repository or the Drake site? 15 MR. OGDEN: They're not at the repository. They're here on site. They're fairly lengthy, 16 17 voluminous, however you say that, voluminous. MR. MARTIN: Very big. 18 MR. OGDEN: Very big. Because they do -19 20 daily report may look as thick as an inch thick, primarily because it does include all of the test 21 22 results for all the sampling that may have occurred that 23 day. And if you got -- if it's a day that we've 24

done air sampling, say, at the perimeter off site water

sampling at the water treatment plant, ash sampling, all of those reports would be included in that daily report.

1.3

So we have not included those in the repository at this time. They are available to whoever wants to look at them, but they're just so big that we haven't put multiple copies in multiple locations.

MR. MARTIN: We'll let the record show the reports are present at the site and are available. I may want to review those. Not necessarily today, but --

MR. CRYSTALL: We can probably pull the ones out that you would be interested to look at if you need them.

MR. MARTIN: Okay.

MR. OGDEN: Or samples, whatever you might want.

MR. CRYSTALL: Can I just suggest when we go down issue by issue, maybe we can do it -- let me take a stab at it first. The responses that we sent to the senators and congressman were more scaled back in terms of our -- or compared to what the Corps did.

The Corps offered us full explanations, which they gave us this morning, which you have now and the public has. But we actually got the information that the Corps sent us last week and offered some more shorter-to-the-point explanations without going into so

much detail.

And maybe if you need the Corps to expand on what we give you, and if you wanted to do that now that they're here, you can take a look at that at your convenience afterwards. But let me take the first stab at it.

MR. MARTIN: At this juncture, then, what I would like to do is proceed with the issues raised in the affidavit as Gregg Crystall has suggested, he can go ahead and provide a brief explanation of each issue.

And if I have specific questions, perhaps the Corps can join in with details.

MR. CRYSTALL: Sure.

MR. OGDEN: That's fine.

MR. CRYSTALL: The first issue that Mr. Davis brought up was the inability of our sampling method to achieve the contract detection limit for beta-naphthylamine. And he questions whether the steam from the incinerator may contain dust, which would be a source of fugitive emissions.

The contract that was signed with OHM, and which OHM left with MRI, Midwest Research Institute to do the air sampling, MRI indicated that they would be able to achieve a very low detection limit of beta-naphthylamine using the method that they suggested.

I believe that level -- well, I'm not even going to say what the level is. I don't want to misspeak with levels. The Corps can get to that if you need it.

1.3

We realized during the trial burn phase -- I realized during the trial burn phase, MRI brought it to our attention prior to that, that they couldn't reach the detection limit that they were contracted to do.

In fact, what we did realize is we can detect beta-naphthylamine at a level which is less than the State average toxic guideline level of 19 micrograms per liter of beta-naphthylamine; we definitely can determine that that's the only regulatory level out there.

And we were confident we did that during the trial burn and prior to the trial burn to measure at the perimeter of the site. What we did after the trial burn was over is we got the quality assurance folks and chemists from MRI, from the Corps, and from OH together, along with folks from our region, to figure out the best way of monitoring beta-naphthylamine at the perimeter.

Our goal at EPA Region 3 was to be able to detect beta-naphthylamine at a level at the fence line at this site that would be protective of public health. What level can someone stand out at the site for two full years of burn and be safe at, what do we need to

detect at the fence line?

Working with the Occupational Safety and Health Administration, OHSA, talking to the folks who formulated their Method 93 for beta-naphthylamine sampling were able to modify that to allow us to be -- reach a level of detection of beta-naphthylamine at the fence line that is protective of public health, and that is what we are using right now.

MR. MARTIN: Is that one part per million?

MR. CRYSTALL: No. Actually, it is .008

micrograms per cubic liter of BNA, beta-naphthylamine,
is what we can detect to. Our understanding is we're
talking about a .02 microgram per liter is the level we
needed to see. So we're actually seeing a level that's
protective of public health perimeter.

MR. OGDEN: You keep mentioning microgram per liter. It's cubic meter. That's a big difference.

MR. CRYSTALL: Yes. That's a big difference, yes. Thank you. And that's pretty much our response. We had problems initially, we could not, and we won't achieve that contract.

But as partners, DEP, EPA, the Corps and OH has developed this method which we feel is a real good method to evaluate beta-naphthylamine at those low levels, and that's what's instituted now and will be

throughout the production burns at the site.

7.

1.1

That's our response to the first part of the issue. The second part is we believe that the steam coming from the ash after we quench it with water to cool it down a little bit is not considered a fugitive emission.

I know there's other information. These are important issues that Mr. Davis brought up, and these are things that we knew about before he brought them up, and we've been addressing since he brought them up and since before he brought them up.

And one of the things that we even talked about this morning was there is something we can use to capture particulates from the steam if it looks like it's a regulatory problem.

You know, perception-wise, we're not going to touch it. If there's steam there and we're confident it's clean, it's not a fugitive emission. We're fine with that, and we're fine with all of the safety procedures instituted by OH and approved by the Corps.

If it's an issue where we see particulates in the steam, we're talking a possible regulatory issue now that DEP would have concern with, we're prepared if we see that regularly to address it.

But our position right now is that just

because there's steam coming from the wet ash, doesn't mean it's a particulate problem where people are being exposed to beta-naphthylamine. That is where EPA stands on the response right now, and I'm sure Mike and Dave can expand if you need it.

. 2

MR. MARTIN: Did Mr. Davis ever prepare one of the shift reports during his tenure with the Corps?

MR. OGDEN: Yes, he prepared shift reports.

MR. MARTIN: Did he ever note in his shift reports his perception that there was a problem with fugitive emissions?

MR. OGDEN: Yes. As a matter of fact, he was one of the first ones to come to us from the field staff to say that I think that there is a -- he had a concern that we -- he didn't talk specifically about the testing method.

But he was talking about the steam issue and that he was concerned initially, as I recall, that we had downgraded that pad area, the incinerator TDF pad from Level C, which would be requiring that you wear a respirator to Level D. He was concerned we didn't have a method that would test it.

Now, you got to go back a little bit in history, that was before we had the OSHA 93 method, and we were in the process of trying to validate the

contract specified TO-13 method to get it down to the very low levels that MRI had initially thought they could hit.

When they couldn't reach that -- we were in that method validation process, method detection limit process, that's the time frame when Kurt came and said if you can't tell me what it is, then how can you tell me that there's not a problem?

We were at the point of knowing that something that was well below the State's PA/ATG number of 19, we knew we could -- that we had numbers that were very, very good in that area, ten times better than that, you know, one to two micrograms per cubic meter.

So we knew that based on the criteria that had been initially established, that we didn't have a problem. But the concern was, when you sit down and say you're looking at a target that's .001, and that was the initial target that MRI had established, and we were at 2, you know, Kurt's concern that he raised, and it was a valid one, is that what's the prognosis if you're in between there some place. That's when we got --

MR. CRYSTALL: And that's specifically his concern. He realized in the meeting Friday, and he understands that the industrial hygienist for OH and the Corps had certified this as an area you don't need

respiratory protection.

. 9

His contention was but you can't tell me exactly how much beta-naphthylamine is there, and he's right, at that point we couldn't; therefore, I'm wearing a respirator. That's Kurt's position. He came out and said that Friday. And that was his position.

MR. OGDEN: What we did at that point was, as Gregg said, we went to the effort -- we already had initiated the effort with MRI to evaluate that. We went back and started asking the question, okay, let's make the assumption that we're not going to be able to hit the target at .001, what is the level that we really have to have?

Is the State's level of 19, you know, the ATG value of 19 micrograms per cubic meter, is that a good number? So we had the toxicologist and all those folks wrestle with the number, and they came up with what we felt was a pretty substantially much lower number than what the State's ATG level might be.

MR. CRYSTALL: Which is where we came out that we're actually analyzing and detecting beta-naphthylamine at a thousand times less than we needed to regulatory, 10,000 times less than we needed to regulatory.

MR. MARTIN: With respect to the State level.

MR. CRYSTALL: ATG, which is the only regulatory level we have. But we are protective of public health at the level we can't find it at.

MR. OGDEN: So the answer that we gave ultimately after a month or more of going through those generations, the answer we got back to Kurt was that the fact that you have steam on the pad, is not necessarily a fugitive emission, by definition, it's not.

Are we protective of worker health and safety, again, we ended up at that point, we were defaulting back to No. 1, the State's ATG values, but also going back to the OSHA numbers and the NIOSH numbers.

And so we went back through our industrial hygiene folks, those people who we hold responsible to make sure that our workers are protected to make sure that we had followed all the published and non-published criteria to make sure that we were protecting our people at safe levels.

They assured us that we were. Based on that, we established the procedure that we would go ahead and upgrade the pad to Level D -- or I'm sorry, downgrade it, not upgrade it.

And the concerns -- of course we had some operating perimeters out there. We have industrial

hygiene sampling that goes on routinely whenever there's operations going on on the pad. It's a plethora of different things, wipe samples and air monitoring and the like.

And if, in fact, we have any indications that we need to upgrade to Level C or higher, we do.

Mk. CRYSTALL: And there's reasons to make sure, that want to make sure, that people are wearing the appropriate level of protection on the site. It's a very cramped site. There's a lot of equipment and people cramped into nine acres.

There's a lot of areas, especially at night, that are in shadows and dark and you really can't see.

And, quite frankly, a respirator limits your visibility considerably in situations like that.

And OSHA recommends, and our agency follows the guidelines that if you don't need it, don't use it because it's sometimes more dangerous to have protection you don't need than not to use the protection.

And that is pretty much the basis of, I guess, where the Corps came to tell Kurt if you don't need the respirator, then we don't want you to wear it out there. It's pretty much that is the justification for it. If it's not needed, don't use it. There's a risk in using it if you don't need it.

MR. MARTIN: Yeah. When did MRI recognize 1 . 2 that they could not meet the original contract air monitoring? 3 MR. OGDEN: Back up. The contract did not 5 specifically identify any limits. What the contract clearly established was -- I forget the wording in here, 6 Dave, you got to help me. 8 MR. MODRICKER: They specified a sampling 9 method, the contract specified --10 MR. OGDEN: And an action level. 11 MR. MODRICKER: The contract specified a 12 sampling method and an action level. It specified a sampling method of TO-13. And it specified an action 13 level of the PA/ATG value of 19 micrograms per cubic 14 15 meter. That's what the contract specified. 16 MR. OGDEN: And part of the procedures that a lab would do, though, what happened was that that method 17 18 did not have a method detection limit for beta-naphthylamine, BNA. 19 MR. MODRICKER: Based on other -- this is my 20 . understanding. Based on other semi-volatile compounds, 21 the subcontractor lab estimated a detection limit for 22

BNA, beta-naphthylamine, to be .001 micrograms per cubic

23

24

25

meter.

subcontractor prepared -- I may be getting more

technical than I need to.

MR. MARTIN: Please go ahead.

MR. CRYSTALL: Your question is, we had a

memo from MRI in the file about nine months or so before

memo from MRI in the file about nine months or so before we actually took -- before EPA and DEP took aggressive action to try to fix it.

But during that time frame, the Corps and OH were working with MRI to try to develop this. I came in on the project right before the trial burn, and I wasn't aware of these things. I did become aware when it became a more prioritized issue in terms of our perception.

MR. MODRICKER: MRI did not necessarily report that they could not meet the detection limit. What they reported --

MR. OGDEN: The estimated detection limit.

MR. MODRICKER: The estimated detection limit. What they reported was that they were having difficulty recovering a surrogate compound that is spiked on the puff XAD resin.

MR. MARTIN: This is the amino surrogate compound for detecting BNA?

MR. CRYSTALL: Right.

MR. MODRICKER: Yes. There was a surrogate

.9

recovery issue; because the surrogate recovery was lower than what was estimated or anticipated, it called into question the detection limit, and that's when we began investigating issues concerning recovery of the compound and doing studies to improve the recovery of the compound.

MR. OGDEN: We realized at that point we were pushing science. We were really pushing science. Not only were we looking to see angles on the head of a pin, but, you know, the change in the pocket of the angel on the head of a pin.

And that's when we got EPA and DEP and said wait a second, we know we can see it ten times less than what the Pennsylvania ATG value is, around one and a half to two micrograms per cubic meter.

But because we're getting such low recovery, we can't guarantee that we're ever going -- that we're going to be able to see it at .001 micrograms per cubic meter. So we did a bunch of bench scale recoveries in trying to get down to .001, trying to use different surrogates.

And when we realized that we weren't going to get any better than around 2, that's when we said, well, we need to start looking for other methods. So we got our air chemists and MRI's air chemists and EPA went out

and basically scoured industry to try to find out if there was another method that's available.

Again, realizing that we were well within the regulatory requirements, but now that this issue had been raised that, you know, there's this published estimate out there of .001, is that -- should we be going and looking for more -- a better system.

Even when we found the OSHA 93 method, what we found is that we had to modify that method to be able to use large volume recovery as opposed -- it was really established for small volume recovery for BNA, a little different analysis procedure, but with some adjustments, we would have been able to.

We did bench scale testing on that, and my recollection -- and that's when we came up with the .008 micrograms per cubic meter.

MR. CRYSTALL: We had a goal to meet, we had a level from the toxicologist that we wanted to make sure we can detect that or --

MR. OGDEN: So back to your original question, though, you know, did Kurt prepare anything? Yes, he prepared some general comments initially, just issues of concern to him that when I'm walking on the pad -- as we were downgrading, when I walk on the pad, I have a concern that I may get doused with steam and that

ash -- his concern was really more along the lines of I have a -- it wasn't with those low recovery issues.

It was more, you know, a gut feeling I have ash that's supposed to be at 55 parts per billion when -- to be able to be clean. Now, he's talking -- he started to mix his metaphors here a little bit.

But he was talking about ash that didn't pass. And since I have now ash that doesn't pass, could it possibly be that I have steam or vapor of something semi-volatile that is going to be dangerous to me?

That was the other reason we got our chemists and industrial hygiene people to come back and start doing some mass balance equations to say is that a problem, if I had beta-naphthylamine, worse case of, you know, a thousand parts per billion, what's the potential to say steam stripped beta-naphthylamine out of that ash and is that a problem?

Again, the response that we got back from our chemist was that that's not a problem at all. The only problem you might have is if you have particulates that were really ingrained in the steam.

MR. MODRICKER: Then we did steam sampling.

MR. OGDEN: Then we did steam sampling, which pretty much proved that beta-naphthylamine in the steam is non-detect.

MR. MARTIN: Perhaps this is a fairer question for MRI, but had MRI ever achieved a detection level for BNA at the 001 level elsewhere, at other sites?

MR. OGDEN: No.

20 -

MR. MARTIN: So had they ever -- what was their experience with respect to detecting BNA at other sites in the air monitoring networks?

MR. OGDEN: I don't know. That would probably be a fairer question for them.

MR. MODRICKER: Yes, it would be.

MR. OGDEN: I know that -- at least I got the impression in talking to MRI, that during their procedures to establish this detection limit, that at least the people we were talking to didn't seem to have any experience.

You got to understand that the -- they have lots of experience. But even now -- let's say EPA establishes a method to recover volatiles or semi-volatiles that there are, you know, hundreds or thousands of those chemicals that they don't necessarily go out and establish a method of detection on it for that particular compound.

They establish it for a family of compounds.

So the fact that there was not a detection limit for BNA

1	is not surprising. They didn't seem to be in talking
2	to the Corps air chemists, they were not surprised that
3	there was not a method detection limit established
4	already, a published method limit established for BNA.
5	MR. MARTIN: Thank you. Going back to Mr.
6	Davis again, and his observations on the issue of
7	fugitive emissions from the site, when he worked during
8	his shift near the TDF pad, besides observing what he
9	deemed fugitive emissions, did he ever report any
10	incident or incidents in which he had difficulty
11	maintaining his Level C respirator, Level C safety
12	equipment?
13	MR. OGDEN: I don't know. I guess I would
14	have to go back and look at the reports for those. Does
15	that ring a bell with you?
16	MR. MODRICKER: I'm going from memory; I
17	don't recall Kurt Davis discussing with me concerns that
18	his Level C respirator wasn't working; is that the
19	question?
20	MR. MARTIN: Yes, that's the question.
21	MR. CRYSTALL: Unless he wasn't allowed to
22	use it.
.23	MR. MARTIN: Well, that's a different
24	question.

25

Unless there's an issue of

wearing the respirator standing in the steam and how
effective that is, that may be a concern that he had,
but I don't recall.

MR. CRYSTALL: It would surprise me that

MR. CRYSTALL: It would surprise me that someone who goes to the OSHA 40-hour training would not know how to fix their respirator or go to the supervisor — not go to the supervisor and have it fixed. I don't understand that question.

MR. OGDEN: I would have to review the file.

I don't recall that as an issue ever with Kurt or
actually, with anyone else.

MR. MODRICKER: Yes, that's the best answer I could probably give for the record. I don't remember. I would have to check.

MR. MARTIN: I guess the precise question would be with respect to his respirator in Level C when he worked during the shift near the TDF area, did he ever report that his respirator had ruptured, that his carbon filter unit become fully absorbed, did that ever occur to your knowledge during his tenure?

MR. OGDEN: Don't know.

MR. MODRICKER: Once again, I don't recall off the top of my head. I would have to check. If that happens, they are instructed to report it and specifically to the health and safety officer that's on

8.

duty.

That's the procedure that someone's supposed to take if they get breakthrough with the respirator, any employee anywhere on site.

MR. MARTIN: Okay.

MR. MODRICKER: And that should be documented if an employee reports breakthrough. Is that something you need me to check on?

MR. MARTIN: Yes please. Was Mr. Davis ever asked not to wear his respirator, his Level C protective equipment?

MR. OGDEN: That's a good question. He asked if -- after we went through these discussions about the steam, he was still not satisfied with the answer. He went to our industrial hygienist at the Baltimore District.

The response he got from the industrial hygienist was -- and at the same time I had gone to the industrial hygienist and asked kind of a little different question.

And my question was, please review the OHM's industrial hygiene protocols and their decision to downgrade on the pad and tell me if that's a good decision or not.

At the same time, my understanding is that

Mr. Davis went to the industrial hygienist and asked a similar question and also if he could continue to wear his respirator.

When the answer came back, the industrial hygienist gave me an answer and also gave a similar answer to Mr. Davis. And the answer was that in the industrial hygiene business, you never, ever deny someone the opportunity to be more protective.

And he also reported that the procedures that OHM was using to determine the downgrade, the level of protection on the pad, and that's primarily what we're talking about is in this area where's there's steam on the pad.

MR. MARTIN: The TDF pad?

MR. OGDEN: The TDF pad. I'm sorry. That those procedures were, in fact, good procedures. And as an industrial hygienist, he agreed with the level to downgrade that OHM had established.

At that point, as one of the site supervisors, you know, I met with Mr. Davis and said I have a concern that we have as a Corps employee in your oversight role that we want to be -- No. 1, we want to be safe.

I've got a -- I've got two industrial hygienists now who tell me that we are at the

6.

22.

appropriate level of protection, and knowing that OSHA has got -- you know, their recommendations are always to stay at the recommended level of protection, and the fact that since you are the Corps of Engineers person on site, that there is a perception that we're telling you one thing and telling the workers something else.

. 2

Я

MR. MARTIN: Meaning the OHM --

MR. OGDEN: The OHM, yeah, the workers on the pad that are also working right next to Mr. Davis. At that point, what I told him is that I wasn't going to force him to wear or not wear a respirator, but that our Corps policy was going to be we were going to follow OHM's established procedures for health and safety at this site.

And that if he didn't want to wear a respirator, he wouldn't have to go on the pad. Now, as a supervisor, I need him to go on the pad, and so I would have to review his, you know, the need to have somebody who's working for me that is not in the areas that I needed him to go into.

Now, that's a decision that we are very clear with all the people, I'm sure with Mr. Davis as well, that when we go out onto the project, that it is a hazardous waste site and there were going to be situations you're going to get into that are going to be

potentially hazardous, but you have to go there, that's part of your function, part of why you're hired.

So what I tried to be was very clear with Mr.

1.

3.

· 2·2

Davis that the decision was his if he wants to go on the pad or not. But if he were to go on the pad, I expected him to follow OHM's guidance for protection.

That was the last I heard of it. He did not wear his respirator on the pad from there on. I think that was pretty close -- I'd have to go back and check the dates, but we were probably within a month or two of finalizing the trial burn. Does that sound -- do you recall having any other conversations?

MR. MODRICKER: I had a conversation with Kurt, but it was somewhat different than yours.

MR. OGDEN: That was the last one I remember having with him.

MR. MODRICKER: I don't know if mine was before or after your conversation with him.

MR. OGDEN: I don't know if that clarifies your --

MR. MARTIN: Well, that helps. Do you want to share yours or do you want to --

MR. MODRICKER: Sure. He basically approached me with a concern of wearing a respirator on the pad and whether or not he would receive hazard duty

premium for wearing a respirator.

When you wear a respirator in the exclusion zone, you get a premium pay of 25 percent for wearing a respirator. When Kurt approached me on the subject, I also either referred him to or discussed the same subject with our industrial hygienist, Charlie Bragdon, with the Baltimore District.

And basically, what I ended up telling Kurt is that the industrial hygienist for OHM and the Corps have indicated that the downgrade to Level D is appropriate. It's backed up with the testing, the analytical testing and whatnot.

As far as wearing his respirator, I basically told him what I understood our CIH to say, which was I'm not going to tell you you can't wear it. But I will tell you that you're not required to wear it, and as such, you will not get hazard duty pay if you wear a respirator in an area that you're not required to.

It would be equated to me sitting here wearing a respirator in a support zone and just because I put it on, doesn't mean'I get hazard duty pay for that shift. Those were my discussions with Kurt on the subject.

MR. OGDEN: And I didn't have those conversations with Kurt, but I had a similar

conversation with Charlie Bragdon as well. So there was 1 an issue of pay associated with this, aside from just the whole idea of wearing the respirator. 3 MR. MARTIN: I understand that, and I'll let 4 5 the record show that. MR. CRYSTALL: We took care of Issue 5, I'll 7 tell_you that. 8 MR. MARTIN: To finish this first issue 9 raised in his affidavit, the issue of a dust laden steam, correct me if I'm wrong, was that sampled at all? 10. MR. CRYSTALL: The dust in the steam? 11 12 MR. MARTIN: Yeah. MR. CRYSTALL: I believe it was. 13 MR. OGDEN: Yes, it was. 14 MR. CRYSTALL: And I don't think we found 16 beta-naphthylamine in those samples. MR. OGDEN: Right. It was non-detect in the 17 three valid samples that we collected, as well as in the 18 TO-13 sampling that we had done earlier. 19 MR. CRYSTALL: Another check we also had in 20 this area is the instruments that were in this area, the 21 machinery that was in this area when after it's used 22 gets a wipe test. 23 The workers that are in this area that come 24

into contact with the ash and the waste feed where

33 béta-naphthylamine is, wear detection patches underneath 1 their gloves to see if there's been any type of 2 infiltration through their protective clothing. 3 And I don't believe he found any workers who -- there was one hit one time, I believe, someone who 5 6 had a beta-naphthylamine hit under a glove. MR. MODRICKER: I'm not aware of that. 7

8

10

11

12

13

14

15

16

17

18.

19

20

21

22

23

24

25

MR. CRYSTALL: Okay. Well, there might have been. I don't recall hearing more than one. And the only other time we found beta-naphthylamine was off Michelin tires on the trucks that come in. For some reason, Michelin tires showed beta-naphthylamine when you tested it.

MR. OGDEN: They did some sampling to verify that that was what we call a false positive.

MR. CRYSTALL: Right, it was. It wasn't from It was related to the actual make-up of the the site. tire.

That was typically -- just to MR. MODRICKER: clarify it, that was typically on the tires was a wipe test on tires of loaders or equipment leaving the exclusion zone that had been de-coned.

And that's part of the de-con procedure is to verify that there's no beta-naphthylamine left that you haven't cleaned off that's leaving the site. That's

where the issue came up with the tires and the false 1 positives. 2 MR. CRYSTALL: And as we are now, we don't 3 think fugitive emissions in terms of dust from the steam 4 5 generated by cooling the ash down is a problem. We have seen it on an occasion. We don't think it's a regular 6 7 occurrence. 8 If it looks like it's going to be a regular 9 occurrence, we're prepared to put something on it to 10 capture the particulates coming from the steam. And as 11 I mentioned earlier, if it's just a perception that there's a lot of steam coming from this area, that's 12 13 just a perception. MR. MARTIN: Who did the sampling for the 14 dust particulate in the steam; was that MRI? 15 MR. OGDEN: Yes, I believe. 16 17 MR. MODRICKER: Dust particulate. MR. MARTIN: That's going back to the earlier 18 question, the dust laden steam. 19 20 . MR. OGDEN: The steam sample that we did with 21 Method 5, did MRI do that? MR. MODRICKER: Yeah, MRI did the analytical, 22 and we had it oversight by the Corps and, I think, Focus 23 was out there also. 24

25

MR. MARTIN: Was that with the use of PID

1	instruments?
2	MR. MODRICKER: That was an impinger system.
3 .	I believe it was a Method 5
4	MR. MARTIN: Impinger solution?
5	MR. OGDEN: Right, very similar to the way we
6	did some of our stack sampling.
7	MR. MODRICKER: Is that the testing you were
8	referring to?
9	MR. MARTIN: Yes. Theoretically, if there
10	were a problem with vapor emissions from the ash
11	stockpiles, what could be done to address that? Even if
12	you had remarked earlier it's just a perception problem,
13	what could be done?
14	MR. OGDEN: You're asking about the stockpile
15	or are you talking about the
16	MR. CRYSTALL: A vapor problem or a
17	particulate problem?
18	MR. MARTIN: Well, maybe, you know, fill me
19	in.
20	MR. CRYSTALL: Well, the particulate problem
21	is easy. You can get something some type of scrubber
22	to get the particulates out and make sure it's just
23 .	steam going off.
24	In terms of the actual presence of volatile

chemicals coming off in the steam, I don't see how

something that's been subjected to close to 1800 degrees coming out to 800 to 900 degrees would have a 2 volatilization problem. 3 MR. MODRICKER: The reason we're probably hesitating is you're talking about steam coming off the 5 6 ash piles, and I think maybe what you're talking about

is where the predominant steam is coming up, which is 7

off of the last conveyer before you put that ash in a

8 big pile. I mean, that's where you predominantly have 9

the steam. 10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

MR. MARTIN: Well, it could be both. recognize that predominantly more steam will come off of your conveyer with the ash.

MR. CRYSTALL: We had volatile, semi-volatile steam as well for certain things. I'm not totally sure, but I think we did.

MR. MODRICKER: I know we tested it for BNA. I would have to go back and see what other compounds we looked for in the steam.

MR. MARTIN: The average temperature of the ash --

MR. OGDEN: I'm reading here, Mr. Martin, on some of our response, you know, what we talk about is we do additional industrial hygiene both personnel and area samples around the ash conveyers, around the ash

handling building to characterize worker exposure, okay, not necessarily in the steam, but around the area.

That IH sampling includes volatile compounds, halogenated hydrocarbons, Fenac, semi-volatiles, metals, and particulates. To date, those industrial hygiene samples around the ash handling conveyers and incinerator pad have been at levels below the detection limits for BNA.

And in addition, the analytical results for other constituents have been below the NIOSH threshold limit value for TLV.

MR. MODRICKER: And that is not the TO-13 sampling of the steam. But that is additional sampling that was done in and around the area by a different method.

MR. OGDEN: And this is the method I was talking about before that we asked OHM to incorporate ---we didn't ask them. When they asked us to downgrade on the pad, it was with their understanding that in order to do that, they were going to have to continue to do monitoring on the pad to be able to verify that, in fact, there was not a problem.

MR. MARTIN: That you could sustain Level D conditions.

MR. OGDEN: That you could sustain Level D

conditions, exactly. So that's what these are all about. What Mr. Davis asked specifically about was how 2 can you prove to me that there's not a problem in the steam.

1

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

.22

23

24

25

That's when we went out and developed or modified a method to actually sample steam because these methods would not -- it's very difficult to sample steam just because of its, you know, make-up.

You can get it to condense, but once it condenses, you don't know if you've lost any particulates. I would have to get a chemist to explain But the way they explain it to me, it's very difficult to do.

MR. MARTIN: The average temperature of the ash, would you say for the most part, that was 800 to 900 degrees?

MR. MODRICKER: When it comes out of the breach.

The issue then is with this MR. CRYSTALL: whole thing, we did a trial burn which encompassed a four-month period, five-month -- well, four plus months.

Part of the design of that was to come out with levels of fenac and beta-naphthylamine and other chemicals that we can backfill on the site. And part of it was to push the emissions control system on the

incinerator by changing different temperatures and parameters at the kiln and secondary combustion chamber -- part of the trial burn was to mimic worse case emissions scenarios.

. 2

_7

20.

Another part of the trial burn was to meet the backfill criteria and show that the incinerator can do it. During that part of the operation, we realized that there's a relationship between the number -- the degree of the material coming out of the kiln in clumps and the number -- the level of fenac and beta-naphthylamine we have in the ash.

And we realized that if the ash gets up to the 800- to 900-degree level, we're very likely to have the lay-down criteria met to allow us to backfill.

I don't know if you can say there was an average temperature in the whole trial burn phase, because part of that we knew we weren't going to meet the backfill criteria because the kiln wasn't high enough to actually burn off everything, but that would give us a certain situation that we needed to monitor anyway in case something happened in real life doing it.

MR. MARTIN: Was the problem a kiln issue or was the problem a moisture content in the soil?

MR. CRYSTALL: Both. We had added lifters in the kiln, putting little shelves in there to make it

more like a tumble dryer to break things up.

Ţ

Part of it was we expected the moisture content to be in the range of 13.5 percent, and it was above that. It was about 15 or higher.

MR. MARTIN: Was it ever as high as 18 to 20?

MR. CRYSTALL: I believe it could have been.

MR. OGDEN: Yes.

MR. CRYSTALL: Part of the trial burn was to optimize feed rates and see what we can do. And there was an opportunity to mix in corncobs as well as cement kiln dust to see how that would work in the combustion mechanics.

Corncobs get real hot real quickly and they mix in with the stuff, and we're hoping that that can generate some heat to help dry out the material and burn out the chemicals.

Virtually inert and will take out some of the moisture from the material we're concerned with. So we did a lot of that optimization as well before we actually did the regulatory risk assessment testing phase of the trial burn; we did the optimization phase to try to figure out what we need to see in the kiln, retention time in the kiln, temperature in the kiln, and temperature in the secondary combustion chamber for the emissions, but kiln

temperatures to get an ash that will meet the backfill criteria consistently, which takes care of another one of his issues.

And we felt we met that with a typical operating feed rate; with a typical temperature that we expect to maintain in the kiln, we feel we can clean the site up.

MR. OGDEN: When I explained this to a lot of the folks that I work with, I use my race car analogy and that is, you don't take an Indianapolis car and just put it into the race without running some test laps with it.

That's what we were doing in this optimization period, just trying to run it through its paces, push the limits, if you will, to make sure that we knew what it would do and put it under different scenarios, as Gregg said, add some kiln dust, et cetera.

MR. MARTIN: Why don't we go to issue two.

MR. CRYSTALL: Okay. Issue two, we might have covered a little bit of. Again, we don't feel it's going to be a persistent problem. It may be an occasional scenario that we see particulates in the steam.

If it appears that it's going to be a persistent problem, DEP is prepared to tell us that it's

a regulatory issue. And if it is something like that,

we will take care of the particulates.

MR. OGDEN: One of the things that Kurt might

have done here, too, is -
MR. CRYSTALL: The design of the incinerator

21.

MR. CRYSTALL: The design of the incinerator initially had this whole enclosure of the west ash drag to totally eliminate steam.

MR. OGDEN: Not to eliminate steam.

MR. CRYSTALL: Eliminate particulates. I'm sorry. Kurt's question in the affidavit was why didn't we follow the contract and put all of these protective devices on -- to the extent practical?

When we got to the point where we were looking at this in the trial burn phase, we realized that it's not a problem. We didn't need to.

MR. OGDEN: And I have a question for Dave, and it's really -- because I was under the impression that it wasn't necessarily something that OHM planned to do, but it was something that they put into their drawings in the event that we need to do it, that they would have the space allocated for that particular piece of equipment.

MR. MODRICKER: Let me clarify that. To the best of my understanding, in their work plans that they submit to us, there was not a scrubber called out on the

back of the wet ash drag. In their detailed drawings, which include P & ID drawings, piping, instrumentation drawings, mechanical drawings, electrical drawings, and whatnot, which were not required to be given to us by contract, but which we requested and which we reviewed.

There were indications, clouds drawn, clouds on the drawings to show the ability to put a wet dust collection system. We never required it. OHM never told us they planned on using it.

If you get into some of their earlier detailed design drawings, and you will see some mention of it in some form or another. That's the best way I can answer that.

MR. CRYSTALL: The site didn't feel we needed it. And one of the things we're looking at now is if it becomes a persist problem that we see, we're going to put it in.

MR. MARTIN: So it's still possible to engineer that?

MR. CRYSTALL: Yes.

MR. OGDEN: But as Gregg said, we haven't felt the need to do it. Our State permit says if we have visible fugitive emissions at that location, that we're supposed to take action. It doesn't say we're supposed to take action to eliminate.

It doesn't say that we have to have zero 1 emissions at that point. What we do is, again, if it 2 becomes a question of what is a fugitive emission --3 4 MR. MARTIN: Yes, I was about to ask you for my benefit, the definition of that. 5 6 MR. OGDEN: The definition really comes out 7 of the State regulation. Steam, by definition, is not a fugitive emission. Visible dust that is in the steam 8 9 would be considered -- dust that would overflow --MR. CRYSTALL: It's a non-controlled release 10 of a hazardous substance. The stack emissions are 11 controlled when we shut the feed off. That's not a 12 13 fugitive. That's where the emission is supposed to be. A puff of smoke from the kiln would be a fugitive emission. 15 A cloud of dust from the ash after it gets 16 cooled would be a fugitive emission. It's not 17 controlled. That's pretty much what the definition is. 18 EPA wise, we --19 MR. MODRICKER: Or any visible release from 20 the stockpiles. 21 MR. OGDEN: That's uncontrolled. 22 MR. CRYSTALL: Correct. That's right. 23 MR. OGDEN: So what we got here in the steam, 24 and again it becomes kind of a fine line, is the steam 25

by itself is not a fugitive emission. But if it happens to be capturing particulates and taking it with it, then that may be considered a fugitive emission.

So one of the things we do is we watch the steam as it comes off the wet ash drag. One of the things that we had done during this down time is we tried to make the wet ash drag even more efficient than it was before by limiting -- by controlling that area where steam might be visible on the pad.

And so we've really consolidated that area, if you will, into that one single point where the steam is going to come off the wet ash drag before it gets carried to the ash handling building, basically the ash storage facility.

So right now, it's a matter of we do all our IH sampling for particulates and everything else. We have our perimeter monitors that run on a monthly basis basically to monitor for particulates.

But at that particular instant, it's really the matter of the operator and any inspector who's walking around to say is that steam or is that dust in the steam?

MR. MODRICKER: I'll add to that -- first of all, the best thing I could do is give you a copy out of the State's air quality -- Chapter 122 where it defines

fugitive emissions. From there I would interpret it to say that steam in and of itself from the incineration process is not a fugitive emission.

Visible dust from the incineration process itself could be considered a fugitive emission, and you have to take measures to control it.

In the stockpile area, what would be considered a fugitive emission, to my understanding, would be visible dust going beyond the property line. Prior to getting there, we instruct the contractor to take measures to minimize dust in the exclusion zone.

And if it gets dry, and you see a scuff of dust from a dozer, even if it's not going beyond the edge of the property, you go out and take measures to control it. And that's my understanding of the intent of the fugitive emissions.

MR. MARTIN: However, if dust were visible within steam plume, would that be considered a fugitive emission?

MR. OGDEN: Yes, and we would take steps, then, to control that dust, knock it down with more spray, or whatever. The Cadillac version, which is the thing that's been kind of laid out, designed, but not built is this steam scrubber which would basically scrub the steam of any particulate that might be in it,

1 | collect it, and handle that as a separate entity.

MR. MODRICKER: You may be getting into a matter of degree and judgmental calls when you start saying is there dust in the steam? You're probably talking about a matter of degree.

MR. MARTIN: As you noted earlier, whoever is responsible on site at the time would have to make a judgment call.

MR. MODRICKER: Yes.

MR. OGDEN: It's one of the reasons we asked, and the State is good, they got an inspector that's going to be out here several times a week, and we're very involved with the State in trying to make sure that we're not in violation of the equivalency document, to make sure that our people have the same interpretation as the State inspection team would.

MR. MARTIN: Does the air equivalency permit incorporate by reference, then, the State definition of fugitive emissions?

MR. WELCH: Yes. And we've been here -we've had some of the same staff here for going on ten
years, and we have not noted a singular fugitive
emission violation to date.

We've asked them to make modification to the system that they've done. These other engineering

abilities are out there, but quite frankly, and the State's position is to have them available.

But I mean, even though we're only putting 10 percent towards this at this point, why spend 10 percent to straighten up a perception problem? If there's a violation, that's something different.

MR. OGDEN: Right. And that's the operational approach that we've taken.

MR. MARTIN: Thank you. Let's go to the next issue.

MR. CRYSTALL: The third issue, there's a number of different things here. If I may quickly, persistent difficulty in obtaining control of the quench flow in the evaporative cooler that is essential to minimize dioxin formation.

First of all, we don't think there was a persistent problem. There was a problem. We have fixed nozzles and changed nozzles out on the quench flow, and we don't think there will be another problem.

We feel the most important part of the quench flow is to minimize the catastrophic destruction, the bag house. In effect, what is does is it also decreases the temperatures quickly enough as to minimize formation of dioxins.

So he is right in what he says there, but we

. 12

feel it's more important to protect the bag house and the whole air emission system than minimize formation of dioxin because we don't think there is any dioxin coming out here that's going to affect anyone.

MR. OGDEN: If I could add, the one thing we don't want to have out there is the high potential for a fire in the bag house.

MR. CRYSTALL: Right.

. 2

20 .

MR. OGDEN: That could be catastrophic and very damaging to the environment.

MR. CRYSTALL: So we don't think we have difficulty. There was a problem; we think it's fixed. Fugitive emissions resulting from the flooding of quench tower bottom and resulting spills onto the thermal destruction facility.

Evidently, Mr. Davis has seen a situation where there was too much water used to quench the ash, and that led to puddles around the ash and that was washed into the lagoon for the waste water treatment plant to take care of. And that was an occasion he noted. That is not the norm.

The design is to put enough water on there to cool the steam -- to cool the ash from the 800 to 900 degrees it comes out of the kilns.

MR. OGDEN: Not the ash. We're talking about

the quench tower, so we're cooling gases. 1 2 MR. CRYSTALL: Okay. Sorry. What was the problem with that then? 3 MR. OGDEN: The question here is really you 4 5 got the quench tower, is that the gases are at 1800 degrees when they cross over into the evaporative cooler. And what we need to be able to do is add enough 7 8. water to be able do cool the gases from 1800 degrees to 450 degrees thereabouts, get them cool enough to enter 9 the bag house. 10 11 12

And the design is such that you evaporate the water that you add so that it's in essence a dry bottom at the bottom of the --

MR. MARTIN: So you start at 1800 up here, and as you work your way down, you hit the 400?

MR. OGDEN: Right. Now, when you say work your way down, the retention time in the gases in the evaporative cooler is what?

MR. MODRICKER: Retention in the evaporative cooler is --

MR. OGDEN: Not a long time.

MR. MODRICKER: I don't know. Short.

MR. OGDEN: Less than ten seconds is my understanding.

MR. MODRICKER: And the quench process, is my

2.5

13

14

15

16

17

18

19

20

21

22

23

understanding, if you're talking about how quick we quench it, we're talking fractions of a second.

MR. OGDEN: You're talking about a very, very short time to be able to have the gases go from 1800 to 450 degrees. And so you're talking about -- when he says there's a problem, it's a challenge.

I wouldn't put it as a problem. What we want the contractor to do is air on the side of having it too wet. Make sure that there's enough water in there because if you don't get the temperature down to 450 degrees, you have the potential for a bag house fire, you have an automatic cutoff and you have a TRV opening.

We want to minimize the TRV openings, so we would rather live with a puddle at the bottom of the evaporative cooler than a TRV opening and a shutdown of the system.

MR. WELCH: What actually you're hearing is people trying to guess what Mr. Davis' problem is, because he couldn't dialogue that to us Friday. The position that we've taken is every drop of water that's processed through that evaporative cooler goes into our water treatment plant which we regulate the discharge off and, in fact, monitor for fenac and beta-naphthylamine. There is no fugitive emission while operating a wet bottom evaporative cooler.

MR. MODRICKER: And that's a good summary.

And I would like to -- for what it's worth, I'm going to add to it also because No. 1, the wet material is not a fugitive emission on the pad. What we're talking about is probably more than anything else a housekeeping

6 issue.

9.

20.

Originally, we had feed screws on the bottom of the evaporative cooler to carry away any particulate that may accumulate on the bottom. When they were cooling the gases, there's times when it was wet down there, and this would drip down, and they would collect it in a sump.

What they've done is they've installed some piping on the bottom of the cooler to more conveniently convey that to a sump. It is not a fugitive emission.

MR. OGDEN: As Mike said, it ultimately ends up at our waste water treatment plant. It is treated and controlled at that location.

MR. MARTIN: Next point.

MR. CRYSTALL: TRV openings associated fugitive emissions. Our risk assessment took into account 12, 5-minute openings of the TRV and 36 one half openings of the TRV, assuming that, you know, as protocol, as soon as the TRV pops open, the feed is stopped, plus whatever is there goes right out to the

TRV and into the atmosphere.

2.5

The risk assessment evaluates those amounts openings. We expect there will be unplanned TRV openings in the event there's a lightening storm, the power goes out, the fan goes off, the TRV opens.

There's other ways that it opens as well. If the quench tower is not cooling off things fast enough, it will open. There's also planned TRV openings where we fully stop feed and purge the kiln of all contaminated material before we open the TRV. That's pretty much where we stand. It will happen. It's --

MR. MARTIN: Are those all included within the estimate?

MR. CRYSTALL: The planned TRV openings we feel will not release anything. Everything is purged so that is not included in the risk assessment. But those again, they happen routinely for maintenance. And all the feed is shut off and the material purged from the kiln.

MR. MARTIN: Okay.

MR. OGDEN: The plan would be, we have our system interlock checks that we go through to make sure that if, in fact, the power would be interrupted, that the TRV would open. So we have a periodic check where we -- kind of like a fire drill, if you will.

But as Gregg said, we make sure that the system is purged, and we do the interlock check and open the TRV. And again, it's a matter of just maintenance.

MR. CRYSTALL: The next point, a frequent shutdown and startup and associated increases in emissions of fluids. I don't understand that at all. And I don't think Kurt was able to elaborate further than that's what he thinks would happen.

We don't start the feed in this unit until the kiln and secondary combustion chamber are at operating temperatures. And we don't shut the heat off until everything is out of the kiln.

MR. WELCH: His description on Friday was more to the fact that we gave a disclaimer in the air equivalency document during the heat-up, we would accept the increase in NOX, nitrous oxides and normal volatilization gases not related to incineration, but to the combustion of the oxygen and the natural gas.

And that was what he described Friday was that the more you start it and shut it down, the more you have that discharge of NOX. The reason it was started and stopped repeatedly was because we were going through testing. That is something that was accepted as a natural phenomenon of combustion.

MR. OGDEN: So what he was bringing up is you

1.

. 22

24.

2 MR. WELCH: That's what he said on Friday. MR. OGDEN: I apologize. I wasn't at the 3 meeting on Friday. Thank you, Mike. MR. MARTIN: Address the next point, Gregg. 5 I'll let Dave and Mike do MR. CRYSTALL: 6 7 that. There was one documented incident, a problem with a PH meter. 8 MR. OGDEN: Yeah, as Gregg said on the last 9 one, I don't know what Kurt means by repeated problems 10 here: We had one incident, one single indent with the 11 scrubber PH probe. It's well-documented. We did our 12 13 notification to EPA and the State. I don't know how much you want to get into 14 that particular incident. But we -- as a result of it, 15 we changed some operating procedures on site. 16 problem, I think, stemmed from the fact that we were 17 trying to calibrate a piece of equipment while we were 18 in operation. 19 And the procedure is we're not going to 20 calibrate those key pieces of monitoring equipment while 21 we're in operation anymore. 22 MR. WELCH: We've duplicated the probe, and 23 we issued a notice of non-compliance for that. And we 24 investigated it and felt that it was a reasonable

would have that in any boiler plant.

1

explanation that they were using litmus tests; they actually did not -- they were out of caustic, but the water that was still in the tower still had a non-basic element to it because of the residual caustic.

MR. OGDEN: That's true.

. 3

1.9

4.

MR. MARTIN: Why don't we go to down to Issue

MR. CRYSTALL: This issue stems from the fact that the water used to be sprayed onto the ash coming out of the kiln was one third water from blowdown of the scrubber and two thirds city water supply.

Kurt's explanation pretty much is blowdown water, by definition, is enriched with chemicals. Why would you use that to put on the ash? Is it contaminating your ash and is any spilled water on excess water that remains around the ash considered a fugitive emission?

If it is, are you allowed to throw it right back into the lagoon that goes to the waste water treatment plant? That's pretty much his issue. Again, we feel we've taken samples of the scrubber water; we've taken samples of the ash; we don't believe that it is a problem.

By design, we're not supposed to have puddles of water. During the optimization phase, there might

.

have been. We don't feel it's going to be a persistent problem. But then again, even if there was a puddle of water around the, the waste water treatment plant can handle what's coming in.

. 2

20.

We have sampled the in fluid to the waste water treatment plant for dioxin, as well as the carbon that is used in waste water treatment plant for the presence of dioxin, in order to get contracts to dispose of the carbon or regenerate the carbon.

And we've come up with non-detects to one part per billion level. We don't believe there's dioxin. In fact, we had a professional engineer's report which we can make available to you today, Bob, which shows exactly how small a fraction of dioxin could possibly get to the waste water treatment plant or through it.

Again, we don't think this is an issue anymore, the blowdown scrubber water that you have to do that, to clean the scrubber water.

MR. OGDEN: And we sampled that scrubber water before we -- we have sampled. Basically, I'm tooking here, sampling it for volatiles, semi-volatiles, fenac and metals. And the analytical results are typically below the detection limits for volatiles, semi-volatiles and fenac.

But we do have some trace amounts of metals, but they've all been detected at acceptable limits for us. And then again, as Gregg said, we take that blowdown water, and we blow it onto the ash -- first it's diluted as it's mixed with the city water, and then it's blown down onto the ash, and then the ash again is sampled before it goes back into the -- so if we were adding any volatile or semi-volatiles that would end up back in the hot zone, if you will, the exclusion zone for retreatment.

`1.

. 20

But what we're getting from our engineers, whatever, is that the amounts would be so low that they really would have no appreciable -- they would have no appreciable addition to the ash material.

MR. MODRICKER: And operationally, we sample the scrubber water because we want to confirm that it's not contaminating the ash. If it does, then we have to reprocess that ash. That's not cost effective, and we don't want to do that. So I mean -- I think the real answer is we sample the scrubber water, we sample the ash after the scrubber water is applied.

MR. CRYSTALL: You know what; I asked the question this morning of Dave and of Mike, and I think you guys are double checking the answer maybe, if we didn't use one third scrubber water for the bottom ash

and we used all city water, what would we do with the scrubber water?

And my understanding is it would go through the waste water treatment plant anyway. It's being double checked by the folks that need to check it at DEP, but that's pretty much what would happen to it. So we're saving us the third cost of water.

The next issue, I guess -- that covers the fourth issue, I think. The fifth issue we talked about, which is the issue of Kurt wearing a respirator or not.

MR. OGDEN: I think we've addressed that.

MR. CRYSTALL: Yeah, I think we did,

too.

MR. OGDEN: I wouldn't have anything to add.

MR. MARTIN: Let's go to six.

MR. CRYSTALL: Kurt's position here is he would rather have seen us reach a steady state feed in the incinerator and then worry about what we need to do with the kiln to meet the ash.

We'd let it run for 40 tons per hour, 45 tons per hour for a couple weeks. And from that steady state feed rate that we know will work mechanically, what do we need to do to get backfilled to the level, and that's where he's thinking. He explained that to us Friday.

What we have done in the trial burn, as we've

explained numerous times to a lot of people, is our intention was not to meet the backfill criteria of the ash throughout the trial burn. It was to optimize feed rates, to make sure our emissions control system works under circumstances that would mimic worse case emissions.

It was to collect data for the risk assessment. And part of it was to show that we can meet the backfill criteria at a typical burn rate, which we feel we did.

The contract with OHM has a percentage of time in there for backfilling material -- I mean, for reburning material so it can reach the backfill criteria.

The risk assessment takes into account almost 25 percent of the time of the two years is backfill -- reburn time to meet the backfill criteria. We included the reburn time of ash that did not meet the criteria to lay it down on the site as part of the risk assessment in the time frame.

And that's as simple as that. Our goal was not to show we can meet backfill levels every run. Our goal was to show that under typical runs, we can usually meet it, and we think we did that.

MR. OGDEN: During the trial burn process, I

1.1

12.

don't want to make it sound like everything went, you know, like peaches and cream. We did have discussions with OHM -- we, the Corps, EPA, with OHM about what's the appropriate way to go through the trial burn process. How much time should we spend optimizing, how much time should we spend trying to make sure that we have ash that meets the backfill criteria and all the other parameters that we have to do.

We had a lot of discussions about that. And I'm only suggesting that Kurt was possibly involved in some of those discussions and may have taken that to mean that we, the Corps, were unhappy with OHM's trial burn plan.

But we did ultimately approve their trial burn plan after having lots of internal discussions about, you know, what's the best way to skin the cat, we ultimately agreed and all got on the same page. Now, I'm not sure if Kurt was involved in those final decisions or not.

Quite frankly, he wasn't involved in a lot of the decisions. He wasn't a decision maker at that point. But we probably -- I'm sure we solicited some opinions.

MR. CRYSTALL: We had a lot of people in these decisions. We had EPA Region 3, our incinerator

expert RECRA, we had EPA headquarter folks from ORD, we 1 . 2 had ERT, we had the Corps' Center for Excellence --MR. OGDEN: Center of Expertise out of Omaha. 3 MR. CRYSTALL: They were involved at that point. DEP was involved at that point, not only Mike's 5 6 folks, but the air quality folks. 7 MR. WELCH: We disagreed with it actually. MR. CRYSTALL: Yes, you did disagree. 9 MR. WELCH: We went on the record that we 10 wanted it tested harder. We wanted them to stretch the envelop even further, so they actually maintained a more 11 conservative approach than what we would have had them 12 do. 13 MR. CRYSTALL: Right. We had out Dorothy 14 Cantor, who was our field science advisor until she took 15 her sabbatical, as well as managers and partners. So it 16 17 wasn't just a decision that OH made that everybody said okay, okay. 18 We were adjusting ideas up until the last day 19 of the trial burn, in all honesty, in terms of making 20 sure we get the most out of the time we had to burn. 21

MR. MARTIN: At this juncture with injecting maybe lime solution in the kiln and the other engineering adjustments you've made, you should be able to reach an optimal, you know, residence time and all

22

23

24

that.

·15

MR. CRYSTALL: Yes.

MR. MARTIN: I guess empirically you'll know in a few days where you're going to be at with the ash putdown requirement.

MR. CRYSTALL: And we feel that it will fluctuate with the seasons. It's wet now; we might have to have a different setup than it will be in the middle of the summertime when things start to dry out in terms of feed rate, the exact kiln temperature and retention time.

MR. MODRICKER: A lot of it, as you've mentioned, is a function of the moisture in the soil.

Obviously, the wetter the soil is, the more BTU's you have to burn, the longer and harder it is to get the soil up to temperature.

So we want to ensure that we meet the air equivalency requirements for all the emissions coming out of the stack. We don't want to constrain ourselves during that testing period and limit ourselves to the through put because the material is very wet.

- We limit our through put and then have the opportunity that we may have dryer material and not be able to process it like we could because we set ourselves at this low feed rate.

So I think what you're hearing is the idea was to optimize all the different conditions.

. 22

MR. OGDEN: We wanted to see how big the box could be, to establish the limits of the box so that we could -- under conditions that we could anticipate, in dry conditions or wet conditions, that we would have parameters established as to what conditions that we could meet in terms of air quality and ash quality under various conditions, whether it be soil moisture or temperature or whatever.

MR. MARTIN: Last question.

MR. CRYSTALL: Last question that he had or that you have?

MR. MARTIN: Well, that I have. Did Mr.

Davis ever raise during his tenure any issue with respect to the calibration of the CEM monitoring unit?

MR. MODRICKER: He was involved in witnessing CEM calibrations.

MR. MARTIN: Is a that done on a daily basis?

MR. MODRICKER: Daily. There's daily

calibrations of the continuous emission monitors. And

we have made some modifications to it since his

departure, tenure, whatever. I'm not sure what issues

he's talking about. If you could elaborate on them, I

might be able to answer the question better.

MR. MARTIN: Well, he may have raised a calibration issue that, you know, the unit did not meet the calibration specifications, you know, on a particular day. I don't know if that came up in the meeting with the lawyers or not.

1.3

MR. CRYSTALL: Mike, do you recall that?

MR. WELCH: Well, you know what's curious,
and apparently, at the close of our meeting, one of the
questions that was asked of Kurt is do you have any
other concerns, criticisms, interests that we need to
look at?

And after a lengthy look at Mr. Harrison, he said no. So I mean, I don't remember that ever being raised in any of our discussions. Plus, when we had all of our air people out here, they went through all of the calibrations and stuff because we wanted to be sure that our stack people were satisfied with them. So it would be a new issue to me.

MR. MODRICKER: Let me say that we have had people with much more expertise than Kurt Davis from both the Corps, the State, the contractor, EPA out here specifically to review CEM calibrations and the performance of that system.

And the experts that have reviewed it, are confident in its ability to perform. That's probably

the best way I can answer it. If you ask me if he's 1 ever had concerns or issues, he probably has, but I 3 don't know specifically what they are. MR. MARTIN: Did he ever mention, I think its 4 5 termed a "drift report" having to do with the operation of a CEM unit? 6 MR. MODRICKER: I don't recall him mentioning it to me, but I do know that there was a calibration drift done on the instrument. And it was a relative 9 10 accuracy testing on the instrument. 11. MR. MARTIN: That's done on a daily --12 MR. MODRICKER: No, there are specific -when I use the terms "calibration drift" and "relative 13 14 accuracy, " that's typically the testing that you have an 15 outside firm come in and do. And typically you do that when you begin has waste feed when you're starting to 16 17 certify and use the instruments. Now, there is daily calibrations that are 18 done by technicians on site to ensure that you're within 19 20 the acceptable ranges that are established for the instrument. Does that answer your question? 21 22 MR. MARTIN: Yeah. MR. MODRICKER: I'm not quite sure what his 23

MR. MARTIN: Yeah, that helps. I think when

24

25

issue is.

he prepared -- contributed to his shift report,
operation of the CEM unit may have been an issue in one
of those reports. And apparently, there's a written
report, I don't know if it's separate from the shift
report or part of it, where drift calculations are made.

К

20.

And he reported or alleged that there were times when those were not done or left vacant or blank on the report forms.

MR. MODRICKER: Yeah, I'm not familiar with the issue.

MR. CRYSTALL: Can you pull that information?

MR. MODRICKER: We can certainly pull
reports. It may be difficult to find the specific
issue, not knowing what it really is, but we can review
it. CEM's are calibrated daily.

MR. OGDEN: Before an instrument is put into service, we have certain tests, drift reports, drift tests, et cetera, that we do to make sure that those pieces of equipment work. And the calibration of those is really just using calibration gases to make sure that it's in -- that it's basically measuring the right stuff in the right ranges.

MR. WELCH: Bob, would you be suggesting that they try and locate something like that without having anything more specific than that to go on?

MR. MARTIN: Not unless that information or 1 data is already part of the shift report. I'm not 2 familiar with the basis for reporting --3 4 MR. MODRICKER: Daily reports include the 5 calibration that was done for the CEM's that day; that's 6 part of the report. MR. MARTIN: Then that would be, I think, what's relevant. 8 MR. OGDEN: We can certainly look at the 9 daily reports and see if there's anything highlighted in 10 Kurt's shift report that identifies a concern he raised 11 12 about CEM's and --13 MR. MARTIN: And drift analyses not being 14 done. MR. OGDEN: Yeah, whatever, anything relating .15 to CEM that he highlighted as a concern. 16 MR. MARTIN: Just a theoretical question. 18 the event of a power failure, the materials which remain in the secondary combustion chamber, the temperature 19 remaining in the SCC, is that sufficient to destroy the 20 contaminants in the SCC in the event of a power failure? 21 Let's say the power failure --22 MR. OGDEN: Let's back up. What ends up 23 happening with a power failure, you have an automatic 24

waste feed cutoff.

MR. MARTIN: Right. But you still got 1 material in your chambers. 2 MR. OGDEN: Well, in the SCC what you have is 3 basically gases, okay. MR. WELCH. With a short residence time and a 5 6 high temperature in there --7 MR. OGDEN: What's going to happen is the gas it going to go straight up the stack. It's not going to 8 go through the downstream pollution control pieces of 9 10 equipment. MR. MARTIN: Is there any, in other words, 11 12 untreated particulate matter which may come up the stack 13 during power loss? MR. OGDEN: You would have the potential for 14 that, of course; you know, the fact you've got 15 particulates that are now not -- they don't have the 16 opportunity to go through the bag house. You have acid 17 gases that don't get a chance to go through the scrubber 18 19 unit. MR. MODRICKER: I think that's what's 20 21 addressed in the risk assessment. Those are the types of events you're talking about. The theoretical 22 residence time in the secondary combustion chamber is a 23 minimum of two seconds. 24

MR. MARTIN: Okay.

MR. MODRICKER: The minimum gas temperature 1 in the secondary is a minimum of 1801 degrees. 2 Obviously, the refractory in that secondary combustion 3 chamber is very, very hot, and it takes a long time to cool down. 5, But I don't think anyone here can tell you 6 exactly what the temperature is in that secondary. Yes, when you stop the waste feed, there's material that remains in the front end of the system in the kiln. And yes, the thermal relief vent, as its design, opens and 10 11 it's a vent, so it's going to, by natural draft, draw air through that hot chamber. 12 If you're looking at an event, it would be a 13 14 short duration event that you may see the particulates coming out right when the stack opens. I think that's 15 16 why they're addressed in the durations in the risk 17 assessment. MR. MARTIN: Just operationally, what would 18 the reignition time be for the unit, assuming you had a 1.9 power fluctuation or outage? 20

MR. MODRICKER: It depends on why you have an outage.

21

22

23

24

25

MR. MARTIN: Okay. If lightening struck.

MR. MODRICKER: If a lightening strike knocked out the power to the site, your thermal relief

vent would open, okay, you would go out and start your
emergency backup generator. And it may be approximately
five minutes before you regain power to -
MR. OGDEN: Reset all your electrical
systems.

MR. MODRICKER: Right. To close that thermal relief vent, you have to have enough power to get your ID fan running. So if you had a scenario where your ID fan broke, you're not going to get the system back up and running that quickly. But the example you gave would be much quicker.

MR. OGDEN: One of our operational considerations is if, in fact, we're in the middle of a lightening storm, and correct me if I'm wrong, at least we were looking at it at one point to stop -- potentially stop haz feed if we're in a situation where there's a high probability of a lightening strike.

So we stop haz waste feed in those situations because we don't -- and we go into a hot hold scenario.

And then when that thunderstorm alert passes, we would start haz feed again.

MR. MARTIN: Is there a pilot light for ignition on the system? And if so, is that shielded from high winds?

MR. OGDEN: How do we light those things?

MR. WELCH: It's arc lit, is the way I 1 understood it. It's not pilot lit, that's how I understood it. 3 MR. OGDEN: That's my understanding, too, but 5 I've never gone out and checked it. 6 MR. MODRICKER: I'm going to say, for the 7 record, I don't know. I would have to check. 8 MR. OGDEN: That was my understanding as 9 well, Mike, but I've never seen it. 10 MR. WELCH: It's an electric start. 11 MR. DRUMBOR: Whether it is PC electric or 12 arc. MR. MARTIN: Which can be initiated by 13 computer from the control trailer? 14 15 MR. WELCH: Yes. MR. MODRICKER: That would make sense. 16 17 MR. MARTIN: Thank you. That's all the questions I have. Do you guys want to continue or --18 MR. WELCH: I have a couple comments. I have 19 a 4:00 meeting. I guess I'm going to start out by 20. probably showing a little frustration. I bring forth a 21 unique situation. And I am not only the regulator here, 22 who is in charge of this project from the State of 23 Pennsylvania, but I'm a resident, family and the whole 25 bit.

I think I would have really welcomed an opportunity, maybe, the State of Pennsylvania would have to have more input to you while you were preparing your draft and interim. We have expended and extended an enormous wealth of oversight to this project, unprecedented at any NPL site in the State of

Pennsylvania.

I've got four staff assigned to this site.

There's not a singular NPL site in the State of

Pennsylvania that has a State staff assignment. Now,

that came from the government's office. I didn't elect

to have my staff be here.

We have brought out the mobile analytical lab, which is one of only two in the country. It's here today, as a matter of fact. And we certainly arranged that long before you were here, so it wasn't just convenient to have you here.

MR. MARTIN: Is that like the ERT Taggart unit?

MR. WELCH: Yes. We had them operate two years ago. We've had them operate every time we've had a complaint from the community. We had them operate when we were trying to differentiate the odors between the RECRA site next door and the superfund site.

We had them here during the risk and trial

burn. We brought out our entire stack test team. They were resident during the test and trial burn. We're sampling here today for the next seven days. They'll be back in four weeks and sample for another seven days.

1.

10.

We have added, actually, two mass spectrometers to the unit for this trip because there was claims that we weren't picking up the molecular end of the scale that was relevant here, which we didn't agree with, but we wanted to prove that they were wrong.

I think what I want to bring forward residing here is that you're not hearing the perspective of the community. And that for whatever reason, it appears that the timing of your visit is very untimely for everyone involved.

MR. MARTIN: Meaning today?

MR. WELCH: Yes. My supervisor would at some time at your convenience, if you ever do come back up here, would enjoy sitting down with you to share with you some of his perspectives.

But I think what we want to come across to you with is that we've looked at the draft report that you've done, we have been in the position of regulator and we've actually stopped the project for some period of time because we were concerned with some of the situations that were happening here.

We went through a formal partnering evolution where we were given authority that -- I'm not sure that we wanted it, but we were given it. Mr. Voltaggio and Gregg and the Corps and everyone has committed to allowing us to have that equal say in the decisions that are made here.

б

We have elevated everything that has been spoken here at this table. The risk assessment, we've had peer review outside of what anyone else here has done. The peer review, we participated in.

We have sat through all of that, and we still cannot see where the continuance of any more testing, any more development of machinery, where there's been a shortfall.

Our responsibility as the State is to ensure that the air that comes out of the stack meets our emission standards. And that the water that's discharged into Bald Eagle Creek meets the standards of the State.

Probably the weakest part of our agency is the Occupational Health and Safety aspects, which we have relied on OSHA to report to us on.

In your report, you've mention a couple other things that I thought I would just bring you up to date on and that was when I was referring over at the city building about maybe bringing some things to closure.

You had mentioned the AC & C site at the lower end of the airport. We've completed our --

MR. MARTIN: Is that the --

MR. MODRICKER: Munroe Farms.

MR. WELCH: We completed our investigation.
We had Westinghouse Remedial Services come out and
complete a semi-phase two. Basically, we didn't confirm
what the allegations were that there was a collection of
-- a disposition site of drums there.

What we did find, through some of the analyticals, was the disposal of sludges that was permitted in '72 is now causing groundwater pollution.

We have met with American Color and Chemical, and they have agreed to undertake the full assessment characterization and remediation of the property. So at least something we've brought to somewhat of a closure in our mind, a closure as far as curiosities and questions. The Taggart field site, which was another --

MR. MARTIN: I just want to thank the State for undertaking that investigation at the Munroe farm site. In my -- I think it was interim report, what I wanted to ensure was that we continue to help the State as much as possible, not only with the technical expertise, but with money as well.

But I do recognize that the State took the

The first section of the section of

. 25

24

1

.2

3

5

6

7

9

10

11

12

13

14

15

1.6

17.

18

19

20

21

22

23

lead on that, and I would thank the State for that. You found no drums?

20.

MR. WELCH: We found pieces of drums. We found portions of the drums. I think what you need to be aware of is that everything we found was in the trenches that had been identified in not only the magnetometer study but also in the maps that had been drawn back in the '70's as to where they were going to dispose of their aniline sludges.

What we found was some lab wastes. We found some pieces of drums, buckets. We found, I believe, four intact drums, intact to the point that they were at least holding a shape of product.

We analyzed them all. We didn't find anything dramatic in the sludges with the exception of maybe some hazardous levels of arsenic. But what we did find was hazardous constituents in the groundwater, and they directly relate to the aniline dyes.

We tried to fingerprint that site to Drake so that we could break that. And we, in fact, found nothing that related us to Drake. And I think that the fact that AC & C has stepped forward and is trying to commit to doing a cleanup in a non-adversarial manner probably lends to that being a correct assumption.

Taggart field was one of the other sites.

That was the baseball field site at the end of the road. 1 That was a site that they had brought forward. 2 We went out, and we did soil testing. 3 found a groundwater monitoring well in the field. tested that. All of that came back negative, non-detect 6 for anything. 7 We went to the nearby resident that they had contacted and, in fact, sampled his basement, sampled 8 the groundwater in his basement. And that all came back 9 negative with the exception of a soap product that we 10 found and a Merthiolate which is a by-product of 11

plastics.

12

13

14

.15

16

17

18

19

20

21

22

23

24

25

MR. MARTIN: Was this the Yost basement?

MR. WELCH: No, it was Yohn, I think Yohn.

MR. CRYSTALL: Yost is the Mayor.

MR. WELCH: Mr. Yohn, I think is his name.

MR. MARTIN: Let the record show it was not Yost.

MR. WELCH: I guess what I want to bring forward is that we're going to be here long after you're going to your next site and that these folks are -we're responsible for the operation and maintenance, the care of the property. We're ensuring the ARARS are met.

And what we really are pleading to you is to incorporate as much of what we feel is unbiased, because it certainly seems that this community has hinged their last hope on this ombudsman report.

. 25

I mean, we're talking about at the public meeting after the employees of the government and the employees of OHM left, there was a corps of probably 25 people, which is truly the corps that believes that this is the wrong remedy.

But they're just hanging on the thread that you're going to stop this project. And that's why I asked this morning whether -- my confusion was whether you would be coming out with a technical recommendation or how exactly that worked.

Because that's how important it is to us that all of the information that we've tried to give you gets into the reports for balance, if nothing else.

And anything that we can give you to satisfy that or to fulfill a question you have, we stand ready to do. But the timing is just -- it's hard to believe that the day before we're going to start that you come out.

MR. MARTIN: Well, let me make clear, for the record, I was not aware of the decision to commence operations tomorrow. I mean, as I explained earlier, there's an ombudsman process, and there's a superfund decision-making process. And unfortunately, the twain

doesn't meet at times with the EPA.

1.3.

I have to complete my process. I will do that. But as far as knowing that we were going to start burning in the morning and me being here today, I didn't know that.

MR. WELCH: And I give you the benefit of the doubt on it, but I think after sitting through the public meeting, sitting through the tirades of Commissioner Bottorf and of A.I.R., that they are having regular contact with you, I mean, this is what they are purporting, Bob, and none of us seem to be having any.

It certainly weighs the scales towards something that's not balanced. And after the meeting a week ago Tuesday night when they were pressing Tom Voltaggio for when are you going to start this unit, you know, there was people standing up saying that we're going to contact the ombudsman to see that that stops,

So I mean, it certainly is a perception that you're going to battle.

MR. MARTIN: And that perception, for the record, exists nationwide. There are various groups in various communities in our region all over the United States that make that argument persistently to Agency management. That kind of statement is always made.

I have to go. But I do appreciate the

significant contribution of the Commonwealth of. 1 2 Pennsylvania with this project. MR. WELCH: That's all I have. 3 MR. CRYSTALL: I just wanted to give you a letter we sent to Commissioner Bottorf of February 25 6 from Tom Voltaggio, which explains a couple of his alternate technologies that he's banking on so much. 7 One of the companies is bankrupt and the 9 other one -- the closed loop system that is being used 10 in New Bedford, Massachusetts, which EPA has told us 11 from Region 1 they're using, which isn't a closed loop system, which requires an after burner to make sure 12 13 dioxin and furans don't get emitted. That is a very comprehensive letter that 14 Frank Vavra helped draft up for Tom's signature. 15 was a commitment Tom made in the public meeting that we 16 would evaluate the technologies brought forth to us from 17 A.I.R. 18 These are the two that they brought forth. 19 We have talked with our experts. There is no such thing 20 21 as a closed loop system, a fully closed loop system. MR. OGDEN: We confirmed that with our 22 experts. 23

A.I.R. people stand up in public meetings saying do what

MR. CRYSTALL: We had Mick Harrison and

24

25

Region 1 does. They changed their decision. They're going to use the eco-logic system, and they're not. They haven't decided it yet.

6.

20.

That I think would be interesting since your final report is going to address alternate technologies. We have other information as well to back that up.

MR. MARTIN: So A.I.R. propounded to alternate technology?

MR. CRYSTALL: Well, actually, they gave us three. They gave us the mobile in situ treatment unit, which was a ditch with a heating element and the guy wanted to come on the site and show us how we can clean up the site with no problem, which from everybody's account, we feel you need to drag an incinerator behind this unit for it to work because there's no emissions controls at all.

They're just going to put hot heating elements into the soil, and that's okay. The other was the Molten Metal Technology, that company is bankrupt now. And the one is the eco-logic, which was the closed loop hydrocracking system, similar to a petroleum.

A distillery would use hydrogen gas to pretty much absorb the chemicals and then that needs to be taken care of. I questioned whether the people suggesting we use this really want hydrogen tanks on

this site.

It's a lot more dangerous, we feel, than incineration. Another issue, which I think you're going to address in the final report, is an emergency response plan/evacuation plan.

I would ask that you talk to -- well, you don't need to talk to him, but Rick Goodbrod is the director of the division of emergency service system for the county and he has come forth in public to say that there is a valid county emergency response plan which incorporates and cites specific health and safety and emergency response considerations and is absolutely workable.

We have the emergency response folks from the county come to every weekly meeting. We've had on-site, full scale exercises with ambulances and fire trucks and everything else with all the city/county responders.

We've actually -- EPA as well as OHM, has trained county and city emergency responders in OSHA training and HAZWOPER training, its hazardous waste operations and emergency response training for specifically conditions we have here.

And I honestly believe that the response community knows the real problems that could happen at this site which are related to the liquid oxygen tanks,

and equipment handling problem where a drum of sodium hydroxin at the treatment falls off a back -- falls off a forklift or something like that and busts open; those things are the real problems which they have a grasp on.

We have county emergency responders as well as the city manager and the commissioners on a notification system for when we have planned TRV openings to let them know that this isn't an emergency, it's not a problem, it's planned.

As well as when there's an unplanned TRV opening, Mr. Goodbrod we have on -- the director of emergency services for the county. This is a situation we really don't expect it to be a problem, as you were aware, but there is an unplanned opening if anyone asks.

So all the notification procedures are in place for emergency response. The county's emergency response plan has evacuation plans for the City of Lock Haven.

Everybody in the response community and Lock Haven, the EMT'S as well as fire departments are aware of these and how our site relates to the rest of the city in terms of what would happen.

We are part of the emergency response plan.

If something happens, we get to be evacuated like everybody else. So there is not a finalized county

.25

emergency response plan. And my impression or reason l why it's not, is because of the county commissioners 2 need to sign it, and they have not to this day. 3 But the response community is satisfied with 4 5 the plan, and I think that's the most important part. 6 MR. MARTIN: Okay. MR. CRYSTALL: I think that's important for 7 you to know. It's something that we're beat-up on. We 8 don't have a final county emergency response plan. 9 10 Well, you won't sign it. MR. MARTIN: That lies with the county 11 commissioners? 12 MR. CRYSTALL: It's their responsibility to 13 14 approve it. MR. OGDEN: Or to raise some question as to 15 what --16 MR. WELCH: Well, they have a yes vote, a no 17 vote, and an abstention; one of the commissioners won't 18 vote on it. 19 MR. MARTIN: To respond to your earlier 20 concern, and I would like to for a moment, I know you 21 22 got to run to your meeting, about communications with the -- what I call the petitioners, the A.I.R. group. 23

there was more extensive communication with petitioners

24

25

Early on in the ombudsman case here at Drake,

in the early stages of the ombudsman case. That is fairly typical.

As I move to closure in the ombudsman process, I favor written comments, and I favor meetings on the record. So the close kind of communication you noted earlier, generally happens in the beginning and certainly not at this juncture.

And I've handled many cases, some of which involve states as aggrieved parties that have come to me about EPA. And it's -- this is no different than those cases.

MR. WELCH: I was letting -- I know you've heard it before, but the perception is that it still exists. And I mean, I think that's part of what feeds their process that if they felt that their constituents were losing hope, that their numbers would --

MR. CRYSTALL: In fact, Bob, Rusty has come out in public meetings, and I'll say this because he's come out in public saying that the reason you have not finalized your report is because you're afraid for your life.

MR. MARTIN: Afraid for my life?

MR. CRYSTALL: Right. And that's the reason you don't come up to Lock Haven or finalize your report.

And how do you know that, Rusty? I know. I have good

sources. We know. And it's things like that that are being said in public.

Rusty and A.I.R. have threatened members of different groups here. They've gone to local small mom and pop businesses -- the Smedley's have, not Rusty, the Smedley's have and they've said if we see you allow OHM or Army Corps of Engineers to patronize your establishment, we're going to picket you.

They've gone to a County Farm Bureau meeting, which you'll hear about tonight, and they've said if you don't agree to help us get this project stopped, we're going to follow your milk trucks to your distributor and tell them that they shouldn't use it because it has dioxin in it.

They're actually threats, not physical threats, although maybe you have different stories about that, but they're economic threats, and they're threats that are getting some people upset. And as far as I'm concerned, it's definitely not above the board play on their part.

I feel that as federal employees and state employees, we have to be honest; we can't lie; we can't exaggerate, but I have not seen that coming from A.I.R. I've seen -- discussions I've had with the Smedley's which have put issues to bed totally changed around and

brought two years later.

1.

.2

3

4

б

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

2.5

This public meeting we had on February 10, they started talking about beer cans they found in January a year ago. They started talking about how we informed the five people they swear were taking drugs and drinking on site, that we told them that they were going to be tested and they were able to clean themselves up.

The next time they said well, we know you just took chlorine tablets and put them under their fingernails and that spiked their urine test so they couldn't find anything.

Then it was well, you just had chlorine bleach in a canister, a vile in your arm, and you sprayed it out into the bottle and that masks whatever you have.

And it's things like that that they're saying in public which just are so absurd. But all it does is it rowels up the rest of the A.I.R. members. You know, as you know from two Septembers ago, the seven-hour meeting, we just got blasted with a six and a half hour meeting, which was almost the same.

You know, there's a position that A.I.R. has, that Mick Harrison, that Green Peace has that are just totally opposite of EPA's current views of things.

On the dioxin reassessment, there's a -- it hasn't been finalized yet because EPA believes it should be one way where folks from Green Peace and certain industries feel we should have another way of measuring dioxin or calculating reference to those exposures versus incremental for exposures.

Я

1:5

.25

There's a lot of things that don't have answers. Mick Harrison asked the chair of our Williamsport peer review whether there's anyone on the panel, including the chair, who can say there's a level of dioxin that can be emitted that will not harm infants.

One person said I can say it can harm them, and I can say it can't harm them. There's really two schools of thought. We realize that. We've come out publicly and tried to explain that.

But I've been told by Bill Smedley and Vickie Smedley that they don't care what science says, this incinerator is not going to happen here.

So one of the reasons I asked you that question at the Environmental Advisory Committee if there's closure from your point of view, do you have to stop having to listen to these folks? There won't be closure. We know that.

It doesn't matter what science says. It

doesn't matter that we sent the response to Senator Specter saying that we don't feel your final report has any implications for us starting earlier.

And my understanding is the Senator was amenable to that. He accepted that response. It's not like he's ready to get Carol Browner fired because her staff decided they didn't want to monitor the Senator's request. He accepted that.

Congressman Peterson did not send us a letter not asking us to wait for your final report before we start. He asked us to please prioritize this report since the site is such a high priority. That letter is still somewhere in Tim Fields's office for signature.

So it's not exactly how it's always characterized against us. There's at least two sides to each story, and we feel we have the documented records of the high road; we really do.

That's all I wanted to say. I appreciate you coming out here. I felt it was very important that you got a chance to talk with the State, the City Environmental Committee and the Farm Bureau because they will not speak out in a public meeting when there's 75 people supporting A.I.R., they will not stand up and say anything. It's a fact.

MR. MARTIN: Well, thank you for arranging

i

it.

MR. CRYSTALL: I'm glad you were able to come.

MR. MODRICKER: I have one question and a short comment. And you may have answered this at this morning's meeting. But is it typical for you to prepare a report based on allegations of a group without consulting the other parties that are involved, in other words those that are being alleged against? That's my question, and then I have a comment.

MR. MARTIN: Allegation of a -- I missed -MR. MODRICKER: Whatever nature. In other
words, there was the draft report that came out, and
I'll make my comment now, that was very frustrating and
somewhat damaging for people here at the site and the
people involved in trying to get the site cleaned up.

The report was prepared and presented, and it appeared to just parrot a lot of concerns that the A.I.R. group had without people like EPA and the State and the Corps and the contractor and a lot of people that were involved in the process being involved and talking with you. So I guess that's my comment --

MR. OGDEN: And it didn't come out as a statement of a complaint. It came out as an endorsement at the national level, national ombudsman has -- I

concur that these are real problems out here.

17.

22.

MR. MODRICKER: That's how it appeared.

MR. CRYSTALL: That is the way that we interpreted it, and I interpreted it. And I talked with a number of other people, and they say if you look at what the words say, Mr. Martin is saying these are the allegations presented to him, you're not supporting the allegations.

And it is frustrating and damaging individually and personally when you read something like that. In all honesty, I was devastated when I saw that because I just couldn't believe you bought everything they said.

But then Voltaggio and the lawyer -- look what the lawyer said, Karen Kraus, these are the allegations presented to Bob Martin, not the allegation Bob Martin is presenting to Tim Fields.

MR. MODRICKER: Being completely unfamiliar with the process, is that typically what --

MR. MARTIN: To be clear, and then maybe you can comment, no, there was no endorsement either in the report or by me personally of the allegations made by A.I.R., either, in the interim report or in the draft final report. Now, if it came across that way, I regret that.

	·
1	MR. MODRICKER: It certainly came across that
,2	way as to a number of people involved in the project.
3	So then my comment is, having gone through this process,
4	if there are concerns in the final report that we have
5	not yet had an opportunity to respond to, to provide you
6	information or don't know about being new to the
7	process, ask them that we be able to be involved in that
8	process.
9	MR. MARTIN: Done.
10	MR. 'MODRICKER: Thank you. That's all I
11	have.
12	MR. MARTIN: Thank you very much.
13	(The meeting concluded at 4:00 p.m.)
14	
15	
16	
17	
18	
19	
20	
21	
22	

CERTIFICATE

I hereby certify that the proceedings and evidence are contained fully and accurately in the notes taken by me on the within proceedings and that his copy is a correct transcript of same.

· 7

23.

.25

Nicole L. Mattern
Notary Public

My commission expires on May 24, 1999

My Commission Expression of Notaries

Member, Pennsylvania Association of Notaries

LAWYER'S NOTES

Pg.	Ln.	,
- 1		
1		
1		
•		
		•
i	i	
	1	
 †	一	
		·
ļ		
	-+	
].	<u> </u>
		*3
	\neg	
<u> </u>		
-		
T		
	\dashv	
	\dashv	
1 -	1	

AR319990

18 [5] 11:11; 15:11; 16:14, 15; 1998 [1] 1:13 1999 [1] 94:13 '70's [1] 77:8 **72** [1] 76:12 **'97** [1] 4:11 - 2 -2 [2] 15:19; 21:23 20 [1] 40:5 24 [2] 7:1; 94:13 ... - [144] 3:10; 4:14; 6:3, 5, 13, 14, 25 [4] 37:3; 60:16; 79:5; 81:5 27th [1] 3:8 19; 7:7, 18; 8:8, 19, 24; 9:9, 17, 20; 11:1, 5; 12:5: 14:14, 15; 15:4, 71, 21; 16:8; 17:22, 24; 19:6, 9, 20; 20:1, 6, 16; 21:17; 22:6, 7, 10, 15, - 3 -19, 24; 23:1, 2, 5; 24:6, 12, 17, 18; 25:1; 26:7; 27:13, 18; 28:22, 24; 3 [4] 1:13; 2:6; 11:21; 61:25 29:2, 7; 30:9, 11, 20, 22; 33:5, 19; 36 [1] 52:22 35:3, 15, 21; 36:21; 37:17; 38:7, 21; 39:3, 8, 10; 42:4, 12, 17; 44:3, 9, 19; 45:8, 23, 25; 47:20; 49:23; ³ 50:13, 20; 51:5; 52:2; 53:11, 25; 55:15; 56:2; 57:21; 58:4, 7, 13, 19; 59:8; 60:12, 4 [3] 56:7; 72:20; 93:13 16; 61:3, 22; 62:2; 64:5; 66:11, 12; 40 [1] 59:20 46-hour [1] 26:5 . 67:1, 21; 68:3, 12, 22; 69:6, 16; 71:3, 15, 19; 72:18; 75:2; 76:2; 3, 9, 400 [1] 50:15 18, 21; 78:21; 79:10, 18; 81:9; 83:6, 45 [2] 1:13; 59:20 18; 84:2, 11; 85:16, 23; 96:10, 12, 450 [3] 50:9; 51:5, 10 16; 87:5, 24; 89:1; 91:11, 22, 25; 92:14, 19 5 [3] 32:6; 34:21; 35:3 5-minute [1] 52:22 .001 [6] 15:17; 16:12; 19:23; 21:18, 55 [1] 23:4 .808 [2] 12:10; 22:15 .02 [1] 12:13 75 [1] 90:22 - 0 · . - 8 -00 [2] 72:20; 93:13 001 [1] 24:3 806 [3] 36:2; 36:15; 49:23 800- [1] 30:13 1 [6] 1:13; 17:11; 28:22; 52:3; 81:11; 82:1 909 [3] 36:2; 36:16; 49:23 19 [3] 48:3, 4; 88:2 10,000 [1] 18:23 900-degree [1] 39:13 12 [1] 52:22 **83** [3] 12:4; 14:24; 22:8 122 [1] 45:25 13-month [1] 4:8 13.5 [1] 40:3 15 [1] 40:4 abe [1] 3:3 17745 [1] 1:14 abilities [1] 48:1 18 [1] 40:5

21:18; 22:9, 13; 23:5; 37:21; 50:7, 8; 51:4; 54:7; 62:24; 63:24; 64:25; 88:7; 91:2; 93:7 about [42] 12:13; 13:9, 13; 14:15, 17; 20:5; 23:7; 27:13; 28:12; 35:14, 15; 36:5, 6, 23; 37:17; 38:2; 40:4; 44:4; 47:5; 49:25; 51:1, 3, 5; 52:4; 59:9, 18; 61:3, 9, 16; 64:24; 68:12; 69:22; 75:25; 79:3; 85:22; 86:10; 87:10, 16; 88:3, 4; 93:6 above [2] 40:4; 87:19 absolutely [1] 83:12 absorb [1] 82:23 absorbed [1] 26:19 absorbs [1] 40:17 abstention [1] 85:18 abourd [1] 88:18 ac [2] 76:1; 77:22 accept [1] 54:15 acceptable [2] 58:2; 66:20 accepted [3] 54:23; 90:5, 8 account [3] 52:22; 60:15; 82:14 accumulate [1] 52:9 accuracy (2) 66:10, 14 accurate [1] 4:6 accurately [1] 94:4 achieve [3] 10:17, 24; 12:21 achieved (1) 24:2 acid [1] 69:17 acres -[1] 18:11 acroes [3] 74:20; 92:24; 93:1 act [1] 7:25 action [6] 19:10, 12, 13; 20:7; 43:24, activities [2] 5:20, 22 activity [1] 7:21 actual [6] 2:22; 3:14, 18; 5:1; 33:17; 35:24 actually [19] 6:5; 9:23; 12:10, 14; 16:21; 20:6; 26:11; 38:6; 39:19; 40:20; 51:17; 50:2; 62:7, 11; 74:5, 23; 82:9; 83:18; 87:15 edd [7] 41:17; 45:23; 49:5; 50:7, 12; 52:3; 59:14 added [2] 39:24; 74:5 adding [1] 58:8 addition (2) 37:9; 55:14 additional [2] 36:24; 37:13 nddrees [5] 13:24; 35:11; 55:5; 62:5; 83:4 addressed [3] 59:11; 69:21; 70:16 addressing [1] 13:10 adjusting [1] 62:19 adjustments [2] 22:12; 62:24 administration [1] 12:3 advisor [1] 62:15 advisory [1] 89:21 affect [1] 49:4 affidavit (9) 2:16; 3:5, 15, 18, 22; 5:9; 10:9; 32:9; 42:10 straid [2] 86:20, 22, able [19] 10:24; 11:21; 12:5; 16:11; attes [15] 11:18; 13:4; 17:5; 27:13;

30:18; 32:22; 44:16; 58:21; 51:15; 65:12; 78:20; 79:4; 80:7, 13; 81:12 afferwards [1] 10:5. again [17] 8:9; 17:10; 22:3; 23:18; 25:6; 26:22; 41:20; 44:2, 25; 53:17; 54:3; 56:20; 57:2, 17; 58:3, 5; 71:21 against [2] 90:15; 91:9 agency [3] 18:16; 75:20; 80:23 aggressive [1] 20:6 aggrieved [1] 86:9 🕟 ago [4] 73:21; 80:14; 88:4, 20 agree [2] 74:9; 87:11 agreed [3] 28:17; 61:17; 76:14 ahead [3] 10:10; 17:21; 20:3 air [19] 8:25; 10:23; 18:3; 19:2; 21:25; 24:8; 25:2; 45:25; 47:17; 49:2; 51:8; 54:14; 62:6; 63:17; 64:8; 85:15; 70:12; 75:16 airport [1] 76:2 alert [1] 71:20 all [52] 6:4, 15, 17, 19, 22, 23; 7:13; 8:21, 22; 9:1; 13:19; 16:16; 17:17; 23:19; 29:22; 32:10; 38:1; 42:11; 45:15, 24; 48:16; 53:9, 12, 17; 54:6; 58:2; 59:1; 81:7, 17; 82:20, 25; 63:18; 64:2; 65:14, 15; 71:4; 72:17; 75:11; 77:14; 78:5, 9; 79:14; 80:22; 81:3; 82:16; 83:17; 84:15; 86:18; 90:18; 92:11; 93:10 allegation [2] 91:11; 92:16 allegations [7] 2:13; 76:8; 91:7; 92:7, 8, 16, 22 alleged [2] 87:8; 97:9 allocated [1] 42:21 allow [3] 12:5; 39:14; 87:6 allowed [2] 25:21; 56:18 allowing [1] 75:5 elmoet [2] 60:15; 68:22 along [2] 11:19; 23:1 · aiready [3] 16:8; 25:4; 68:2 · alan [14] 2:7; 8:1; 17:12; 28:2, 5, 9; 29:9; 31:5; 32:20; 34:24; 48:22; 52:3; 53:6; 77:7 atternate (3) 81:7; 82:5, 8 although [1] 67:18 ahwaya [3] 29:2; 80:24; 90:14 am (3) 2:5, 6; 72:22 ambulances [1] 83:16* emenable (1) 90:5 merican [1] 76:13 emine [1] 20:22 amounts [3] 53:2; 58:1, 12 analogy [1] 47:9 analyees [2] 6:23; 66:13 analysis [1] 22:12 malytical [5] 31:12; 34:22; 37:9; 57:23; 73:13 analyticals [1] 78:11 analyzed [1] 77:14 analyzing [1] 16:21 angel [1] 21:10 angles [1] 21:9

1800 [5] 36:1; 50:5, 8, 14; 51:4

1801 [1] 70:2

ability [2] 43:7; 65:25

aniline [2] 77 % 18 another (10) 22:2: 32:20; 39.5, 41:2; 43:12; 48:19; 74:4; 76:18. 83,3; 89,4 answer [14] 17.4, 6; 26.12; 27:14, 28:4, 5, 6; 43:13; 58:20, 24; 64:25; answered [1] 91:5 answers (1) 89:8 anticipate [2] 7:3; 64:5 anticipated [1] 212 anymore [2] 55:22; 57:18 anyona [6] 26:11; 49:4; 70:6; 75:9; 84:14; 89:9 anyone's [1] 4:24 anything [12] 22:21; 52:5; 53:15; 59:14; 67:25; 66:10, 15; 77:15; 78:6; 79:16; 66:12; 90:24 anyway [2] 39:21; 59:4 anywhere [2] 5:2; 27:4 apologize [1] 55:3 apperently [2] 65:8; 67:3 appeared [2] 91:18; 92:2 appears [2] 41:24; 74:12 applied (1) 58:21 approciable [2] 58:13, 14 appreciate [2] 80:25; 90:18 appreselt [2] 48:8; 82:12 appresshed [2] 30:24; 31:4 appropriate [5] 2:20; 18:9; 29:1; 31:11; 61:4 appreve [2] 61:14; 85:14 approved [1] 13:20 approximately (1) 71:2 arara [1] 74:23 are [2] 72:1, 12 are [72] 2:13; 6:11, 20, 22, 25; 8:13; \$14, 8; 12:8; 13:7, 8; 14:2; 17:2, 8, 16; 18:8, 13; 24:20; 26:24; 28:25; 28:2, 4, 8, 21, 25; 32:24; 34:3; 35:15; 36:1; 44:11; 48:1; 50:5; 53:12; 54:10; 56:18; 57:23; 58:24; 85:24; 86:3, 12, 18, 20; 87:5, 15; 60:16, 21; 75:6; 78:21, 23, 24; 80:9, 10, 15, 21; 81:18; 83:25; 84:4, 15, 20, 23; 87:1, 18; 88:18, 24; 91:8, 9; 92:1, 6, 15; 93:4; B4:4 area [17] 14:10; 18:12, 25; 20:17; 28:12; 31:18; 32:21, 22, 24; 34:12; 36:24; 37:2, 14; 45:8, 10; 46:7 areas [2] 14:12; 29:19 argument [1] #0:23 acm [1] 80:14 army (2) 2:8; 87:7 around [12] 21:14, 23; 36:25; 37:2, 6, 14; 45:21; 40:18; 56:16; 57:3; arranged [1] 73:15 acranging [1] 90:25 accomis [1] 77:18 mah [54] 5:6; 9:1; 13:4; 14:1; 23:1,

36.6, 8, 13, 21, 25; 37·6; 38:15; 39:11, 12; 41:1; 42:6; 43:1; 44:16; 45:5, 7, 12, 13; 49:17, 18, 23, 25; 56:9, 14, 15, 16, 22; 58:4, 6, 14, 17, 18, 21, 25; 59:19; 60:3, 18; 61:7; 83:4, 54:8 aside [1] 32:2 mak [6] 4:21; 37:18; 44:4; 56:1; saked [15] 27:10, 12, 19; 28:1; 37:17, 18; 38:2; 47:10, 24; 58:22; 65:9; 79:10; 89:8, 20; 90:11 asking [3] 16:10; 35:14; 90:10 asks [7] 84:14 aspects [1] 75:20 966essment [11] 40:21; 52:21; 53:2, 16; 80:8, 15, 19; 69:21; 70:17; 75:8; assigned [1] 73:8 acaignment [1] 73:10 assistance [1] 7:24 associated [4] 3:12; 32:2; 52:20; · eccuming (2) 52:23; 70:19 accumption [2] 18:11; 77:24 assurance [7] 4:25; 7:11, 16, 21; 8:1, 2; 11:17 accured [1] 17:20 ada [7] 15:10; 16:14, 19; 17:1, 11; 19:14; 21:14 atmosphere (1) 53:1 #Rack [1] 8:2 attached [1] 4:1 stantion [1] 11:7 stierney's [1] 3:12 atterneys [1] 2:25 mithority [1] 75:2 teanatic (2) 51:12; 58:24 aveilable [5] 9:4, 8; 22:2; 48:2; average [4] 11:11; 36:20; 36:14; mere [7] 20:11; 33:7; 77:5; 79:22; 84:14. 20 away [1] 52:6

. . .

| Beack [33] | 4:10; | 5:7, | 8; | 9:19; | 14:23; |
10:10; | 17:6, | 11, | 12, | 14; | 19:4; | 22:20; |
23:12, | 16; | 25:5, | 14; | 28:4; | 30:8; |
34:18; | 36:18; | 42:1; | 56:19; | 58:7, | 8; |
00:23; | 71:9; | 74:4, | 17; | 77:6; | 78:5, | 9; |
82:6; | 84:2 |
| Beackell [1] | 31:11 |
| Beackell [1] | 5:8; | 38:24; | 30:8, | 14, | 18; |
41:1; | 60:2, | 8, | 13, | 16, | 17, | 22; | 61:7 |
Beackelling [1]	50:23			
Beackelling [1]	71:2			
Bag [6]	48:22;	48:1,	7;	50:10;

51:11; 69:17 balance [2] 23:13; 79:15 balanced [1] 80:13 baid [1] 75:18 baltimore [2] 27:15; 31:7 banking [1] 81:7 bankrupt [2] 81:8; 82:19 baseball [1] 78:1 based [5] 15:14; 17:20; 19:20, 21; basement [3] 78:8, 9, 13 basically [11] 22:1; 30:23; 31:8, 13; 45:13, 18; 48:24; 57:21; 87:21; 69:4; bacis [4] 18:20; 45:17; 64:19; 68:3 battle [1] 80:19 be [118] 2:11; 3:21; 4:16, 19, 22, 24; 5:1; 6:16; 7:8, 9, 18; 8:4; 9:2, 11; 10:19, 23; 11:21, 23, 25; 12:5, 25; 14:20; 16:11, 19; 19:23; 20:1; 21:18; 22:6; 23:4, 5, 9, 10; 24:10, 11; 25:1; 26:2, 16; 27:6; 26:6, 22, 23; 29:12, 24, 25; 30:3; 31:19; 34:8; 35:11, 13; 36:11; 37:21; 40:3; 41:21, 24; 43:4; 44:9, 13, 14, 17; 45:2, 3, 9; 48:5, 7, 9, 18, 25; 47:2, 12; 48:19; 49:9; 50:7, 8; 51:4; 53:3, 21, 23; 56:9; 57:1; 58:12; 62:24; 63:4, 8, 23; 64:4, 9, 25; 65:16, 18; 67:13, 23; 66:7; 70:13, 19; 71:2, 11; 72:13; 73:12; 74:3; 77:5; 78:20; 79:11; 80:11; 82:4, 23; 84:13, 24; 87:22; 86:7; 89:3, 11, 23; 92:20; 93:7 best-up [1] 85:8 became [1] 20:12 because [36] 4:1, 9; 8:19, 21; 14:1; 18:18; 21:1, 18; 31:20; 36:6; 30:17, 18; 42;17; 49:3; 51:10, 19; 52:3; 54:22; 56:4; 58:16; 63:21, 24; 65:16; 71:19; 74:6, 24; 78:25; 79:13; 62:15; 85:2; 86:18, 20; 87:13; 89:2; 90:6, 21; 92:12 become [3] 7:21; 20:11; 26:19 becomes [3] 43:16; 44:3, 25 bed (1) 87:25 bedford [1] 81:10 been (23) 13:10; 15:15; 22:5, 13; 33:2, 8, 22; 36:1; 37:7, 10; 40:6; 48:23; 47:20; 57:1; 58:2; 67:2; 74:22; 75:7, 13; 77:6, 7; 89:2, 17 beer [1] 86:3 before [23] 2:21; 3:15; 13:9, 11; 14:24; 20:5, 8, 10; 30:18; 36:8; 37:17; 40:20; 45:8, 12; 53:10; 57:21; 5&7; 67:16; 71:3; 73:16; 79:19; 86:13; 90:10 began [1] 21:3 begin [1] 56:16 beginning [1] 85:8 behind [1] 82:14 being [12] 14:2; 59:4; 65:13; 66:13; 77:24; 80:4; 81:9; 87:2; 91:9, 21;

92:18: 93:6 believe [16] 2:14; 4:11, 11:1, 13:3; 32:13; 33:4, 5; 34:16, 35.3, 40:6. 56:22: 57:11: 77.11: 79:18: 83:23: believes [2] 79:6; 89:2 bell [1] 25:15 below [4] 15:10; 37:7, 10; 57:24 bench [2] 21:19; 22:14 benefit [2] 44:5; 80:8 besides [1] 25:8 best [7] 11:19; 26:12; 42:24; 43:12; 45:24; 61:16; 66:1 beta-naphthylamine [27] 10:18, 25; 11:10, 12, 20, 22; 12:4, 6, 11, 24; 14:3; 16:3, 22; 19:19, 23; 23:14, 16, 24; 32:16; 33:1, 8, 10, 12, 24; 38:23; 39:11; 51:24 better [4] 15:12; 21:23; 22:7; 84:25 between [4] 4:22; 15:21; 39:8; beyond (2) 46:9, 13 big [7] 8:18, 19; 9:5; 12:17, 18; 36:9; 64:3 biii [3] 1:9; 3:1; 89:17 billion [3] 23:4, 15; 57:11 bit (8) 5:10; 13:5; 14:23; 23:6; 41:20: 72:25 blank [1] 87:7 blacted [1] 86:21 blesch [1] 88:14 biow [1] 58:4 biowdown [4] 58:10, 12; 57:18; blown [1] 58:6 baa [11] 12:11; 19:19, 23; 20:23; 22:11; 24:3, 7, 25; 25:4; 36:17; 37:6 board [1] 87:19 **bob** [6] 57:13; 67:23; 80:11; 86:17; 92;18, 17 beller [1] 55:1 both [4] 36:11, 24; 39:24; 65:21 settle (1) 88:15 bottom [9] 49:14; 50:12, 13; 51:14, 25; 52:7, 8, 14; 58:25 bottorf [3] 3:1; 80:9; 81:5 bought [1] 92:12 bex [2] 64:3, 4 bragden [2] 31:6; 32:1 breack [1] 38:18 break [2] 40:1; 77:20 breakthrough (2) 27:3, 7 brief [1] 10:10 hring [5] 4:10; 72:21; 74:10; 75:23; 78:19 bringing (2) 54:25; 75:25 breim [7] _71:9 brought [13] 10:16; 11:6; 13:8, 9, 10, 11; 73:13; 74:1; 76:16; 78:2; 81:17, 19; 86:1 browner [2] 4:2; 90:8

bes's [1] 63:14

buoksto [1] 77:11

4 7, 8, 16; 32:25; 34:5; 35:10;

building [5] 5:5, 6: 37:1: 45:13; built [1] 46:24 bunch [1] 21:19 bureau (2) 87:9; 90:21° burn [31] 7:2, 4; 11:5, 6, 15, 16, 25; 20:10; 30:11; 38:20; 39:3, 5, 16, 19; 40:8, 15, 22; 42:14; 59:25; 60:3, 9, 25; 61:4, 13, 15; 62:20, 21; 63:15; burner [1] 81:12 burning [1] 80:4 burne [1] 13:1 business [1] 28:7 businesses [1] 87:5 busts [1] 84:3 by [32] 2:13, 17, 19, 22; 7:13; 9:17; 13:20; 17:8; 34:5, 23; 37:14; 39:1; 43:4; 44:7; 45:1, 8; 47:18; 55:10; 56:13, 24; 59:5; 68:19; 70:11; 72:13, 20; 89:17; 92:22; 94:5 by-product [1] 78:11

- C -

c [9] 14:20; 18:6; 25:11, 18; 26:16; 27:10; 76:1; 77:22 cadillac [1] 48:22 calculating [1] 89:5 calculations [1] 67:5 calibrate [2] 55:18, 21 calibrated [1] 67:15 calibration [8] 64:16; 65:2, 3; 66:6, 13; 67:19, 20; 68:5 calibrations [5] 64:18, 21; 65:16, 22; call [7] 3:4; 4:7, 17; 7:10; 33:15; 47:8: 85:23 called [2] 21:2; 42:25 calls [2] 7:17; 47:3 came [17] 15:8; 18:5, 17, 20; 18:21; 20:9; 22:15; 28:4; 34:1; 65:4; 73:11; 78:5, 9; 91:13, 24; 92:24; cam [48] 6:9; 9:10, 16, 17; 10:4, 8, 11; 11:3, 9, 12, 24; 12:12; 13:13; 14:5; 15:7; 21:13; 22:18; 35:21; 38:3, 9, 24; 39:6, 15; 40:9, 14; 41:6; 43:13; 57:3, 13; 60:8, 13; 22, 23; 66:1; 67:11, 12, 14; 55:9; 70:6; 72:13; 79:16; 82:12; 89:10, 11, 13, can't (9) 15:7; 16:2; 17:3; 18:13; 21:17; 31:15; 87:22; 89:14 canister [1] 88:14 cannot (1) 75:12 cans (1) 88:3 . cantor [1] 62:15 capture [2] 13:14; 34:10 capturing [1] -45:2

care [7] 32:6; 41:2; 42:2; 49:20; 78:23; 82:24; 89:18 carol [2] 4:2; 90:6 carried [1] 45:13 carry [1] 52:8 case [6] 23:14; 39:3, 21; 60:5; 85:24: 86:1 cases [2] 86:8, 11 cat [1] 81:18 catastrophic [2] 48:21; 49:9 causing [1] 78:12 caustic [2] 56:2, 4 cem [6] 64:16, 18; 65:22; 66:6; 67:2; 68:16 cem's [3] 67:15; '68:5, 12 cement [2] 40:10, 17 center [2] 62:2, 3 certain [4] 36:15; 39:20; 87:17; 89:3 certainty (6) 67:72; 66:9; 73:15; 79:1; 80:12, 18; 86:7; 93:1 certificate [1] 94:1 certified [1] 15:25 certify [2] 66:17; 94:3 , cetera [2] 41:17; 67:18 chair [2] 89:8, 10 challenge [1] 51:8 chamber [7] 39:2; 40:25; 54:10; 68:19; 69:23; 70:4, 12 chambers [1] 69:2 chance [2] 69:18; 90:20 change [1] 21:10 changed [4] 45:18; 55:16; 82:1; changing [1] 39:1 chapter [1] 45:25 characterization [1] 76:15 characterize (1) 37:1 eluracterized [1] 90:15 charge [1] 72:23 ckarlie [2] 31:6; 32:1 cheek [9] 26:14, 23; 27:8; 30:9; 32:20; 53:24; 54:2; 59:5; 72:7 sheeked [2] 59:5; 72:5 oheeking [1] 58:24 checks [1] 53:22 chemical [7] 1:1, 14; 2:3, 10; 6:23, 24; 78:13 ohemicale [8] 24:21; 35:25; 38:24; 40:18; 58:13; 82:23 chemiet [2] 23:19; 36:11 chemists [5] 11:18; 21:25; 23:11; **chiorine [2] 88:10, 13**. chose [1] 4:10 cih [1] 31:14 cireumstances [1] 80:5 cites [1] 63:11 city [10] 58:11; 58:5; 59:1; 75:24; 83:17, 19; 84:6, 17, 22; 90:20 claims [1] 74:7 clarification [2] 4:4; . 7:24

carbon [4] 26:19; 57:6, 9

ciarifies (1) 30:19 clarity [3] 5:10; 33:20; 42:23 clean [6] 13:18; 23:5; 41:6; 57:19; 82:12: 88:7 cleaned [2] 33:25; 91:16 cleanup [1] 77:23 clear (5) 8:7; 29:21; 30:3; 79:21; clearly [1] 19:6 ciose [5] 30:9; 36:1; 65:8; 71:6; closed [5] 81:9, 11, 21; 82:20 ciosure (6) 75:25; 76:16, 17; 86:3; 89:22. 24 ciothing [1] 33:3 cloud [1] 44:18 ciouds [2] 43:6 clumps (1) 39:9 policot [4] 6:18; 47:1; 52:11; 60:7 collected (i) 32:18 oollection (2) 43:8; 75:8 color [1] 76:13 combustion (9) 39:2; 40:11, 25; 54:10, 18, 24; 58:19; 69:23; 70:3 oome (24) 14:13; 23:12; 32:24; 33:11; 36:12; 38:22; 45:12; 57:10; 86:15; 89:12; 74:17, 20; 76:6; 79:19; 62:12; 63:9, 15; 66:9, 17, 19, 24; 89:15; 91:3, 23 oomee (5) 38:17; 44:8; 45:5; 49:24; coming [17] 13:4; 14:1; 34:10, 12; 35:25; 36:2, 5, 7; 39:9; 49:3; 56:9; 57:4; 63:18; 70:15; 79:11; 87:23; mmence [1] 79:22 semment [7] 2:22; 91:5, 10, 14, 22; oomments [3] 22:22; 72:19; 86:4 commission [1] 94:13 commissioner [3] 3:1; 80:8; 81:5 oommissioners [4] 84:0; 85:2, 12, 18 oomink [1]: 77:23 9**00:11:18** oommitted (1) 75:4 oommittee [2] 69:21; 90:21 oommonweelth [1] 81:1 oommenication [2] 85:25; 86:5 oommunications [1] 85:22 oommunities [1] 80:22 community [6] 73:22; 74:12; 79:1; 83:24; 84:19; 85:4 componies [1] 81:8 oompany (1) 82:19 compared [1] 9:20 compilation (2) 8:8, 11 complaint [2] 73:22; 91:24 oomplets [2] 76:7; 80:2 completed [2] 78:2, 5 completely [1] 92:18 compound [5] 20:20, 23; 21:4, 6;

compounds [4] 19:21; 24:24; 36:18; comprehensive [1] 81:14 computer [1] 72:14 concern [14] 13:23; 14:14; 15:16, 19, 23; 22:23, 25; 23:1; 26:2; 28:21; 30:24; 68:11, 16; 65:21 concerned [5] 14:18, 21; 40:19; 74:24; 87:19 concerning [1] 21:4 concerns [6] 17:24; 25:17; 65:10; 66:2; 91:18; 93:4 concluded [1] 93:13 concut [1] 92:1 condense [1] 38:9 condenses [1] 38:10 conditions [9] 37:24; 38:1; 64:2, 5, 6, 7, 9; 83:22 conference (1) 3:4 oonfident [3] 11:14; 13:17; 65:25 . oonfirm [2] 58:16; 76:7 oonfirmed [1] 81:22 oonfusion [1] 79:10 oongressman [3] 4:2; 9:19; 90:9 connection [1] 2:2 conservative [1] 62:12 considerably [1] 18:15 consideration [1] 3:23 oensiderations [2] 71:13; 83:12 oonsidered [7] 13:5; 44:9; 45:3; 46:5, 8, 18; 56:18 consistently [1] 41:2 ooneolidate [1] - 6:18 oonsolidated [2] 7:10; 45:10 oonstituents [3] 37:10; 77:17; 86:15 oonstrain (1) 63:19 construction [7] 4:17, 20, 25; 5:14; 6:15, 17; 7:8 oeneuMing [1] 91:8 eontast [3] 32:25; 80:10, 17 contacted (2) 3:5; 78:8 oontnin [1] 10:19 contained [1] 94;4 oontaminanta [1] 68:21 contaminated [1] 53:10 oonterminating [2] 58:15; 58:17 oontont [2] 39:23; 40:3 contention [1] 16:2 oontinuanee [1] 75:12 oontinue [5] 7:3; .28:2; 37:20; 72:18; 76:22 entiauous [1] 64:21 sentrast (15) 2:14; 4:5; 10:17, 21; 12:21; 15:1; 19:2, 4, 5, 9, 11, 15; 42:11; 43:5; 60:11 contracted [1] 11:8 ocatractor [7] 5:17; 7:17; 8:3; 46:10; 51:8; 65:21; 91:20 contractors (1) 6:21 oontracts [1] 57:8 contributed [1] 87:1

car [2] 41:9, 10

eontribution [1] 81.1

eantrel (9) 7.19; 38.25,, 46:6, 15, 21; 48:13; 80:4, 69:9; 72:14 eantrolled [3] 44:12, 18; 52:18 eontrolling [1] 45:8 controls [1] 82:16 convenience [2] 10:5; 74.17 oonvenient [1] 73:17 ounveniently [7] 52:14 conversation [3] 30:13, 18; 32:1 eenversations [2] 30:12; 31:25 convey [1] 52:15 opnveyer [2] 36:8, 13 SORVEYORS [2] 36:25; 37:6 966 [8] 13:5; 49:23; 50:8, 9; 70:5 eecled [1] 44:17 socier [9] 48:14; 50:7, 18, 20; 51:15, 21, 25; 52:5, 14 ecoling [4] 34:5; 50:1; 52:10; 53:7 ospies [1] 9:6 eopy [6] 3:19, 22, 25; 45:24; 94:5 eerneebe [2] 40:10, 13 oorpe [33] 2:9, 15; 3:16; 4:13; 5:15; 7:13; 9:20, 21, 24; 10:2, 11; 11:3, 18; 12:22; 13:20; 14:7; 15:25; 18:21; 20:8; 25:2; 28:21; 29:4, 12; 31:9; 34:23; 61:3, 12; 65:21; 75:4; 79:5, 6; 87:7; 91:20 oorpe' [1] 62:2 correct [5] 32:10; 44:23; 71:14; 77:24; 54:5 oost [2] 58:18; 59:7 sould [27] 12:20; 15:3, 11; 19:2; 20:15; 23:8; 26:13; 28:2; 35:11, 13; 36:11; 37;23, 25; 40:6; 45:24; 46:5; 49:5, 9; 57:14; 63:24; 64:4, 5, 8, 24; couldn't [6] 11:7; 15:4; 16:4; 51:19; 84:12; 92:12 ocumed [2] 2:16, 24 **country** [1] 73:14 ocusty [12] \$3:8, 10, 15, 17, 19; 84:5, 12, 25; 85:2, 8, 11; 87:8 ocumby's [1] \$4:76 oouple [4] 58:21; 72:18; 75:22; 81:6 ooutus [2] 17:24; 60:16 covered [1] 41:20 eavers [1] 58:8 eramped [2] 18:10, 11 ereem [1] 67:2 ereek [1] 75:18 orew [1] 4:23 oritoria [12] 15:14; 17:18; 39:6, 14, 18; 41:2; 60:2, 8, 14, 17, 18; 61:7 articisms (1) 45:10 erees (1) 50:8 erystall [75] 1:8; 2:6, 21; 3:8, 11, 17; \$10, 16; 10:8, 13, 15; 12:10, 18; 15:22; 16:20; 17:1; 16:7; 20:4 24; 22:17; 25:21; 26:4; 32:6, 11, 13, 15, 20; 33:8, 18; 34:3; 35:18, 20; 36:14; 30:15: 30:24: 40:6, 8: 41:18: 42:5,

9; 43:14, 20; 44:10, 23; 48:11; 49:8, described [1] 54:19
11; 50:2; 52:20; 53:14; 54:4; 55:6; description (2] 4:19;
56:8; 58:22; 59:12, 18; 61:24; 62:4, design [7] 38:22; 4
8, 14; 63:2, 6; 64:12; 65:8; 67:11; 49:22; 50:11; 56:24;
78:15; 81:4, 24; 82:9; 85:7, 13; designed [1] 46:23
cubic [9] 12:11, 17; 15:13; 18:15; destruction (2) 48:23
cubic [9] 12:11, 17; 15:13; 18:15; destruction (2) 48:23
cutott [1] 76:17
current [1] 88:25
cutott [2] 51:12; 68:25
detection (2) 15:24; described [1] 58:2
detection (2) 11:9, 22; described [1] 58:2

- D -

d [5] 14:21; 17:22; 31:10; 37:23, 25 daily [16] 8:19; 7:10, 13; 8:7, 8, 10, 20; 9:2; 64:19, 20; 66:11, 18; 67:15; 68:4, 10 damaging [3] 49:10; 91:15; 92:9 dangerous [3] 18:18; 23:10; 83:2 dark [1] 18:13 data (2) 60:7; 68:2 data [4] 1:13; 37:5; 47:23; 75:23 dates (3) 6:1, 8: 30:10 dave [7] 8:2, 8; 14:4; .19:7; 42:18; david [2] 1:10, 11 davie [21] 2:15, 23; 3:22; 4:5; 5:11; 10:15; 13:8; 14:6; 25:6, 17; 27:9; 28:1, 6, 20; 29:9, 22; 30:4; 38:2; 49:16; 64:15; 66:20 daviet [2] 4:16; 51:18 4my [13] 4:23; 8:3, 15; 7:2, 22; 8:11, 23, 24; 62:19; 65:4; 66:5; 79:19; 85:3 daya [4] 7:2; 63:4; 74:3, 4 de-een [1] 33:23 de-cened [1] 33:22 desided [2] 82:3; 90:7 decision [**V**] 27:22, 24; 29:21; 30:4; 61:21; 62:17; . 79:22; 62:1 decision-making [1] 79:25 decisions [4] 87:18, 21, 26; 75:5 decreases [1] 48:22 deemed [1] 25:9 delautting [1] 17:11 dolines [1] 45:25 Mailely [2] 11:12; 87:19 definition [7] 17:8; 44:5, 6, 7, 18; 47:18; 58:13 degree [3] 39:9; 47:3, 5 degrees [10] 38:1, 2; 38:16; 49:24; 50:6, 8, 9; 51:5, 11; 70:2 deny [1] 28:7 dep [M] 2:25; 12:22; 13:25; 20:6; 21:12; 41:25; 59:6; 62:5 department [2] 2:7, 24 departments [1] 84:20 departure [1] 64:23 depende [1] 70:21

description (2) 4:19; 54:13 design [7] 38:22; 42:5: 43:11; 49:22; 50:11; 56:24; 70:10 designed [1] 46:23 destroy [1] 68:20 destruction (2) 48:21; 49:15 detail [1] 10:1 detailed [2] 43:1, 11 details [1] 10:12 detect [5] 11:9, 22; 12:1, 12; 22:19 detected [1] 58:2 detecting [3] 16:21; 20:23; 24:7 detection [19] 10:17, 24; 11:8; 12:8; 15:5; 19:18, 22; 20:15, 17, 18; 21:3; 24:2, 14, 22, 25; 25:3; 33:1; 37:7; determine [2] 11:12; 26:10 devastated [1] 92:11 develop (1) 20:9 developed [2] 12:23; 38:5 development [1] 75:13 devices [1] 42:12 dialogue (1) 51:19 didn't [20] 14:15, 21; 15:15; 23:7; 24:15; 25:1; 29:15; 31:24; 37:18; 42:10, 15; 43:14; 58:25; 73:11; 74:8; 78:7; 77:14; 80:4; 90:7; 91:23 difference [2] 12:17, 18 different [19] 6:17, 18, 22; 18:3; 21:20; 22:12; 25:23; 27:20; 30:14; 37:14; 39:1; 41:16; 48:6, 12; 63:6; 64:2; 86:10; 87:4, 18 differentiate (1) 73:23 difficult [3] 36:7, 13; 67:13 difficulty [4] 20:20; 25:10; 48:13; 40:12 diluted [1] 58:5 diexin [12] 48:15; 49:3; 57:6, 8, 12, 14; 81:13; 87:14; 80:1, 5, 11 dioxino [1] 48:24 dicastly [1] 77:18 dicuster [2] 83:8; 84:11 diangree [1] 62:8 disagreed [1] 62:7 discharge [2] 51:22; 54:21 discharged [1] 75:18 discisimer [1] 54:14 diceuse [1] 3:4 discussed [1] 31:5 discussing [1] 25:17 discussions: [8]: 27:13; 31:22; 61:2, Q 11, 15; 85:14; 87:24 disposal [1] 78:11 dispose [2] 57:8; 77:9 disposition [2] 5:7; 76:9 distillery [1] #2:22 distributor [1] 87:12 district (2) 27:16; 31:7 ditok [1] 82:11 division [1] 83:8 document [2] 47:14; 54:15

documented [3] 27:6; 55:7; 90:18 documents [1] 6:19 does [9] 8:21; 25:74; 30:11; 47:17; 48:22; 58:17; 66:21; 82:1, 88:18 doesn't [9] 4:9; 14:1; 23:8; 31:21; 43:24; 44:1; 80:1; 89:25; 90:1 doing [5] 21:5; 23:13; 39:21; 41: done [20] 8:25; 32:19; 35:11, 13; 37:14; 42:4; 45:6; 47:25; 52:13; 59:25; 64:19; 66:9, 11, 19; 67:7; 66:5, 14; 74:22; 75:10; 93:9 door [1] 73:24 dorothy [1] 62:14 double [2] 58:24; 59:5 doubt [1] 80:7 doubled [1] 22:25 down [19] 9:17; 13:5; 15:1, 16; 21:20; 34:5; 45:6; 46:21; 50:15, 17; 51:10; 52:10, 11; 54:20; 58:6; 58:6; 60:19; 70:5; 74:18 downgrade [6] 17:22; 27:23; 28:10, . 18: 31:10: 37:18 downgraded [1] 14:19 downgrading [1] 22:24 downstream [1] 80:9 dezer [1] 48:13 draft [6] 70:11; 73:4; 74:21; 81:15: 91:13; 92:23 drag [6] 42:6; 43:1; 45:5, 7, 12; 82:14 draim [9] 1:1, 14; 2:3, 9, 14; 8: 77:18, 21; 85:24 dramatic [1] 77:15 draw [1] 70:11 drawings [8] 42:20; 43:1, 2, 3, 7, 11 drawn [2] 43:6; 77:8 6rift [7] 68:5, B, 13; 67:5, 17; 68:13 driff [1] 53:25 drinking [1] 86:6 drip [1] 52:11 drep [1] 51:20 drugs [1] 86:5 drum [1] 84:1 drumber [1] 72:11 drume [6] 76:9; 77:2, 3, 4, 11, 12 dry [5] 40:15; 46:12; 50:12; 63:9; dryor [2] 40:1; 63:23 lumber [1] 1:11 duplicated [1] 55:23 duration [1] 70:14 durations [1] 70:16 during [23] 4:13; 7:2, 4, 25; 11:5, 6, 14; 14:7; 20:8; 24:13; 25:7; 26:17, 20; 39:7; 45:6; 54:15; 56:25; 60:25; 63:20; 64:15; 69:13; 73:25; 74:2 dust [22] 10:19; 32:9, 11; 34:4, 1 17, 19; 40:11, 17; 41:17; 43:7; 9, 16; 45:21; 46:4, 9, 11, 13, 17;

duty [4] 27:1; 30:25; 31:17, 21

dyes [1] 77:18

· E -

each [4] 7:5, 7; 10:10; 90:16. eagle [1] 75:18 earlier (10] 32:19; 34:11, 18; 35:12; 43:10; 47:6; 79:23; 85:20; 86:6; earty [2] 85:24; 86:1 masily [1] 6:10 easy [1] 35:21 eco-logic (2) 82:2, 20 economie [1] 87:17 edge [1] 48:14 effect [1] 48:22 effective [2] 26:2; 58:18 efficient [1] 45:7 effort [2] 16:8, 9 either [3] 31:5; 92:21, 23 eisborate [2] 54:7; 84:24 elect [1] 73:11 electric [2] 72:10, 11 electrical [2] 43:3; 71:4 element [2] 58:4; 82:11 elements [1] 82:18 elevated [1] 75:7 eliminate (4) 42:7, 8, 9; 43:25 else [8] 26:11; 29:6; 45:16; 52:5; 75:9; 79:15; 83:17; 84:25 elsewhere [1] 24:3 emergency [16] 71:2; 83:4, 8, 10, 12, 14, 18, 21; 84:5, 8, 12, 16, 23; 85:1, emission [22] 13:6, 18; 17:6; 44:3; 8, 13, 15, 17; 45:1, 3; 46:3, 5, 6, 19; 47:23; 49:2; 51:24; 52:4, 15; 56:17; 64:21; 75:17 emissione [22] 10:20; 14:11; 25:7, 8; 34:4; 35:10; 38:25; 39:4; 40:25; 43:23; 44:2, 11; 46:1, 18; 47:19; 49:13; 52:21; 54:6; 60:4, 6; 63:16; emitted [2] 81:13; 69:11 empirically [1] 63:3 employee [8] 2:74, 18; 4:8, 7; 27:4, 7; 28:21 employees [5] 5:23; 70:4, 5; 87:21, emts [1] 84:20 encloeure [1] 42:8 encompassed [1] 38:20 end [5] -58:8; 70:9; 74:7; 78:2; ended [2] 17:10; 31:8 endorsement [2] 91:24; 92:21 enda [2] 52:16; 68:23 engineer [1] 43:19 engineer's [1] 57:12 engineering [2] 47:25; 62:24

7:14; 29:4; 58:11; 87:7 'enjoy [1] 74:18 enormous [1] 73:5 enough [8] 39:19; 48:23; 49:22; 50:7, 9; 51:9; 53:7; 71:7 enriched [1] 56:13 ensure [4] 63:17; 66:19; 75:15; ensuring [1] 78:23 enter [1] 50:9 entire [1] 74:1 entity [1] 47:1 envelop [1] 82:11 environment (1) 49:10 environmental [3] 2:8; 89:21; 90:21 epa [21] 2:17; 3:23; 11:21; 12:22; 14:3; 20:6; 21:12, 25; 24:18; 44:19; 55:13; 61:3, 25; 62:1; 65:21; 80:1; 81:10; 83:18; 86:10; 89:2; 91:19 ep#'8 [1] 88:25 equal [1] 75:5 equated [1] 31:19 equations [1] 23:13 equipment [10] 18:10; .25:12; 27:11; 33:21; 42:22; 55:16, 21; 67:19; equivalency [4] 47:14, 17; 54:15; eri [2] 62:2; 73:18 especially [1] 18:12 essense [1] 50:12 eccentiai [2] 2:12; 48:14 establish [4] 24:14, 22, 24; 64:4 estabilished [11] 15:15, 18; 17:21; 19:6; 22:11; 25:3, 4; 26:18; 29:13; establishes [1] 24:19 establishment [1] 87:8 eelimate [2] 22:6; 53:13 ealimeted [4] 19:22; 20:17, 18; 21:2 et [2] 41:17; 67:18 evacuated [1] 84:24 evenuation [2] 83:5; 84:17 ovolusto (3) 12:24; 16:9; 81:17 evaluates [1] 53:2 evaporate [1] 50:11 evaporative [8] 48:14; 50:6, 18, 19; 51:15, 21, 25; 52:8 even [11] 6:6; 11:1; 13:12; 22:8; 24:18; 35:11; 45:7; 46:13; 46:3; 57:2; 62:11 event [6] 42:20; 53:4; 68:18, 21; events [1] 69:22 ever (17) 14:6, 8; 21:17; 24:2, 6; 25:9; 26:10, 18, 19; 27:9; 28:7; 40:5; 64:15; 65:13; 66:2, 4; 74:17 every [4] 51:20; 60:22; 73:21; 83:15 everybody [3] 62:17; 84:19, 25 everybody's [1] 82:13 everyone [2] 74:14; 75:4

everything [9] 39:19; 45:18; 53:15;

54:12: 61:1; 75:7; 77:5; 83:17: 92:12 evidence [1] 94:4 evidently [1] 49:18 evolution [1] 75:1 exact [3] 6:1, 7; 63:10 exactly [6] 16:3; 38:1; 57:14; 70:7; 79:12; 90:14 exaggerate [1] 87:23 example [1] 71:10 excevation [1] 5:3 excellence [1] 62:2 exception (2) 77:15; 78:10 excess [1] 56:16 exclusion [5] 5:4: 37:2: 33:22: 46:11: 58:9 exercises [1] 83:16 exists [2] 80:21; 86:14 expand [2] 10:2; 14:5 expect [3] 41:6; 53:3; 84:13 expected [2] 30:5; 40:2 expended [1] 73:4 experience [3] 24:7, 16, 18 expert [1] 62:1 experties [3] 62:3; 65:20; 76:24 experts [3] 65:24; 81:20, 23 expired [2] 4:10, 11 expires (1) 84:13 explain (3) 36:11, 12; 89:16 explained [4] 47:8; 59:24; 60:1; explains [1] 81:8 explanation [3] 10:10; 56:1, 12 explanations (2) 9:21, 25 expected [1] 14:3 exposure [1] 37:1 exposures [2] 89:5, 6 extended [1] 73:4 extensive [1] 85:25 extent [1] 42:12

teelitty [2] 45:14; 49:15 last (22) 11:9; 14:12; 17:7; 18:6; 24:26; 28:16; 28:4; 37:22; 51:23; 53:23; 54:14; 55:17; 56:6; 57:12; 69:15; 71:13; 73:15; 77:20, 22; 78:8; 80:17; 90:24 tailuru [4] 68:18, 21, 22, 24 taicer`[2] 24:1, 10 fairty (2) 8:16; 86:2 telle [2] 84:2 talee [2] 33:15; 34:1 temitter [2] 67:9; 66:3 ternity [2] 24:24; 72:24 tan (3) 53:5; 71:8, 0 ter (4) 31:13; 70:17; 80:3; 87:18 term (3) 78:20; 87:9; 90:21 terms [1] 78:4 test [1] 53:7

tavar [2] 86:4 february [3] 3:9; 81:5; 88:2 federal [2] 4:7; 87:21 feed [21] 5:5; 32:25; 40:9; 41:5; 44:12; 52:7, 24; 53:9, 18; 54:9; 59:17, 22; 60:3; 63:10, 25; 66:16; 68:25; 70:8; 71:18, 18, 21 feeds [1] 88:14 feel [18] 12:23; 41:6, 20; 43:14; 48:20; 49:1; 53:15; 58:21; 57:1; 60:10; 63:6; 78:25; 82:14; 83:2; 87:21; 89:4; 90:2, 16 feeling [1] 23:3 felt [6] 18:18; 41:4; 43:22; 55:25; 86:15; 90:19 fenas [8] 37:4; 38:23; 39:10; 51:23; 57:23, 25 tence [3] 11:22; 12:1, 7 ferdae [1] 3:3 tew [1] 63:4 field [7] 5:2; 14:13; 62:15; 76:18; 77:25; 78:1, 4 fields [1] 92:17 fleids'é [1] 90:13 NTS: [1] 59:9 figure [2] 11:19; 40:22 file [2] 20:5; 26:9 ffH [1] 35:18 filter [1] 26:19 final [8] 61:18; 62:5; 83:4; 85:9; 90:2, 10; 92:24; 93:4 finalize [1] 86:24 finalized [3] 84:25; 86:20; 89:2 finalizing [1] 30:11 find [8] 6:9; 17:3; 22:1; 67:13; 78:10; 77:14, 17; 86:12 fine [4] 10:14; 13:18, 19; 44:25 fingernaile [1] 88:11 fingerprint [1] 77:19 finish (1) 32:8 fire [5] 49:7; 51:11; 53:25; 83:16; 84:20 fired (1) 90:8 firm [1] 66:15 Nret [9] 9:16; 10:5, 16; 13:2; 14:13; 32:8; 45:23; 48:16; 58:4 five (2) 71:3; 56:5 five-month [1] 38:21 ffx [2] 20:7; 26:8 fixed (3) 26:7; 46:17; 49:12 flooding [1] 49:13 flow [3] 46:74, 18, 21 Nuotusta (1): 63:7 fluetication (1) 70:20 fluid [1] 57:5 fluide (1) 54:8 focus [1] 34:23 folics [14] 11:17, 19; 12:3; 16:16; 17:15: 41:9; 59:5; 62:1, 6; 78:21; 83:14; 89:3, 23

followed [1] 17:17

follow [4] 29:12; 30:6; 42:11; 87:12

engineers [8] 2:9, 15; 3:16; 5:16;

tailaws [1] 18:16 larca [1] 29:11 torget [1] 19:6 fortdift [1] 84:3 form [1] 43:12 tormal [1] 75:1 formation [3] 48:15, 23; 49:2 former [1] 2.13 forms [1] 67.6 formulated [1] 12.4 forth [4] 72:21; 81:17, 19; 83:9 forward [4] 74:10; 77:22; 78:2, 20 found [16] 22:8, 9; 32:15; 33:4, 10; 77:2 3 4 5, 10, 11, 20; 78:4, 11; tour [4] 38:21; 73:8; 74:4; 77:12 four-month [1] 38:21 fourth (1) 50:9 traction [1] 57:14 tractions [1] 51:2 tranne [3] 15:6; 20:6; 60:20 trank [1] 81:15 trankty [3] 18:14; 48:1; 61:20 frequent [7] 54:4 triday (9) 3:8; 15:23; 18:6; 51:19; 54:13, 19; 55:2, 4; 50:24 trom [63] 2:25; 4:2; 5:2; 6:17; 7:24; 10:19; 11:18, 19; 13:4, 14; 14:1, 13, 20; 20:5; 22:18; 23:18; 25:7, 16; 27:17; 30:6; 32:2; 33:16; 34:4, 10, 12; 35:10; 40:19; 44:14, 18, 20; 46:1, 2, 4, 13; 49:13, 23; 50:6; 81(4) 53:18; 55:17; 56:8, 10; 58:11; 59:21; 62:1; 65:20; 67:4; 71:24; 72:14, 23; 73:71, 22; 87:8, 11, 17; 82:13; 83:14; 87:23; 86:20; 80:3, 22 front [1] 70:9 trustrating [2] 91:14: 92:9 trustration (1) 72:21 tugitive [30] 10:20; 13:5, 18; 14:11; 17:8; 25:7, 9; 34:4; 43:23; 44:3, 4, 13, 14, 17; 45:1, 3; 46:1, 3, 5, 8, 18, 18: 47:18, 22; 49:13; 51:24; 52:4, 15, 21; 56:17 tuttiki [1] 70:17 tull [4] 9:21; 11:25; 78:14; 83:16 tulty [4] 26:18; 53:8; \$1:21; \$4:4 tunetien [2] 30:2; 63:13 turana [1] 81:13 turther [2] 54:7; 62:17

- Q -

gae [4] 54:18; 60:7; 70:1; 62:22 gaees [10] 50:1, 5, 8, 17; 51:4; 52:10; 54:17; 67:20; 60:4, 18 gane [8] 9:22; 17:4; 28:5; 54:14; 71:16; 82:9, 10 general [2] 2:24; 22:22generally [1] 60:6 general [1] 40:15

generated [1] 34:5 generations [1] 17:6 generator [1] 71:2 gentleman [1] 2:11 george [1] 1:11 get [33] 11:3; 15:1; 21:20, 23; 22:25; 27:3; 29:25; 31:3, 17, 21; 35:21, 22; 38:9, 11; 40:13; 41:1; 43:10; 50:9; 51:10; 55:14; 57:8, 15; 59:23: 62:21; 63:15; 69:18; 71:7, 9; 81:13; 84:24; 87:11; 90:6; 91:16 gets [8] 32:23; 39:12; 44:18; 45:12; 45:12; 79:14 getting [8] 20:1; 21:16; 46:10; 47:2; 58:11; 87:18 give (6) 10:3; 26:13; 39:20; 45:24; 79:14, 18; 80:6; 81:4 given [3] 43:4; 75:2, 3 glad [1] 91:2 glove [1] 33:6 glaves [1] 33:2 ge [36] 2:18; 9:16; 10:9; 14:23; 17:21; 20:3; 24:22; 25:14; 26:6, 7; 29:18, 17, 20, 23: 30:1, 5, 9: 36:16: 41:18; 48:14; 48:9; 51:4; 53:22; 58:6; 59:3, 15; 67:4; 67:25; 69:8, 9, 17, 18; 71:1, 19; 80:25 gool [4] 11:21; 22:17; 60:21, 23 good [8] 18:1; 26:5; 51:21; 52:25; 53:5; 58:18; 58:7 going (86) 7:3, 23; 9:25; 11:2; 13:16; 18:11; 17:5, 12; 18:2; 21:17, 18, 22; 22:7; 23:10; 25:5, 16; 29:10, 12, 24, 25; 31:15; 34:8, 18; 36:23; 37:20; 39:17; 41:21, 24; 43:16; 45:12; 46:9, 13; 47:12, 21; 49:4; 52:2; 54:22; 55:20; 57:1; 63:4; 69:7, a; 70:11; 71:9; 72:6, 20; 77:a; 78:20, 21: 79:9, 19: 80:3, 15, 17, 19: 82:2, 5, 17; 83:3; 87:8, 12; 88:7; gene [5] 27:18; 72:5; 87:4, 9; 93:3 good [9] 12:23; 15:12; 16:15; 27:12, 23; 26:16; 47:11; 52:1; 86:25 goodbrod [2] #3:7; #4:11 get [30] 3:17; 5:7; 8:24; 9:23; 11:17; 14:23; 15:21; 17:8; 19:7; 21:12, 24; 23:11, 18; 24:12, 17; 27:17; 28:24; 28:2; 42:13; 44:24; 47:11; 50:5; 61:17; 60:1, 15; 73:8; 85:22; 80:21; 90:20 government [2] 5:12; 79:4 gavernment's (1) 73:11 grade [1] 5:22 graded [1] 4:20 grasp [1] \$4:4 green [2] 86:24; 80:3 grade [11] 1:8; 2:6; 10:9; 16:6; 41:17; 43:21; 54:1; 55:5, 9; 58:3; groundwater [4] 78:12; '77:17; 78:4,

group (3) 85:23; 91:7, 19
groupe' (2) 80:21; 87:4
guarantee [1] 21:17
guess [10] 2:18; 18:21; 25:13;
26:15; 51:18; 59:8; 63:3; 72:20;
78:19; 91:22
guidance [1] 30:6
guideline [1] 11:11
guidelines [1] 18:17
gut (1] 23:3
guy [1] 82:11
guys [2] 58:24; 72:18

- H -

had (81) 3:2; 4:20; 6:4; 12:20; 14:14, 19, 24; 15:2, 11, 15, 18, 25; 16:6, 16; 17:17, 24; 20:4; 22:4, 8, 17; 23:14; 24:2, 6; 25:10; 26:2, 18; 27:18; 28:18; 30:13; 31:25; 32:19, 20; 33:6, 22; 34:23; 35:12; 36:14; 39:24; 42:8; 45:8; 47:21; 52:7; 55:11; 58:3: 57:12; 61:9, 24, 25; 62:1, 2, 12, 14, 21; 64:12; 65:14, 19; 86:2; 70:19; 71:8; 73:20, 21, 22, 25; 75:9; 76:1, 6; 77:6, 7; 78:2, 7; 81:24; 83:15; 87:24; 88:2, 13; 91:19; 82:5 half (3) 21:15; 52:22; 60:21 halogonated (1) 37:4 handle (2) 47:1; 57:4 handled [1] 86:8 kandling [5] 5:6; 37:1, 6; 45:13; 84:1 hanging [1] 79:8 happen (8) 53:11, 17; 54:8; 50:6; 69:7; 83:24; 84:22; 89:19 happened [2] 19:17; 39:21 kappening [2] 60:24; 74:26 happana [4] 20:24; 45:1; 84:24; hard (1) 79:18 harder [2] 62:10; 63:15 harm [5] 89:11, 13, 14 harrison [8] 3:2, 13; 65:12; 81:24; 86:24; 80:8 haen't (1) 89:2 haven [5] 1:14; 2:3; 84:18, 20; haven'i (4) 8:6; 33:26; 43:21; 82:3 having [11] 20:18; 30:12, 16; 51:6; 61:15; 60:5; 67:24; 80:8, 11; 88:23; haz (3) 71:16, 18, 21 hazard [3] 30:25; 31:17, 21 hazardous [6] 29:24; 30:1; 44:11; 77:16, 17; 83:20 hazwoper [1] 83:20 he [90] 2:19; 3:6; 4:6, 7, 9, 12, 19; 5:13, 14, 18, 21, 25; 6:2, 4, 5, 13, 15, 16; 7:17; 10:9, 18; 13:9, 10, 11;

14:8, 9, 12, 14, 15, 17, 18, 21; 15:19, 23; 16:5; 22:22; 23:5, 7; 25:7, 8, 9, 10, 21; 26:2, 17; 27:12, 14, 17; 28:2, 9, 17; 29:15, 18; 30:4, 7, 23, 25; 33:4; 48:25; 49:20; 51:5, 19; 54:8, 19, 25; 55:2; 59:16, 24; 61:20, 2 64:12, 17; 65:1, 12; 66:2, 4; 67:1, 68:11, 16; 83:9; 90:5, 8, 11 he's [9] 6:14; 16:3; 23:5; 59:24; 84:24; 68:1; 81:7; 86:18; 90:6 head [3] 21:9, 11; 26:23 headquarter [1] 62:1 . health [10] 11:23; 12:3, 7, 15; 17:3, 9; 26:25; 29:13; 75:20; 63:11 hear [1] 87:10 heard [2] 30:7; 86:13 hearing [5] 1:1; 33:9; 51:17; 64:1; heat [2] 40:15; 54:11 hest-up (1) 54:15 heating (2) 82:11, 17 held [2] 3:7, 10 help [4] 19:7; 40:15; 76:22; 87:11 helped [1] 81:15 helpe [2] 30:21; 86:25 her [2] 62:16; 90:6 here (47) 2:14; 4:15; 8:13, 10; 10:4; 19:6; 23:6; 31:19; 38:22; 42:4; 44:24; 47:12, 20, 21; 48:12; 49:4; 50:4; 55:11; 57:22; 59:18; 65:15, 21; 70:8; 72:22; 73:12, 14, 16, 17, 25; 74:3, 8, 11, 18, 25; 75:6, 8, 9; 78; 80:4; 83:22; 85:24; 87:4; 89:19; 90:19; 91:15; 92:1 hereby [7] 94:3 hooltsking [1] 36:5 high [8] 39:18; 40:5; 49:5; 69:5; 71:17, 24; 90:12, 17 higher (2): 18:8; 40:4 highest [1] 4:20 highlighted [2] 06:10, 18 kim [17] 3:5; 4:10; 5:18; 8:4; 22:23; 29:10, 11, 17, 20; 30:6, 16, 18; 31:5, 14; 66:7; 83:7; 92:7 hinged [1] 79:1 hired [3] 4:7, 12; 30:2 his [40] 4:13, 24; 7:8; 14:7, 8, 10; 15:22; 16:2, 6; 23:1, 6; 25:6, 8, 11, 18; 20:18, 18, 20; 27:10; 28:3; 29:18; 30:4, 8; 31:13; 32:8; 41:3; 54:13; 58:20; 64:15, 22; 66:23; 67:1; 74:18; 78:6, 9, 16; 81:6; 94:5 **Notary** [1] 14:24 hik [5] 15:3; 16:11; 33:5, 6; 50:15 held [2] 17:15; 71:19 holding (1) 77:13 honoat (1) 87:22 honostly [1] 83:23 hencety (2) 62:20; 92:11 hope [2] 79:2; 86:18 Joping [1] 40:14

het [8] 40:13; 58:9; 70:4, 12; 71:19;

includes [1] 37:3

hour [3] 59:20, 21; 88:21 hours [1] 7:1 house [6] 48:22; 49:1, 7; 50:10; 51:11; 89:17 housekeeping [1] 52:5 how [24] 6:25; . 15:7; . 16:3; 26:1, 6; 35:25; 38:2; 40:11; 51:1; 55:14; 57:14; 81:5; 84:3; 71:25; 72:2; 79:12, 13; 82:12; 84:21; 86:25; 88:4; 90:14; 92:2 however [2] 8:17; 46:17 hudson [1] 1:9 hundreds [1] 24:20 hydrocarbons [1] 37:4 hydrocracking [1] 82:21 hydrogen [2] 82:22, 25 hydroxin [1] 84:2 hygiene [7] 17:15; 18:1; 23:12; 27:22; 28:7; 36:24; 37:5 hygienist (9) 15:24; 27:15, 18, 19; 28:1, 5, 17; 31:6, 9 hygienists [1] 28:25

i'd [1] 30:9 i'll (6) 32:4, 6; 45:23; 55:6; 86:18; ľm [31] 7:23; 11:1; 14:4; 16:4; 17:22; 22:23; 25:16; 26:15; 29:22; 31:14; 32:10; 33:7; 36:15, 22; 42:9; 52:2; 57:21; 61:10, 18, 22; 64:23; 66:23; 67:9; 66:2; 71:14; 72:6, 20, 24; 75:2; 87:18; 91:2 Pve (9) 28:24; 72:5, 9; 73:8; 86:8; 87:24; 89:17 id [3] 43:2; 71:8 idea [2] 32:3; 54:1 ideas [1] 62:19 identified [1] 77:8 identifies [1] 68:11 identity [1] 19:5 ignition [1] 71:23 in [2] 37:3; 45:16 impinger (2) 35:2, 4 implications [1] 90:3 important [7] 13:8; 48:20; 48:1; 79:13; 85:5, 7; 90:19 impression [3] 24:13; 42:17; 85:1 improve [1] 21:5 inability [1] 10:18 inch [1] 8:20 Irieident [4] 25:10; 55:7, 11, 15 incidents [1] 25:10 incineration [4] 46:2, 4; 54:17; 53:3 . incinerator [10] 10:19; 14:19; 37:7; 39:1, 6; 42:5; 59:18; 61:25; 62:14; include [3] 8:21; 43:2; 68:4

including [1] 89:10 incorporate [3] 37:17; 47:18; 78:25 incorporates [1] 83:11 increase [1] 54:16 increases [1] 54:5 incremental [1] 89:6 Indent [1] 55:11. independent [1] 7:17 Indianapolia [1] 41:10 indicated [2] 10:23; 31:10 indications (2) 18:5; 43:6 individually [1] 92:10 industrial [17] 15:24; 17:14, 25; 23:12; 27:15, 17, 19, 22; 28;1, 4, 7, 17, 24; 31:6, 9; 36:24; 37:5 Industries [1] 89:4 industry [1] 22:1 inert [1] 40:18 Infants (1) 89:12 infitration [1] 33:3 information [7] 9:23; 13:7; 67:11; 88:1; 79:14; 82:6; 93:8 informed [1] 88:5 ingrained [1] 23:21 initial [1] 15:18 initially [7] 4:18; 12:20; 14:18; 15:2, 15; 22:22; 42:6 Initiated (2) 16:9; 72:13 Injecting [1] 82:22 input [1] 73:3 Inspection [1] 47:18 inepector (2) 45:20; 47:11 installed [1] 52:13 inetant [1] 45:19 institute [1] 10:22 inatitated (2) 12:25; 13:20 instruct [1] 48:10 inetrooted [1] 26:24 instrument [4] 66:8, 10, 21; 67:16 instrumentation [1] 43:2 instruments [3] 32:21; 35:1; 86:17 minet [2] 77:12 intent [1] 48:15 intention [1] 80:2 interested [1] 9:11 interesting [1] 82:4 Interests [1] 65:10 interim [3] 73:4; 76:21; 92:23 interfeek [2] 53:22; 54:2 internal [1] 87:15 interpret [1] 46:1 interpretation [1] 47:15 interpreted (2) 92:4 Interrupted [1] 53:23 into [28] 6:19; 7:10; 9:25; 18:11; 21:2; 29:20, 25; 32:25; 41:11; 42:18; 43:10; 45:11; 47:2; 49:19; 50:6; 51:21; 52:21; 53:1; 55:14; 56:19; 58:7; 60:15; 67:16; 71:19; 75:18; 79:15; 82:18; 86:15 .included [5] 9:2, 3; 53:12, 18; 60:17 investigated [1] 55:25

investigating [1] 21:4 investigation [2] 76:5, 20 involve: [1] 96:9 involved [14] 47:13; 81:10, 18, 20; 82:4, 5; . 84:17; 74:14; 91:8, 18, 21; 93:2, 7 ian't [2] 81:11; 84:8 issue [44] 2:12; 9:17; 10:10, 15; 13:3, 21, 22; 14:17; 20:12; 21:1; 22:4; 25:6, 25; 26:10; 32:2, 6, 8, 9; 34:1; 38:19; 39:22; 41:18, 19; 42:1; 48:10, 11; 52:6; 56:6, 8, 20; 57:17; 59:8, 9, 10; 64:15; 65:2, 18; 66:24; 87:2, 10, 14; 83:3 issued [1] 55:24 issues [12] 2:11, 19; 3:6; 10:8; 13:8; 21:4; 22:23; 23:2; 41:3; 64:23; 66:2; .87:25 ita (75) 4:1; 8:24; 12:17; 13:15, 18, 21; 14:2; 17:8; 18:2, 8, 18, 23, 24; 31:11; 32:22; 34:6 8, 11; 35:12, 22; 38:7, 12; 41:20, 24, 25; 42:15, 17; 43:18; 44:10, 17; 45:15, 19; 46:13; 47:10; 49:1, 12; 50:12; 51:6; 52:2; 53:11; 54:3; 55:12; 57:1; 58:5, d, 16; 59:4; 63:7; 67:4, 21; 69:6; 70:11; 72:1, 2, 10; 73:14; 79:18; 83:2; 84:9; 85:2, 8, 13; 86:10; 87:1, 19; 86:17; 90:5, 14, 24 Na [8] 38:8; 41:14; 65:25; 66:4; 70:10: 83:20 itself [5] 5:4, 6; 45:1; 46:2, 5

january [1] 88:4 jein [1] 10:12 juagment (1) 47:8 judgmental [1] 47:5 juneture [3] 10:7; 62:22; 86:7 juetice [1] 2:24 juotification [1] *18:23

- K -

karen (1) 92:15 keep [1] 12:18 losy [1] 55:21 kilin [23] 39:2, 9, 18, 22, 25; 40:11, 17, 23, 24, 25; 41:8, 17; 44:14; 53:8, 18; 54:10, 12; 56:10; 59:19; 62:23; 63:10; 70:9 kilne (1) 49:24 kind (8) 27:19; 44:25; 46:23; 53:25; 80:24: 86:5 knew [5] 13:9; 15:11, 14; 39:17; 41:18 knock [1] 48:21 kinocked [1] 70:25 knew [85] 2:20; 6:1; 7:4; .13:7, 16; .

15:13, 19; 16:14; 21:10, 13; 22:5, 21; 23:3, 15; 24:9, 12, 20; 25:13; 26:6, 21; 28:20; 29:2, 18; 30:17, 19; 35:18; 36:17, 23; 38:8, 10; 39:15; 50:22; 52:23; 55:10, 14; 58:22; 59:22; 61:2, 16; 62:25; 63:3; 65:2, 3, 4, 7; 56:3, 8; 67:4; 69:15; 72:7; 80:5, 16; 84:6; 85:8, 21; 86:12, 25; 87:1; 88:9, 19, 20, 23; 89:24; 93:6 knowing [4] 15:9; 29:1; 67:14; 80:3 knowledge [1] 26:20 knowa [1] 83:24 kraus [1] 92:15 kurt [21] 2:15; 4:22; 15:6; 17:6; 18:21; 22:21; 25:17; 25:10; 30:14; 31:4, 8, 22, 25; 42:3; 54:7; 55:10; 59:10; 61:10, 18; 65:9, 20 kurt's [7] 3:4; 15:19; 18:5; 42:10; 56:12; 59:16; 68:11

- L -

1 (2) 1:22; 94:10 lab [4] 19:17, 22; 73:14; 77:10 laden [2] 32:9; 34:19 lagoon (2) 49:19; 56:19 laid [1] 48:23 laps [1] 43:11 large [1] 22:10 last [10] 3:8; 9:24; 30:7, 15; 36:8; 55:9; 62:19; 64:11, 12; 79:2 later [1] 88:1 lawyur [2] 92:14, 15 lawyers (1) 66:5 lay [1] 60:19 lay-down [1] 39:14 lead [5] 4:17; 6:8, 14; 77:1 least [6] 24:12, 15; 71:14; 78:16; 77:13; 90:15 leaving [2] 33:21, 25 ied [1] 40:18 left [4] 10:22; 33:24; 67:7; 79:5 legal [1] 2:16 lends [1] 77:24 lengthy [2] 8:16; 65:12 less [5] 11:10; 16:22, 23; 21:13; let [12] 3:21; 9:7, 17; 10:5; 32:4; 42:23; 55:6; 59:20; 65:19; 78:17; 79:21; 84:8 ieta [7] 3:10; 18:10; 24:18; 48:9; letter [5] 4:1; 81:5, 14; 90:9, 12 . letting [1] 80:12 level [48] .5:2; [11:1, 2, 10, 11, 13, 22, 24; 12:5, 13, 14; 14:20, 21; 16:12, 14, 19, 25; 17:2, 3, 22; 18:6, 9; 19:10, 12, 14; 22:18; 24:3; 25:11, 18; 26:16; 27:10; 28:10, 17; 29:1, 3; 31:10: 37:23, 25: 39:10, 13; 57:11; 59:23: 89:10: 91:25

levele [8] 11:3; 12:25; 15:2; 17:19; 37;7; 38:23; 60:22; 77:15 liaison [1] 4:22 lie [1] 87:22 Hea [1] 85:11 ltfe [3] 39:21; 86:21, 22 liffers [1] , 39:24 light (2) 71:22, 25 lightening (5) 53,4; 70:23, 24; 71:14, like [23] 2:18; 10.8, 13:14; 18:4, 15; 34:8; 40.1; 42:1; 52:2; 53:25; 61:1, 2; 63:24; 67:24; 73:18; 84:3, 24; 85:21; 87:1; 86:17; 90:6; 91:19; 92:10 likely [1] 38:13 lime [1] 62:23 limit [17] 10:17, 24; 11:2; 15:5; 19:18, 22; 20:15, 17, 19; 21:3; 24:14, 25; 26:3, 4; 37:11; 63:20, 22 limiting [7] 45:8 limita [7] 18:14; 19:5; 37:8; 41:15; 57:24; 58:2; 64:4 line [5] 11:22; 12:1, 7; 44:25; 48:9 lines [1] 23:1 liquid [1] 83:25 listen [1] 80:23 IR (2) 72:1, 2 lHer [4] 11:12; 12:11, 13, 17 litmus [1] 50:1 ltille [9] 5:10; 13:5; 14:23; 22:11; 23:6; 27:19; 39:25; 41:20; 72:21 live [1] 57:14 leaders [1] 33:21 local [1] 87:4 lecate [1] 67:24 location [2] 43:23; 52:18 locations [1] 9:6 look [5] 1:14; 2:3; 84:17, 19; 86:24 long [4] 50:21; 70:4; 73:18; 78:20 langer (1) 63:15 leek [10] 8:20; 8:5, 11; 10:4; 25:14; 85:11, 12; 88:8; 92:5, 14 looked [2] 36:18; 74:21 looking (b) 15:17; 21:4, 24; 22:7; 42:14: 42:15: 57:22; 70:13: 71:15 leoka [2] 13:14; 34:4. leep [5] 81:9, 11, 21; ##:21 leaing [1] 86:18 ions [1] 80:13 lest [1] 36:10 let [14] 18:10, 12; 34:12; 40:18; 41:6; 60:1; 61:8, 20, 24; 63:12; 83:2; 80:7; 91:18, 20 iete (2) 24:18; 61:15 lew [7] 10:24; 12:24; 15:2; 21:16; 23:2; 54:12; 63:25

m [2] 1:13; 93:13 machinery [2] 32:22; 75:13 made [9] 2:13; 62:17, 24; 64:22; 67:5; 75:6; 80:24; 81:16; 92:22 magnetometer [1] 77:7 maintain [1] 41:6 maintained [1] 62:11 maintaining [1] 25:11 maintenance [3] 53:17; 54:3; 78:22 make [33] 2:22; 3:19; 7:23; 8:6; 18:10; 17:18, 18; 18:7, 8; 22:18; 35:22; 39:25; 41:15; 45:7; 47:7, 13. 15, 24; 51:9; 53:22; 54:1; 57:13; 80:4; 61:1, 6; 67:18, 20; 72:16; 79:21; 80:23; 81:12; 91:14 make-up [2] 33:17; 36:8 maker [1] 81:21 maiding [1] 62:20 management [1] 80:24 manager [1] 84:6 managers (2) 3:3; 62:16 manner [1] 77:23 meny (2) 6:25; 86:8 maps [1] 77:7 marek [1] 1:13 marry [1] 7:20 martin [118] 1:8; 2:1, 5; 3:7, 10, 14, 18, 21; 4:5, 12; 5:18, 21, 24; 6:11, 26; 7:5, 12; 8:3, 6, 10, 13, 18; 8:7, 13: 10:7; 12:8; 14:8, 8; 18:28; 18:1; 20:3, 22; 24:1, 6; 25:5, 20, 23; 26:15; 27:5, 8; 28:14; 29:7; 30:21; 32:4, 8, 12; 34:14, 18, 25; 35:4, 8, 18; 36:11, 20, 22; 37:23; 38:14; 39:22; 40:5; 41:18; 43:18; 44:4; 48:17; 47:8, 17; 48:\$; 50:14; 52:18; 53:12, 20; 55:5; 54:6; 54:15; 62:22; 62:3; 64:11, 14, 18; 65:1; 68:4, 11, 22, 25; 66:1, 7, 13, 17; 66:1, 11, 25; 70:18, 23; 71:22; 72:13, 17; 73:18; 74:16; 78:3, 18; 78:13, 17; 78:21; 80:20; 82:7; 85:4, 11, 20; 88:22; 90:26; 97:11; 92:6, 16, 17, 20; 93:6, masks [1] #8:75 mass [2] 23:13; 74:5 **manchestalla (1) 8**7:10 material [15] 5:4, 8; 38:8; 40:15, 18; 52:3; 53:10, 18; 58:14; 60:12, 13; 63:21, 23; 60:2; 70:6 natorials [1] 86:18 ettet [10] 14:12; 45:15, 20; 47:3, 5; 54:3; 60:12; 73:15; 80:25; 80:1 mattern [2] 1:22; 94:10 may [23] 2:11; &:20, 22; 9:9; 10:19; 20:1; 22:25; 20:2; 41:21; 45:3; 47:2; 48:12; 52:9; 61:11; 63:23; 86:1; 87:2, 13; 80:12; 70:14; 71:2; 91:5; 94:13 maybe [11]. 9:17; 10:2; 36:18; 36:6; 58:24; 62:23; 73:2; 75:25; 77:18;

mayor [1] 78:15 me [34] 2:12; 3:15; 9:17; 10:5; 15:7, 8; 16:2; 19:7; 23:10; 25:17; 26:4; 27:8, 23; 28:5, 25; 29:19; 30:24; 31:4, 19; 32:10; 35:18; 36:3, 12; 42:23; 65:18, 19; 66:1, 8; 77:74; 79:21; 80:4; 86:9; 92:22; 94:5 mean [13] 14:2; 31:21; 36:9; 48:3; 58:19; 60:12; 61:12; 65:13; 79:3, 23; 80:10, 18; 85:14 meaning [2] 29:7; 74:15 means [1] 55:10 messure [1] 11:15 measures [3] 46:6, 11, 14 measuring [2] 67:21; 89:4 mechanical [1] 43:3 mechanically [1] 59:22 meekanies [1] 40:12 meet [17] 19:2; 20:15; 22:17; 39:5, 17; 41:1; 50:19; 60:2, 8, 17, 18, 22, 24; 63:17; 64:8; 65:2; 80:1 mooting [22] 2:1, 6; 3:7, 10; 15:23; 55;4; 65:5, 4; 72:20; 79:4; 80:8, 13; 81:16; 83:15; 85:22; 87:9; 86:2, 21, 22; 90:22; 91:6; 93:13 meetings (3) 81:25; 86:4, 18 meets [3] 81:7; 75:16, 18 members [2] 87:3; 86:19 meme (1) 20:5 nomorandum [1] 5:10 nemery [1] 25:18 mention (3) 43:11; 66:4; 75:22 mentioned [5] 4:5; 8:3; 34:11; 63:13; 78:1 mentioning [2] 12:16; 65:7· morthicisto [1] 72:11 met [6] 2:23; 2\$:20; 3\$:14; 41:4; 76:13; 78:23 . motal [1] 82:19 metals (3) 37:4; 57:23; 56:1 notaphoto [1] 23:6 notes (9) 12:17; 15:13; 16:15; 18:15, 24; ·21:15, 19; 22:16; 55:8 method [28] 10:16, 25; 12:4, 23, 24; 14:16, 22, 24; 15:1, 5; 19:6, 12, 13, 17, 18; '22:2, 8, 8; 24:18, 22; 25:3, 4; 34:21; 35:3; 37:15, 16; 38:6 methoda [2] 21:24; 38:7 michelin (2) 33:11, 12 miek [5] 3:2, 12; 81:24; 86:24; 80:8 mierogram [2] 12:13, 18 miorograma [9] 11:11; 12:11; 16:13; 18:15; 18:14, 23; 21:15, 18; 22:18 middle [2] 63:6; 71:13 midwat (1) 10:22 might [11] 9:14; 18:18; 23:20; 33:8; 41:18; 42:3; 45:8; 46:25; 56:25; 63:7; 64:25 milim (10) 1:9, 10; 3:17; 14:4; 52:18; 56:4, 6; 58:23; 65:6; 72:9 miliar's [1] 62:5

milk [1] 87:12

million [1] 12:9 mimic (2) 39:3; 60:5 mind [1] 76:17 mine [1] 30:17 minimize (8) 48:11; 48:15, 21, 23; 49:2; 51:13 minimum [3] 59:24; 70:1, 2 minutes [1] 71:3 mirror [1] 7:4 missed [1] 91:11 misspeak [1] 11:3 mix (3) 23:6; 40:10, 14 mixed [1] 58:5 mobile (2) ·73:13; 82:10 modification [1] 47:24 modifications [1] 84:22 modified (1) 38:6 modity [2]. 12:5; 22:9 medrieker [64] 1:10; 5:22; 6:9; 7:23; 19:6, 11, 20; 20:14, 18, 25; 23:22; 24:11; 25:16, 25; 26:12, 22; 27:6; 30:13, 17, 23; 33:7, 19; 34:17, 22; 35:2, 7; 36:4, 17; 37:72; 36:17; 42:23; 44:20; 45:23; 47:2, 9; 50:10, 22, 25; 52:1; 58:15; 83:72; 64:17, 20; 65:19; 66:7, 12, 23; 67:9, 12; 88:4; 80:20; 70:1, 21, 24; 71:8; 72:6, 16; 76:4; 91:4, 12; 92:2, 18; moleture [5] 30:23; 40:2, 18; 63:13; molecular [1] 74:7 mellen (1) 82:19 mom [1] 87:4 mement [1] 85:21 money [1] 78:24 meniter [4] 39:20; 45:18; 51:23; 90:7 monitoring [8] 11:20; 18:3; 19:3; 24:8; 37:21; 55:21; 64:16; 78:4 tenitere [2] 45:17; 64:21 nonigomery [1] 7:25 neeth [2] 17:5; 30:10 monthly (2) 19:25; 45:17 menths [3] 6:2; 20:5; 38:21 **more (30)** 9:18, 24; 17:5; 18:18; 20:1, 12; 22:7; 23:1, 3; 28:8; 33:9; 36:12; 40:1; 45:7; 48:21; 49:1; 52:5, 14; 54:14, 20; 62:11; 63:14; **65:20;** 67:25; 73:3; 75:12, 13; 83:2; 85.25 morning [5] 9:22; 13:13; 58:23; 78:10; 80:4 merning's [1] 91:6 ment [5] 2:20; 38:15; 48:20; 62:21; 85:5 meve [1] 80:3 me [400] 2:1, 15, 21, 23, 25; 3:7, 10, 11, 14, 17, 18, 19, 21, 22, 25; 25; 6:7, 8, 17, 13, 25; 7:1, 5, 7, 12,

м -

15, 23; £3, 6, 8, 10, 12, 13, 15, 18,

87:18; 92:20

lewer [4] 5:22; 16:18; 21:1; 78:2

19; 9:7, 10, 13, 14, 16; 10:7, 13, 14, 15; 12:9, 10, 16, 18; 13:8; 14:6, 8, 9, 12; 15:22; 16:7, 20, 25; 17:1, 4; 18:7; 19:1, 4, 8, 10, 11, 16, 20; 20:3. 14, 17, 18, 22, 24, 25; 21:7; 22:17, 20; 23:22, 23; 24:1, 5, 6, 9, 11, 12; 25:5, 13, 16, 20, 21, 23, 25; 26:4, 9, 12, 15, 21, 22; 27:5, 6, 9, 12; 28:1, 6, 14, 15, 20; 29:7, 8, 9, 22; 30:3, 13, 15, 17, 19, 21, 23; 31:24; 32:4, 8, 8, 11, 12, 13, 14, 15, 17, 20; 33:7, 8, 14, 18, 19; 34:3, 14, 18, 17, 18, 20, 22, 25; 35:2, 4, 5, 7, 9, 14, 16, 18, 20; 36:4, 11, 14, 17, 20, 22; 37:12, 16, 23, 25; 38:2, 14, 17, 19; 39:22, 24; 40:5, 6, 7, 8; 41:8, 18, 19; 42:3, 5, 8, 9, 16, 23; 43:14, 18, 20, 21; 44:4, 6, 10, 20, 22, 23, 24; 45:23; 46:17, 20; 47:2, 6, 8, 10, 17, 20; 48:7, 9, 11; 49:5, 8, 9, 11, 16, 25; 50:2, 4, 14, 18, 19, 21, 22, 23, 25; 51:3, 17, 18; 52:1, 16, 19, 20; 53:12, 14, 20, 21; 54:4, 13, 25; 55:2, 3, 5, 6, 9, 23; 56:5, 6, 8; 57:20; 58:15, 22; 59:11, 12, 14, 15, 16; 60:25; 81:24; 82:3, 4, 7, 8, 9, 14, 22; 63:2, 3, 6, 12; 64:3, 11, 12, 14, 17, 19, 20; 85:7, 8, 7, 12, 19; 86:4, 7, 11, 12, 22, 23, 25; 67:9, 11, 12, 16, 23; 66:1, 4, 7, 9, 13, 15, 17, 23; 60:1, 3, 5, 7, 11, 14, 20, 25; 70:1, 18, 21, 23, 24; 71:4, 6, 12, 22, 25; 72:1, 4, 6, 8, 10, 11, 13, 15, 16, 17, 19; 73:18, 20; 74:15, 16; 75:3; 76:3, 4, 5, 19; 77:3; 78:13, 14, 15, 16, 17, 19; 79:21; 80:6, 20; 81:3, 22, 24; 82:7, 9; 84:11; 85.6, 7, 11, 13, 15, .17, 20; 80:12, 17, 22, 23; 90:25; 91:2, 4, 11, 12, 23; 22:2, 3, 6, 18, 20; 93:1, 9, 10, 12 mei [17] 10:22, 23; 11:6, 18; 15:2; 18; 16:9; 19:1; 20:5, 9, 14; 24:2, · 13; 34:15, 21, 22 mrfe [1] 21:25 much (23) 10:1; 12:19; 16:3, 18; 18:20, 23; 23:24; 44:18; 48:17; 53:11; 55:14; **56:12, 80; 60:6; 61:5**, 6; 85:20; 71:11; **70:23**; **70:26; 81:7;** 82:23: 93:12 multiple [2] 9:6 munroe [2] 76:4, 20 my [30] 2:17; 19:20; 22:14; 28:23; 27:21, 25; 31:22; 41:9; 42:24; 44:5; 46:6, 15; 50:23, 25; 50:3; 72:4, 8; 73:12: 74:16: 78:21; 79:10; 80:2; 85:1; 86:22; 90:4; 91:9, 14, 22; 23:3: 94:13 myself [1] 2:25

80:14

national [4] 2:2, 5; 91:25 nationwide [1] 80:21 natural [3] 54:18, 24; 70:11 nature [1] 91:12 near [2] 25:8; 28:17 nearby [1] 78:7 necessarily [6] 9:9: 17:7; 20:14; 24:21; 37:2; 42:18 need [30] 3:25; 9:11; -10:2; 11:4, 25; 14:5; 15:25; 18:6, 17, 19, 22, 25; 20:2; 21:24; 27:8; 29:17, 18; 40:23; 42:15, 20; 43:22; 50:7; 59:5, 18, 23; 65:10; 77:4; 82:14; 83:7; 85:3 needed [7] 12:14; 16:23; 18:24; 29:20; 39:20; 43:14 neede (1) 82:23 negative [2] 78:5, 10 networks: [1] 24:8 never [5] 28:7; 43:8; 72:5, 9 new [3] 65:18; 81:10; 93:6 next [10] 29:9; 48:9; 52:19; 54:4; 55:5; 59:8; 73:24; 74:3; 78:21; 88:9 niocie (2) 1:22; 94:10 night [5] 4:17, 22; 5:25; 18:12; nine (2) 16:11; 20:5 niceh (2) 17:12; 37:10 . nitroue [1] 54:18 non-adversarial [1] 77:23 non-besis [1] 58:3 non-compilance [1] 55:24 non-controlled [1] 44:10 non-detect (3) 23:25; 32:17; 78:5 non-detects [1] 57:10 non-published [1] 17:17 none [1] 80:11 norm [1] 49:21 normal [1] 54:16 notary [2] 1:22; 94:11 **(1)** 14:0 notod (4) 47:8, 22; 40:21; 80:6 nates [1] 94:4 nothing [2] I7:21; 79:15 notice [1] 55:24 national [1] 5:0 netification [3] 55:13; 84:7, 15 nevember [1] 4:11 **nn (30) 4:0; 5:25; 9:22; 10:3;** 12:0, 26; 13:22, 26; 14:4, 23; 22:4; 23:5, &; 24:18; 28:25; 29:18, 21; 34:3; 43:15; 45:15; 50:16; 61:17; 63:7; 66:18; 60:16; 73:10; 76:12; 82:20; 91:14; 92:24 nex [2] 54:16, 21 mazzion [2] 48:18 mpi [2] 73:6, 9 number [9] 15:10; 16:18, 17, 18; 30:6, 10; 40:12; 92:5; 93:2 numbers [4] 15:11; 17:12, 13; 86:16 numerous [1] 80:1.

observations [1] 25:6. observing [1] 25:8 obtaining [1] 48:13 obviously [2] 63:14; 70:3 occasion [2] 34:6; 49:20 occasional [1] 41:22 occupational [2] 12:2; 75:20 occur [1] 28:20 occurred [1] 8:22 occurrence [2] 34:7, g occurring [3] 8:20, 23, 24 odors [1] 73:23 offered [2] 9:21, 24 office [8] 2:17, 24; 3:12, 23; 73:11; officer [1] 28:25 offices [1] 2:7 ogden [99] 1:10; 3:19, 25; 4:4, 14; 5:20, 25; 6:13; 7:1, 7, 15; 8:5, 9, 12, 15, 19; 9:14; 10:14; 12:18; 14:8, 12; 18:7; 17:4; 19:4, 10, 18; 20:17; 21:7; 22:20; 23:23; 24:5, 9, 12; 25:13; 26:9, 21; 27:12; 26:15; 29:6; 30:15, 19; 31:24; 32:14, 17; 33:14; 34:16, 20; 35:5, 14; 36:22; 37:18, 25; 40:7; 41:8; 42:3, 8, 18; 43:21; 44:8, 22, 24; 46:20; 47:10; 48:7; 49:5, B, 25; 50:4, 16, 21, 23; 51:3; 52:16; 53:21; 54:25; 56:3, 8; 56:5; 57:20; 59:11, 14; 60:25; 62:3; 64:3; 87:16; 88:8, 15, 23; 88:3, 14; 71:4, 12, 25; 72:4, 8; 81:22; 85:15; 91:23 oh [8] 11:18; 12:22; 13:20; 15:24; ones [18] 8:4, 5: 10:21, 22: 28:10. 18; 28:7, 8; 31:8; 37:17; 42:18; 43:0; 80:11; 81:3; 79:5; 83:10; 87:8 oken's [4] 27:21; 29:13; 30:6; 61:12 ohoo [1] 12:3 okay [20] 4:12; 5:21, 24; 4:6; [9:13; 18:10; 27:5; 33:8; 37:1; 41:18; 50:2; 53:20; 62:14; 60:4, 25; 70:23; 71:1; 82:18; 85:6 omaha [1] 62:3 ombudoman [11] 1:8; 2:2, 5; 3:24; 79:2, 24; 60:17; **65:**24; **66:1,** 3; on-oito [1] #3:15 ence [3] 5:7; 28:22; 38:5 one [47] 4:15; 6:4, 18; 7:10; 12:8; 13:12: 14:6, 13: 15:13, 20: 21:14: 28:19; 28:4; 30:15; 33:5, R; 41:2; 42:3; 43:15; 45:4, 5, 11; 47:10; 49:5; 52:22; 55:7, 10, 11; 50:10; 57:10; 58:25; 85:8; 87:2; 71:12, 15; 73:14; 77:25; 81:6, 8; 82:20; 85:18; 89:3, 73, 20; 91:4 ones [2] 9:10; 14:13 enty [13] 2:17; 17:13; 17:1; 21:9; 23:18; 32:10; 48:3; 81:10; 82:5;

- 0 -

72:22; 73:14; 78:23; 77:8 onto [5] 29:23; 49:14; 56:9; 58:4, 6 open [7] 52:24; 53:8, 10, 24; 54:2; opening [4] 51:12, 15; 84:11, 14 openings (9) 51:13; 52:20, 22, 23; 53:3, 4, 8, 14; 84:8 opens [4] 53:5, 6; 70:10, 15 operate (3) 73:20, 21, 22 operating (5) 17:25; 41:5; 51:25; 54:11; 55:18 operation [7] 5:2; 39:7; 55:19, 22; 66:5; 87:2; 78:22 operational [2] 48:5; 71:12 operationally [2] 58:15; 70:18 operations [4] 5:2; 18:2; 79:23; operator [1] 45:20 opinione [1] 61:23 opportunity (6) 28:8; 40:10; 83:23; 69:17; 73:2; 93:5 opposed [1] 22:10 opposite (1) 86:25 optimal [1] 62:25 optimization [4] 40:20, 22; 41:14; optimiza (3) 40:9; 60:3; 64:2 optimizing [1] 61:5 ord [1] · 62:1 erder (2) 37:19; 57:8 original [2] 19:2; 22:20 originally (1) 52:7 eeks [8] 14:24; 17:12; 18:16; 22:6; 26:5; 29:1; 75:21; 83:19 other [27] 13:7; 19:20, 21; 21:24; 23:11; 24:3, 7; 30:12; 33:10; 36:18; 37:10; 38:23; 47:26; 53:6; 61:6; **62:23;** 65:10; 60:11; 75:22; 77:25; 81:4; 82:6, 18; 91:8, 12; 92:5 **Sthere** [1] 3:3 war [86] 2:6, 8; 5:10, 15; 6:21; 7:16, 18; 9:20; 10:16; 11:7, 19, 21; 12:12, 18: 13:2, 25: 17:14, 16, 18: 18:18: 20:12; 21:25; 20:11, 18; 27:16; 29:11; 31:6, 14; 35:6; 36:23; 43:22; 45:15, 17; 47:15; 51:21; 52:17, 21; 53:21; 55:12; 56:11; 60:1, 4, 21, 22; 61:25; 62:15; 63:22; 65:6 14, 16, 17; 71:12; 74:1; 75:15, 16, 19; 78:2, 5, 17; e0:22; 81:20, 22; 84:21; 80:8 ourseives [3] 63:19, 20, 25 outage [2] 70:20, 22 retolde [2] 65:75; 75:0 ever [6] 2:18; 5:16; 11:17; 50:6; 75:24; 80:22 overflow [1] 44.0 overeight [5] 4:15; 5:1; 28:22; 34:23: 73:5 exiden [1] 54:18 oxygen (2) 54:18; 63:25

ওঁ অসম মার যোগ অস্কল্য । ইয়াই জ

name [1] 78:16

. .

p (3) 1:13; 43:2; 93:13 pa [3] 1:14; 15:10; 19:14 paces [1] 41:15 pad [25] 14:19; 17:7, 22; 18:2; 22:24; 25:8, 27:23; 28:17, 13, 14, 15; 29.B, 16, 17; 30:5, 8, 25; 37:7, 19, 27, 45,9, 52.4 page [1] 61:17 panel [1] 89:10 parameters [3] 39:2; 61:6; 64:7 parret [1] 91:18 part [26] 12:9; 13:2, 3; 19:16; 30:2; 33:23; 36:15, 22, 24; 39:3, 5, 7, 17; 40:2, 4; 48:20; 57:11; 60:8; 67:5; 68:2, 6; 75:19; 84:23; 85:5; 86:14; participated [1] 75:10 partioular [7] 4:8; 5:12; 24:23; 42:21; 45:19; 55:15; 65:4 particulate [8] 14:2; 34:15, 17; 35:17, 20; 46:25; 52:8; 50:12 particulates [15] 13:14, 21; 23:20; 34:10; 35:22; 37:5; 36:11; 41:22; 42:2, 8; 45:2, 18, 18; 50:16; 70:74 perties [2] 85:8; 91:8 partner [1] 2:9 partnering [1] 75:1 parimera [2] 12:22; 82:18 parts [2] 254, 15 party [1] 2:20 pass [2] 23:8 passes [1] 71:20 patches [1] 33:1 patroniza [1] 87:7 pay [4] 31:3, 17, 21; 32:2 pa (1) 72:11 pense [2] 80:24; 80:3 penshes [1] 61:2 poor (3) 75:8, 10; 868 ponacytvenia [B] 2:4, 2; 3:11; 21:14; 72:24; 73:2, 10; 81:2 people (29) 4:21; 14:2; 17:15, 18; 18:8, 11; 23:12; 24:16; 20:20; 47:16; 51:18; 80:1; \$1:24; **88:16,** 17, 24; 70:0; 80:10; 81:25; ###4 87:14; 88:5; 90:23; 91:76, 16; 16 16; 16:6; per [17] 11:11; 12:8; 17; 13, 16; 15:13; 16:15; 18:14, 23; 21:15, 18; 22:14; 23:4, 15; 57:11; 50:20, 21 persont (B) 31:3; 40:3; 48:4; 60:16 persontage [1] #0:11 perseption [10] 14:10; 20:13; 28:5; 34:17, 13; 35:12; 48:5; 80:18, 20; M:13 perception-wise [1] 13:18 perform [1] 85:25 performance [1] 65:23

perimeter [5] 8:25; 11:18, 20; 12:15; perimeters [1] 17:25 pecied (5) 6:1; 38:21; 41:14; 63:20; periodic [1] 53:24 permit [2] 43:22; 47:17 permitted [1] 78:12 persist [1] 43:16 persistent [5] 41:21, 25; 48:13, 17; peraistently [1] 80:23 person [2] 29:4; 80:13 personally [2] 92:10, 22 personnel [1] 38:24 perspective [1] 74:11 perspectives [1] 74:19 terson [2] 4:2; 90:9 politionera [2] 85:23, 25 petroleum [1] 82:21 ph [2] 55:4, 12 phase [7] 11:5, 6; 39:16; 40:21, 22; 42:14; 58:25 phonomonon [1] 54:24 physical [1] 87:15 piolest [1] 87:8 ploking [1] 74:7 pld [1] 34:25 place [2] 42:21; 55:18 pieces [5] 55:21; 67:18; 69:8; 77:3, pile [1] 38:8 piles [1] 38:8 pHet [2] 71:22; 72:2 pin (2) 21:8, 11 piping [2] 43:2; 52:14 place [3] 1:14; 15:21; 84:10 plan [11] 53:21; 61:13, 16; 63:5, 10; 84:17, 33; 86:1, 5, 8 planned MI 42:18; 43:8; 53:8, 14; 84:7, S plana [3] 42:24; 84:17 plant [14] 1:14; 5:3, 6; 8:1; 48:20; 51:00: 32:17; 56:1; 58:00: 57:0, 6, 7. 15: 00:4 planties [1] 78:12 play [1] #7:10 pleading [1] 78:24 pleane [4] 20:3; 27:6, 21; 80:11 plothers [1] 18:2 plume [1] 48:18 plan (3) 30:21; 52:26; 65:14 poolest [1] 21:10 point [26] 2:18, 22; 4:4; 4:4; 15:8; 10:4, 7; 17:10; 21:7; 20:10; 20:10; 42:13; 442; 45:11; 48:4; 52:18; 54:4; 55:5; 81:22; 62:5; 71:15; 77:12: ##:22 policy [1] 20:12 polick [1] 1:11 poliution [2] 88:8; 78:72 pop [1] 87:5

pope [1] 52:24 pertion [1] 7:9 portions [1] 77:4 position [8] 13:25; 16:5, 6; 48:2; 51:20; 59:18; 74:22; 88:23 positive [1] 33:15 positives [1] 34:2 possible [3] 13:22; 43:18; 78:23 possibly [3] 23:9; 57:15; 61:10 potential [4] 23:15; 49:6; 51:11; potentially [2] 30:1; 71:18 power [11] 53:5, 23; 88:18, 21, 22, 24; 69:13; 70:20, 25; 71:3, 7 practical [1] 42:12 precise [1] 26:18 predominant (1) 36:7 predominantly [2] 36:9, 12 premium [2] 31:1, 3 prep [1] 5:5 propero [5] 7:8; 8:1; 14:6; 22:21; prepared [11] 7:8, 13, 15; 13:23; 144; 20:1; 22:22; 34:9; 41:25; 67:1; 91:17 prepares [1] 7:17 propering [1] 73:3 presence [2] 35:24; 57:8 procest (2) 1:8; 9:8 presented [3] 91:17; 92:7, 16 presenting [1] 92:17 preceing [1] #2:14 proby [12] 12:18; 16:18; 18:20, 23; 23:24; 30:8; 44:18; 53:11; 56:12, 20; 59:4; 42:22 primarity [3] 4:0; 8:21; 28:11 prior [3] 11:7, 15; 40:10 prioritiza [1] 90:11 prioritized [1] 20:12 priority [1] 90:12 probability [1] 71:17 probably [15] 6:2; 8:10; 24:10; 20:13: 30:10: 30:4: 47:4: 52:5: 61:22; 65:25; 66:2; 72:21; 75:16; 77:24: 78:5 probe [2] 55:12, 23 problem [41] 13:15; 14:2, 10; 15:8, 18; 23:14, 17, 19, 20; 34:5; 35:10, 12, 16, 17, 20; 38:3; 37:22; 38:3; 30:22, 23; 41:21, 26; 42:16; 43:10; 48:5, 17, 18; 48:12; 50:3; 51:6, 7, 18; 56:7, 17; 58:23; 57:2; 82:13; B&1, 8, 13 probleme [5] 12:20; 55:10; 83:24; 84:4; 92:1 presedure [5] 17:21; 22:12; 27:2; 33:23; 55:20 presedures [9] 13:20; 19:16; 24:14; 28:9, 18: 20:13; 55:16; 84:15 preced [1] 10:8 precedings [3] 1:5; 94:5, 5

process [19] 14:25; 15:5, 6; 46:3, 4;

50:25; 60:25; 61:5; 63:24; 79:24, 25; 80:2: 80:4, 15: 91:21: 92:19: 93:3 processed [1] 51:21 processing [1] 5:5 product [2] 77:13; 78:10 production [2] 7:4; 13:1 professional [1] 57:12 prognosis [1] 15:20 project (0) 20:10; 29:23; 72:23; 73:5; 74:23; 79:9; 81:2! 87:11; 93:2 property [4] 48:9, 14; 78:15; 78:23 propounded [1] 82:7 protest [1] 49:1 protected [1] 17:16 protecting [1] 17:18 protection [9] 2:6; 16:1; 18:9, 18, 19; 28:11; 29:1, 3; 30:8 protective [9] 11:23; 12:7, 15; 17:2; 27:10; 28:8; 33:3; 42:11 protečel [1] 52:24 proteccie (1) 27:22 preve [2] 38:3; 74:9 proved (1) 23:24 previde [4] 4:15; 5:1; 10:10; 93:5 public [18] 1:22; 9:23; 11:23; 12:7, 15; 17:3; 79:3; 80:8; 81:16, 25; 83:9; 86:18, 19; 87:2; 88:2, 18; 90:22: 94:11 publishy [1] 88:16 published [3] 17:17; 22:5; 25:4 puddia (2) 51:14; 57:2 puddles [2] 40:18; 50:24 putt [2] 20:21; 44:14 pull [3] 9:10; 67:11, 12 purge [1] 53:8 **purged [3] 53:**15, 18; 54:2 purporting (1) 80:11 puck [2] 30:25; 41:15 pushing [2] 21:8 put [10] 9:0; 31:21; 34:9; 30:0; 41:11, 16; 42:11, 18; 43:7, 17; 49:22; 51:7; 56:14; 63:21, 22; 67:16; 62:17; publicum [1] 63:5

. .

putting [2] 38:25; 48:3

qa [2] 8:8, 11
qa [2] 8:8, 11
quality [13] 4:26; 7:10, 18, 18, 20,
21; 8:1, 2; 11:17; 45:25; 62:6; 64:8
quanch [11] 13:4; 48:13, 18, 20;
40:13, 17; 50:1, 5, 25; 51:2; 53:7
quantien [31] 10:10; 20:4; 21:3;
22:21; 24:2, 10; 25:18, 20, 24; 26:8
15; 27:12, 20, 21; 28:2; 34:19;
42:10, 18; 44:3; 50:4; 58:23; 64:1,
12, 23; 68:21; 68:17; 78:17; 65:15;
68:21; 91:4, 10

perhaps [2] 10:11; E4:1"

questioned [1] 82:24
questions [5] 10:11, 18; 65:9; 72:18;
76:18
quick [1] 51:1
quicker [1] 71:11
quickly [4] 40:13; 48:12, 23; 71:10
quits [4] 18:14; 48:1; 61:20; 66:23

- R -

r [12] 80:9; 81:18, 25; 82:7; 85:23; 87:3, 23; 88:19, 23; 90:23; 91:19; race [2] 41:9, 11 raise [5] 2:12, 13, 19; 64:15; 85:15 raised [8] 3:6; 10:8; 15:19; 22:5; 32:9; 65:1, 14; 68:11 range [1] 40:3 ranges [2] 65:20; 67:22 rate [5] 41:5; 59:22; 60:9; 63:10, 25 rather [2] 51:14; 59:17 reach [6] 11:7; 12:6; 15:4; 59:17; 60:13: 62:25 read [1] 92:10 reading [1] 35:22 ready [2] 79:17; 90:6 real [8] 12:23; 39:21; 40:13; 58:19; 83:24; 84:4; 92:1 realize [2] 11:9; 89:15 realized [8] 11:5, 6; 15:23; 21:7, 22; 39:7, 12; 42:14 really [22] 5:11; 6:13; 16:12; 16:13; 21:8; 22:10; 23:1, 21; 42:17; 44:6; 45:10, 19; 50:4; 58:13; 67:14, 20; 73:1; 78:24; 82:25; 84:13; 89:14; resson (8) 23;11; 33:12; 36:4; 54:21; 74:12; 85:1; 86:19, 23 reseonable [1] 55:25 rassons [3] 18:7; 47:10; 89:20 reassessment [1] 89:1 reassigned [1] 6:3 · · reburn [2] 80:17, 18 reburning [1] 60:13 recall [9] 14:18; 25:17; 28:3, 10, 22; 30:12: 33:2: 65:6: 68:7 receive [1] 30:25 recognize [3] 19:1; 36:12; 78:25 recollection [1] 22:15 recommendation [1] 79:11 recommendations [1] 29:2 recommended [1] 29:3 recommends [1] 18:16 record [13] 2:2, 23; 3:21; 5:10; 9:7; 25:13; 32:5; 62:9; 72:7; 78:17; 70:22; 80:21; 80:5 records [1] 90:16 recover [1] 24:19

recovering [1] 20:20 recovery [8] 21:1, 4, 5, 16; 22:10, 11; recre [2] 82:1; 73:24 reference [2] 47:18; 89:5 referred [1] 31:5 referring [2] 35:8; 75:24 refractory [1] 70:3 regain [1] 71:3 regenerate [1] 57:9 region [7] 2:0; 11:19, 21; 81:25; 80:22; 81:11; 82:1 regional [2] 3:2, 15 regret [1] 92:24 regular [3] 34:6, 8; 80:10 regularly [1] 13:24 regulate [1] 51:22 regulation [1] 44:7 regulator [2] 72:22; 74:22 regulatory [9] 11:13; 13:15, 22; 16:23, 24; -17:2; 22:4; 40:21; 42:1 reignition [1] 70:19 relate [1] 77:18 related [4] 33:17; 54:17; 77:21; relates [1] 84:21. relating [1] 66:15 relationship [1] 30:8 relative [2] 65:9, 13 release [3] 44:10, 20; 53:15 relevant [2] 68:8; 74:8 relied [1] 75:21 relief [3] 70:10, 25; 71:7 romain [1] 68:18 remaining [1] 66:20 remaine [2] 58:16; 70:9 remarked [1] 35:12 remedial [1] -78:0 remediation [1] 70:15 remody [1] 79:7 remember [4] 6:7; 26:13; 30:15; rep [3] 4:20; 6:15; 7:8 repeated [1] 55:10 repeatedly [1] 54:22 report [47] 6:19; 7:5, 8, 11, 13, 15, 17, 18, 20, 21; 8:2, 8, 10, 20; 9:2; 20:15; 25:0; 26:18, 24; 57:13; 66:5; · 67:1, 4, 5, 8; 68:2, 5, 11; 74:21; 75:21, 22; 76:21; 78:2; 62:5; 63:4; **80:20,** 24; 90:2, 10, 11; 91:7, 13, 17; 92:22, 23, 24; 93:4 reported [5] 5:19; 20:16, 18; 28:9; 67:6 reports [25] 6:17, 16, 22; 7:12, 16, 22; \$7, 11, 13; \$2, 8; 14:7, 8, 10; 18:25; 25:14; 27:7; 67:3, 13, 17; 68:4, 10; 79:15 repository (3): 8:14, 15; 9:4 representative [3] 4:17, 25; 5:14 representatives [1] 2:7

request [1] 90:8' requested [1] 43:5 required [4] 31:16, 16: 43:4, 8 requirement [1] 63:5 requirements [2] 22:4; 63:18 requires [1] 81:12 requiring [1] 14:20 research [1] 10:22 reest [1] - 71:4 residence [3] 62:25; 69:5, 23 resident (3) 72:24; 74:2; 78:7 residing [1] 74:10 residual [1] 56:4 reein [1] 20:21 respect [4] 16:25; 24:7; 26:18; 64:16 reepirator [25] 14:21; 18:5; 18:14, 22; 25:11, 18; 26:1, 6, 16, 18; 27:3; 28:3; 29:11, 16; 30:8, 24; 31:1, 2, 4, 13, 18, 20; 32:3; 59:10 respiratory [1] 16:1 respond [2] 85:20; 93:5 responders [3] 83:17, 19; 84:5 response [21] 12:19; 13:2; 14:4; 23:16; 27:17; 36:23; 83:4, 10, 12, 14, 21, 23; 84:16, 17, 18, 23; 85:1, 4, 6; responses [2] 3:18; 0:18 responsibilities [5] 4:15, 24; 5:14; responsibility [5] 4:14, 16; 6:7; responsible (5) 6:16; 7:8; 17:15; 47:7; 78:22 reet [2] 84:21; 66:19 recutt [1] 55:15 receiling [2] 49:13, 14 reculto [4] 5:7; 8:22; 37:9; 57:23 retention [4] 40:23; 50:17, 19; 63:10 retreatment [1] 58:10 rovious [10] , 2:10; 0:9; 20:9; 27:21; 28:18; 65:22; 67:14; 75:8, 10; 89:9 reviewed [2] 43:5; 65:24 reviewing [1] 3:22 ricard [2] 6:7, 13 rieard's [1] 6:11 riek [1] 83:7 right [25] 12:8; 13:25; 14:4; 16:4; 20:10, 24; 20:0; 32:17; 33:16; 36:5; 44:23; 45:15; 48:7, 25; 49:8; 50:18; 52:25; 50:18; 62:14; 67:21, 22; 69:1; 70:15; 71:6; 85:23 riag [1] 26:15 riek [12] 18:25; 40:21; 52:21; 53:2, 16; 60:7, 15, 18; 69:21; 70:16; 73:25: 75:8 roed (2) 78:1; 90:17 robert [2] 1:0; 2:5 rele [5] 5:1, 15, 16; 4:1; 28:22; restinely [2] 18:1; 53:17

rowels (1) 88:19
run [5] 41:14; 45:17; 59:20; 60:22;
85:22
running [3] 41:11; 71:8, 10
runs [1] 60:23
ruptured [1] 28:18
rusty [4] 88:17, 25; 87:3, 5

- 5 -

the section of

reprocess [1] 56:18

reps [1] 6:17

sabbatical [1] 62:16 **sale** [3] 11:25; 17:19; 28:23 mafety (8) 12:2; 13:19; 17:10; 25:11; 26:25; 29:13; 75:20; 83:11 eaid [22] 15:6; 16:6, 8; 21:12, 23; 28:20; 41:17; 43:21; 52:16; 54:1; 55:2, 9; 58:3; 62:17; 65:13; 67:2, 6, 10; 88:9; 89:13; 92:13, 15 same [9] 5:23; 27:18, 25; 31:5; 47:15, 21; 61:17; 88:22; 94:6 sample [7] 34:20; 38:6, 7; 58:15, 20; sampled [7] 32:10; 57:5, 20, 21; 58:7; 78;8 samples (8) 9:14; 18:3; 32:16, 18; 36:25; 37:6; 56:21, 22 sampling [24] 6:24; 8:22, 25; 9:1; 10:16, 23; 12:5; 16:1; 19:6, 12, 13; 23:22, 23; 32:19; 33:14; 34:14; 35:6; 37:3, 13; 45:16; 57:22; 74:3 santerum [1] 4:3 sat [1] 75:11 **Bolled [3]** 27:14; 65:17; 85:4 saliety [1] 79:16 earing [1] 59:7 **BBW [1] 82:11 say [30] 6:9,** 17, 25; 11:2; 14:14; 15:16; 23:13, 16; 24:18; 31:14; 38:15; 38:15; 43:24; 44:1; 45:21; 48:2; 50:18; 65:19; 68:22; 72:6; 75:5; 83:9; 86:18; 89:10, 13, 14; 90:18, 23; 92:5, 6 saying [7] 47:4; 60:16; 81:25; 86:19; 86:17; 90:2; 92:6 unya [5] 43:22; 48:25; 51:6; 89:16, seale [4] 21:19; 22:14; 74:8; 83:16 ocaled [1] 9:19 seales [1] 60:12 **306 [3] 68:20, 21; 69:3** seemarie [3] 41:22; 71:6, 19 sessation [2] 39:4; 41:17 schools [1] 80:15 selence [5] 21:4; 62:15; 69:18, 25 secured [1] 22:1 orub [1] 48:24 serubber [15] 35:21; 42:25; 46:24; 55:12; 56:11, 21; 57:18, 19, 20; 58:16, 20, 21, 25; 59:2; 69:18

soutt [1] 48:12

recoveries [1] 21:19

DOCUMENT [1] 63:7 second (3) 13:3; 21:13; 51:2 secondary [8] 39:2; 40:25; 54:10; 66:18; 69:23; 70:2, 3, 7 eeende [2] 50:23; 80:24 DOD [23] 12:14; 13:21, 24; 18:13; 21:9, 13, 16; 33:2; 35:25; 36:18; 40:8, 11, 25; 41:22; 43:11, 18; 48:12; 64:3; 68:10; 70:14; 75:12; 80:17; seeing [1] 12:14 900m [3] 24:15; 25:1; 80:11 seems (1) 79:1 0000 [8] 34:8; 49:16; 59:17; 72:9; 87:23, 24 lemi-phase [1] /4:7 mi-volenia (3f 19:21; 23:10; 36:14 semi-volution [5] 24:20; 37:4; 57:22, senator [4] 42, 3; 90:1, 4 sonater's [1] 90:7 000aters [1] \$:15 send [1] 80:8 sense (2) 5:15; 72:18 BOOK (4) \$:18, 24; \$7:5; \$0:1 **esperato (2)** 47:1; 67:4 eptembers [1] #8:20 Dervice [2] \$7:17; \$3:5 services [2] 76:5; 84:12 mat [1] 43:24 setup [1] 63:8 seven [3] 7:2; 74:3, 4 neven-hour [1] ##:20 several [1] 47:12 shadows [1] 18:13 shape [1] 77:13 share [2] 30:22; 74:18 she [1] 62:15 shelves (1) 30:26 chicided [1] 71:23 statt [34] 4:18, 21, 23; 5:23, 26; 63, 桷 鴻鸟協 擒 魏乃 孫召為新 25ch 20:17; 31:30; 67:1, 4; 60:2, 11 shifts [4] &15, 14, 26; 7:1 short [M] 4:15; 80:30; 51:4; 60:5; wherear in the point [\$50 shortleti [1] 75:14 😽 should [7] 35% 37%; 65% & CEST MES 4 shoulde't [1] #7:15 uhom [10] 3:21; 4:7; 32:5; 38:6; 48th 40th 28, 28, 78th 82th showed [1] 33:12 showing [1] 72:21 shows [1] \$7:14 shut [4] 44:12; 53:16; 54:11, 20 shutdown [2] 57:15; 54:5 olds [1] 51:8 sides [1] 80:16

zigned [1] 10:21 significant [1] 81:1 similar [5] 28:2, 5; 31:25; 35:5; simple [1] 50:21 since [7] 13:10, 11; 23:8; 29:4; 64:22; 82:4; 90:12 single [2] 45:11; 55:11 singular (2) 47:22; 73:9 wit [7] 15:18 site [55] 1:1; 2:3, 10, 14; 5:8; 6:20; 8:14, 18, 25; 9:8; 11:18, 23, 24; 13:1; 18:9, 10; 25:7; 27:4; 28:19; 29:5, 14, 24; 33:17, 25; 38:24; 41:7; 43:14; 47:7; 55:18; 80:19; 88:19; 70:25; 73:6, 8, 9, 24; 78:1, 9, 18, 21; 77:19; 78:1, 2, 21; 82:12, 13; 83:1, 25; 84:21; 86:6; 90:12; 91:15, 16 wites [3] 24:4, 8: 77:25 sitting [4] 31:19; 74:18; 80:7, 8 situ [1] 82:10 **situation** [5] 39:20; 49:16; 71:16; 72:22; 84:12 situations [4] 18:15; 29:25; 71:18; 74:25 mix [2] 50:15; 80:21 okin [1] 61:18 **sludges** [3] 78:11; 77:9, 15 omail [3] 22:11; 57:14; 87:4 smediey [3] 3:2; 80:17, 18 smediey's [3] 87:5, 8, 24 smoke [1] 44:14 900p [1] 78:10 sedium [1] 84:1 eek (7) 30:23; 63:13, 14, 16; 64:9; 78:3; #2:18 selicited [1] 81:22 solution [2] 35:4; 62:23 some [36] 2:26; 9:24; 15:21; 17:24; 22:12, 22; 23:13; 33:11, 14; 35:4, 21; 38:33; 40:15, 18; 41:11, 17; 43:10, 11, 12; 47:21; 52:13; 55:16; 58:1; 81:11, 22; 84:22; 74:16, 18, 23, 24; 7张66: 7张66: 77:16, 11, 16; 65:15; **株式 67:18** semebody [1] 28:19 emocae [4] 11:24; 28:5; 28:8; 33:5 meene's [1] 27:2 mething [21] 13:13; 15:10; 23:8; 27:7; 29:0; 34:0; 35:21; 30:1; 3821; 42:1, 18, 18; 48:8; 54:23; 67:24; 78:18; 80:13; 84:3, 24; 85:8; rmetimes [1] 18:18 permandrat [3] 30:14; 76:18; 91:55 semenhers [1] 90:13 seen [1] 52:24 SOTTY [4] 17:22; 28:15; 42:10; 50:2 sound [2] 30:11; 61:1 seuree [1] 10:20

DOMESON [1] 87:1

opens [1] 42:21

speak [1] 90:22 specific [5] 10:11; 68:12; 87:13, 25; specifically [8] 14:15; 15:22; 19:5; 26:25; 38:2; 65:22; 68:3; 83:22 *pecifications [1] 65:3 specifies [1] 3:4 specified [7] 15:1; 19:8, 9, 11, 12, spector [2] 4:3; 90:2 spectrometers [1] 74:8 spend [3] 48:4; 61:5, 6 spilosd [2] 20:21; 88:11 spilled [1] 58:15 spille [1] 49:14 epoken [1] 75:8 препу [1] 46:22 **sprayed** (2) 56:9; 88:15 stab [2] 9:16; 10:5 stack [9] 35:6; 44:11; 63:19; 65:17; 69:8, 12; 70:15; 74:1; 75:18 shaff [7] 5:18; 14:13; 47:21; 73:8, 10, 12; 90:7 singen [1] 86:1 stand [5] 11:24; 53:11; 79:17; 81:25; 90:23 standarde [2] 75:17, 18 standing (2) 26:1; 80:16 innds [1] 14:3 start {16] 2:21; 21:24; 23:12; 47:3; 50:14; 54:8, 20; 63:8; 71:1, 21; 72:10, 20; 79:19; 80:3, 15; 90:17 started [5] 18:10; 23:6; 54:22; 86:3, starting (2) 65:16; 90:3 startup [1] - 54:5 seets [27] 2:7; 11:11; 16:25; 43:22; 44:7; 47:11, 13, 16, 18; 55:15; 59:17, 21; 85:21; 72:23; 73:2, 6, 8, 10; 75:15, 18; 76:18, 22, 25; 77:1; 87:21; utaturu (6) 15:10; 18:14, 18; 17:11; 45:25; 48:2 sentensent (2) 80:24; 91:24 states [2] 80:23; 85:8 **stay** [1] 20:3 steady [2] 59:17, 21 otomm [57] 10:18; 13:3, 14, 17, 22; 14:1, 17; 17:7; 22:25; 25:8, 16, 21, 22, 23, 24; 26:1; 27:14; 28:12; 32:10, 11; 34:4, 10, 12, 15, 18, 20; 35:23, 25; 36:5, 7, 10, 12, 15, 19; 37:2, 13; 38:4, 6, 7; 41:23; 42:7, 8; 44:7, 8, 24, 26; 46:5, 8, 11, 21, 22; 48:2, 18, 24, 26; 47:4; 49:23 stammed [1] 55:17 starte [1] 56:\$ stopped [1] 77:22 . stope [1] 48:20 · mill [8] 27:14; 43:18; 56:3; 69:1;

75:11; #£13; 90:13

stackpile (2) 35:14; 46:7

stockpiles [2] 35:11; 44:21 #100 [7] 53:9; 70:8; 71:15, 16, 18; 79:9; 89:23 stopped [4] 52:25; 54:22; 74:23; 87:11 #10pe [1] 80:17 storage (1) 45:14 stories [1] 87:16 atorm (2) 53:4; 71:14 atory [1] 90:18 straight [1] 69:8 straighten (1) 48:5 stratch [1] 62:10 etrike [2] 70:24; 71:17 stripped [1] 23:18 etruck [1] 70:23 studies [1] 21:5 atudy [1] 77:7 **stuff [3] 40:14; 65:16; 67:21** auboontractor (2) 19:22; 20:1 subject (3) 31:4, 6, 23 subjected [1] 36:1 submit [1] 42:25 submitted [2] 2:16; 3:23 **substance** [1] 44:11 substantially [1] 16:18 auch [5] 21:16; 31:17; 50:11; 81:20; 90:12 aufficient [1] 68:20 auggest [1] 9:18 ouggested [2] 10:9, 25 suggesting [3] 61:10; 67:23; 82:2 summary [1] 52:1 summertime [1] 63:9 oump [2] 52:12, 15 ouportund (4) 1:1; 2:3; 73:24; 79:24 supervisor [7] 5:11, 15; 6:14; 26:6, supervisora (2) 4:23; 28:20 oupoculaary (3) 5:13, 18; 6:14 supplement [1] 6:21 oupply [1] 58:11 oupport [1] 31:20 oupporting [2] 90:23; 92:7 **supposed** [6] 23:4; 27:2; 43:24, 25; 44:13; 58:24 mare [30] 10:13; 14:4; 17:16, 18; 18:6; 22:19; 29:22; 30:23; 35:22; 36:15; 41:15; 47:13, 15; 51:9; 53:22; 54:1; 60:4; 61:6, 18, 22; 62:21; 84:23; 65:18; 86:23; 87:18, 20; 75:2; ourprioe (1) 26:4 ourprised [1] 25:2 ourprining [1] 25:1 ourrogato [4] 20:20, 22, 25; 21:1 surregates [1] 21:21 rustala [2] 37:23, 25 wear [1] 86:5 system [22] 22:7; 35:2; 38:25; **47:25; 49:2; 51:18; 53:22; 54:2;**

80:4; 65:23; 70:9; 77:9, 23; 81:9.

vignature (2) 81:15; 90:13

olga [2] ac.: 10

12, 21; 82:5, 21; 83:0; \$4:7 systems [1] 71:5

table (1) - 75:8 tablets [1] 86:10 teggart [3] 73:18; 78:18; 77:25 taka (15) 9:17; 10:4, 5; 27:3; 40:18; 56:5, 20; 58:18; 59:6, 23; 60:21; 41:10; 42:2; 43:24, 25; 46:6, 17, 14, 20; 49:20; 58:3 tahan [7] 48:8; 51:20; 56:21, 22; 61:11; 82:24; 94:5 tales [3] 41:2; 80:15; 70:4 taking [2] 45:2; 86:5 talk [5] 14:15; 38:23; 83:6, 7; 90:20 talland [4] 13:12; 50:0; 81:20; 92:4 telking [27] 12:3, 13; 13:22; 14:17; 23:5, 7; 24:13, 15; 25:1; 28:12; 35:15; 36:5, 6; 37:17; 47:5; 49:25; 51:1, 3, 5; 52:4; 64:24; 60:22; 70:3; 88:3 4: 91:22 tenito [2] 82:25; 83:25 target [3] 15:17, 18; 16:12 100 [5] 14:19; 25:0; 26:17; 20:14, 15 | them [27] 5:0; 0:2; 10:7; 16:7; team [2] 47:16; 74:1 technical [5] 20:2; 78:23; 78:11 technicians (1) 60:10 technologice [3] 81:7, 17; \$2:5 chaology [2] 52:6, 18 **100** [12] 15:7; 10:2; 10:21; 27:23; 28:25; 31:15, 16; 32:7; 47:25; 70:6; telling [3] 29:5, 6; 31:6 temperature [14] 30:20; 30:14; 30:16; 40:24; 41:0; 51:10; 62:10, 10; 60:10; 60:10; 60:0; 70:1, 7 temperatures (4) 30:1; 41:1; 40:53; ten (4) 15:12; 21:13; 47:21; 50:36. tenure [5] 4:13; 14:7; 26:30; 64:16; term [6] 4:7, 4, 10; 7:16 Mcmod [1] 88:5 test [0] G:T; 2:24 33:21; 41:11; 74**3** tested [5] 35:13; @ **88:7** testing [12] 14:18; 22:14 31:11 12: 35:7; 40:27; 54:23; 63:30; 66:10, 14; 75:12; 78:3 tests (3) 50:1; 67:17, 18 then [24]: 11:10; 15:12; 16:14, 22, 23; 18:18; 20:2; 21:2, 13, 23; 30:14; Sees [17] 2:11; 12:7, 8; 20:11; 32-0; 45:7; 46:2; 50:23; 51:15; 52:5; 54:4; 62:12; 63:4; 65:20; 87:25: 63:2: 88:10 thank [10] 12:18; 25:5; 48:8; 55:4;

Marie [90] 40% 4:24; 10:14; 11:15; 12:14, 17, 18, 18, 25; 13:2; 15:6, 17, 21, 22; 16:5; 19:15; 21:3, 12, 23; 22:2 15: 23:4 18: 25:20, 23: 26:12 25: 27:2, 12, 23; 28:11; 29:21; 30:1; 33:23, 25; 34:12, 16; 36:1, 9; 38:1, 5: 41:13: 43:12; 44:12, 13, 18, 22 23; 46:15, 23; 47:11; 48:6, 7; 49:4; 51:20; 52:1; 53:10; 54:8; 55:2; 85:25; 86:11, 14; 66:5; 69:20; 70:15; 72:2, 4, 17; 75:17; 79:8, 13; 80:13; 81:3; 82:18; 85:5, 7; 86:14, 23; 90:18; 91:9, 22; 92:2; 92:10 their [24] 12:4; 24:7, 13; 26:6; 27:22: 29:2: 33:2 3: 37:19: 42:18 24; 43:1, 10; 61:14; 77:8; 73:1; 82:1; 85:13; 80:15, 16; 87:20; 80:10, them [26] 2:13; 6:6; 9:5; 12; 13:6, 10, 11; 24:10; 57:18; 47:24; 48:2; 50:4; 62:10, 12; 64:24; 66:17; 73:20, 21, 22, 26; 77:14; 84:E; 87:13; 88:6, 10; 14; 14; 12;7 thomostyes [1] 86:8 18:22; 23:22, 23; 38:18; 46:2; 40:21; 47:16; 50:3; 57:2; 58:3, 5, 6, 17; 54:14; 62:21; 667; 71:30; 8E:30; 80:13; 91:10; N2:14, 20; \$3:3 theoretical (2) 48:17; 68:22 ' theoretically [1] 35:0 there [77] 2:11; 5:22; 4:25; 11:13; 12:13, 17; 14:18, 14; 15:21; 18:3; . . 17:24; 18:63; 20:20; 22:2, e; 24:20, 35; 36ch 38cl 36; 38tl, 8; 38tl; 304 & 345¢ 35¢ 37:22; 30:14 36 MG 456 436 461, 16 初年 株式 珠 珠 株 株 株 株 株 珠拐 聽 刺毒蜂 糖拐蹄 烟囱 MATE SOUTH STATE STATE STATE TO THE STATE COST, THE PRINCE PARK TOR IN 1800 SOME 20 STAR ----PROFE MERTY MAN Banks (40) 127, 17: Fet; 15:4 物化石棉 福 种 黑色 经统 18812 300 34 3412; 303 304 466. 11; \$1% & E210; 524. 4 A EDITO GREEK STAR SECTOR TOOK 7077 700 7016 7016 新地 acts mast, 481, 714, 10, 14, 25; 数线型 therebooks [1], 60:0 maratire [1] 10-1 thermet [4] 48:14; 70:10, 25; 71:8 27:13; 38:1, 6; 42:11; 47:25; 41:25; 78:21; 81:18; 84:21; 88:23; 98:1, 6, they [86] 3:1; 7:21, 25; 4:1, 18;

84, 22; 10:23, 25; 11:7; 8; 15:2, 4;

18:17; 17:20; 19:2; & 20:15, 18, 18; 24.6, 17, 21, 24; 26:1, 2; 26:24; 27:3; 33:14; 37:18, 20; 38:12; 40:13; 57:16; 59:3; 61:4; 63:21, 22; 65:15; 42:19, 20, 24: 43:9: 47:11: 50:4: 52:9, 11; 53:17; 56:1, 2; 56:12, 13; 62:4, 11; 66:15; 66:3; 67:24; 69:16; 74:1, 9; 78:14; 77:8, 12, 18; 78:2, 7; 80:9, 10, 14; 87:19; 82:1, 3, 9, 10; 84:4; 85:3, 17; 86:15; 87:13; 86:3, 4 5 6 7, 9, 11; 89:18; 90:7, 21, 23; 92:5, 13 they'll [1] 74:3 **Shey're** [15] 8:15, 16; 9:5; 10:4; 70:16; 79:6; 81:11; 82:1, 2, 17; 87:15, 17; 80:17 they've [8] 47:25; 52:15; 58:2; 87:4, 2 10 White [2] 8:20 thing (0) 29:0; 30:20; 45:24; 46:23; 40:6; 87:20 **minge** [21] 13:6, 12; 18:3; 20:11; 38:15; 40:1; 42:3; 43:15; 45:4, 6; 他作: 5全方 数章 71.26; 75:28, 26; 84:4; 87:1; 80:17, 25; 80:7 think [43] 14:14: 30:4: 32:16: 36:4 6, 23; 38:6, 16; 48:16, 18; 48:3, 11, 12; 54:7; 56:17; 57:17; 58:14, 23; 58:8, 11, 12; 60:34; 64:1; 68:4, 25; ## 74:14 74:14 74:14 74:14 20; 78:21; 77:4, 21; 78:14, 78; 80:7; #E:4: #E:5 #E:5 7; #E:14 Withhing [1] 58:24 **White [1] 548** 1964 [4] 40:11; 80:10; 80:20; 80:7 Marie [7] 30:11 10th [74] . 2:1; 3:26; 204, 22; 10:7; 11:33: 12:33: 12:33: 16:30; 16:30; 200 20: 204 & 201, 14: 2018; 2814 284 4 21, 24, 34; 36; 36; 25; 5万十年 3年1年 47年 12年 48年 14年 **经收入 经**货件 化放射 医乳腺 50克 50cg 57:17: 50:50; 60:50; 60:50; 72:52: 73:5 & 760: 780: 78:13: 705.3.4.4.16. 配接 珠 舒思 排 MR7, 10, 10; 67:17; 600; 60:10; MATE SEE MAS Basis (37) &16; 74; 16; 36; £15; 教育 集 1254 1616、1756 16 20a; 26a1; 36.14 36.16 37:26, 24; **游传· 57清、58点 线 博 66.25**° 87:11, 10; 67:4 7, 14; 10; 60:27; 71:10 20: 040 00:10: 00:0 01:0 though [3] 18:17; 22:21; 40:3 thought (3) 15:2: 70:53; 80:16 thousand [2] 10:22; 22:16 Bounands [1] 2421 : thread [1] -78:8 threatened [1] 87:3 threetn [4] 87:15, 16, 17 🕟 Marco [4] 4:21; 7:1; 30:10; 80:10

threshold [1] 37:10

through [25] 5-6: 17-5, 14: 27:1 33:3; 41:14; 51:21; 53:22; 54:53; 89:9, 17, 18; 70:12; 75:1, 11; 76:10; 80:7, 8; 93:3 throughout [2] 13:1; 60:3 **throw** [1] 58:18 thunderstorm [1]. 71:20 **Um [2] 90:13; 92:17** time [31] 9:4; 15:6; 20:6; 27:18, 25; 33:5, 10; 40:23; 45:6; 47:7; 50:17, 21; 51:4; 60:12, 16, 17, 18, 20; 81:5, 6; 62:21, 25; 63:11; 68:5, 23; 70:4, 19; 73:21; 74:17, 24; 80:9 times [11] 7:24, 25; 15:12; 18:22, 23; 21:13; 47:12; 52:10; 60:1; 67:7; 80:1 Sming [2]- 74:13; 79:18 **Urades** [1] 80:8 tire [1]. 33:18 **tires** [5] 32:11, 12, 20, 21; 34:1 W [1] 37:11 10-13 [4] 18:1; 18:13; 32:18; 37:12 **teday (4) , 8:8:** 57:13; 78:15; 74:3, 15; 80:4 together [1] 11:18 1086 [6] 28:10; 31:14: 420; 81:10; tem [4] 3.2; 80:14:-81:4 16 teer's (1) #1:15 tementen [7] 70:22 tonight [1] 87:10 1000 [2] SH-20 **第 周 404 株7**2 57余 5条7余 teck [7] 2010; 38:0; 52:21; 62:15; 78:25: ME 10 top [1] 26:33 **82.95** temps [1] 12:17 terrendo (2) de de 20:12 tours (M 4214 St. & 527) 50:5 tente [1]: 11:17tenieningist [2] 16:16; 22:16 1000 [1] 501 tealler [1] 72:14 trained [1] 62:10 training [4] 20:4; 40:20, 21 transprint [2] 1:8; 966 gouchest till 104 mand [1] #2:17 treatment [13] &c; 8:1; 48:18; **新糖 除疗 陈鹤 郑朱玉不传** Mark 82:10; 54:2 tennahan [1] 77:0 wind (24) 7:2: 11:5, 4, 15, 16; 20:10; 38:11; 38:30; 38:4 A 16; 40:4 21; 42:14: 50:26: 60:3, 25: 61:4, 12, 14: 42:20; 73:26; 74:2 tried [8] 5-6: 30:2: 45:7:77:16; 不拘 糖性

72:17; 76:18; 77:1; 80:25; 93:10, 12

10 [1] 7418 truoles [3] 32:11; 43:16; 47:12 tree [1] 56:5 Euty [1] 78:6 WV [17] 51:12, 13, 15; 58:20, 22, 23, 24; 521, 3, 5, 8, 10, 14, 24; 54:3: 84:7. 10 TY [5] 20:7, 9; 22:1; 48:22; 67:24 Trying [11] 14:25; 27:30; 41:14; 47:13; 51:18; 56:16; 61:6; 73:23; 77:22: 81:18 tereday [1] 80:14 temble [1] 40:1 ternin [1] 79:25 two [21] 5:22; 6:2; 11:24; 15:13; 21:15; 28:24; 30:10; 41:18, 18; 50:11; 00:10; 00:24; 73:74, 20; 74:5; 76:7; 81:15; 86:1, 20; 86:14; 90:15 type [2] 33:2; 36:21 1/240 [1] 40:21 Typical [8] 41:4, 5; 60:8, 23; 86:8; Welcolly (N. 33:15, 35: 57:24: 46:14.

16: M:19

ME 在 71年 元7. 77. 海线 80:16: 81:15: 25: M.S. 13: 80:24: 88:4, 19; 90:23; 91:18 spgrade [3] 17:22, 23; 18:8 upost [1] 87:18 urine [1] 86:17 um [35] 4:9; 9:21, 22, 24; 12:5: 14:13: 17:20: 37:18: 39:14, 20: 41:25; 42:25; 43:4, 9; 51:19; 58:3; 59:7, 17, 24; 75:5, 21; 77:21; 79:13: 80:11; 81:10, 17; 82:9, 10, 12; 87:11; 90:3, 9, 10, 11, 15 ues [18] 6:21; 13:13; 18:17, 18, 24; 21:20; 22:10; 25:22; 34:25; 41:8; 50:14; 58:25; 60:13, 17; 82:2, 22, 25; 78:22; 81:4; 82:12; 90:18 27:13 wood [Nf 32:22; 40:17; 50:0; 57:7; 50:1: 21:5 uning (M 10:26; 12:6; 18:26; 28:10; 43.0; 50:1; 67:20; 81:11

". V .

woustly [1] 60:13

- 11 ultimately [4] 17:5; \$2:16; \$1:14, 17 unblesed [1] 78:26 impostration [1] 44:22 under [M 32:6; 41:16; 42:17; 62:6, **註 跳点 未 数10** underneath /17 321 understand (1) 3.6; 24:17; 28:6; 38% 54d understanding [13], 12:12; 18:21; 27:50; 57:70; 46:54; 464; 70; 50:56; 87:17 88:25 72:4. 85 88:45 underetands [1] 1696 understand (M. Strike, That, \$100) undertabe [1] 78:14. undertolding [1] 70:85miller [1] 62:16. undertunably [3] '70 manappy (1) OR SE unique (1) 7th -74s mm, m wite4 [4] * exet. unious (3/ 2021, 24: 60:1 unplanted [2] \$303; \$6.70, 76 empresedented [1] 78d well [4] \$45, 12; Min 16, 18 uniforcity [7] 74:18 untracted [1] 60:12 wifes ain 10:10 that a 10. 11: 1617; 17:16: 186; 28:16; 31点 11; 34:1; 367; 36:12; 40:1; 41:7; " 46:5; 80:14; 36:17; \$4:06; 57:10; SEER OF IN SERVICE SEEN, SEED,

Venest [1] 67:7 vellé [N 15:30; 32:10; 83:16 volidate [1] 14:86 validation [1] 16:5 value [4] 18:18: 18:14: 21:14: 37:11 values [7] 17:17 Veper (NE 22:0: 36:10, 16 materia (SE 84-8 80-8), 50 ME [1 85:15; week feet 700.00 feet 700.00 Feet 7 weeky FMF SECTION STATES verserator (1) 7:10 and of remies [4] seem Anness Lift , tages 1000 SACY MAG SAN, SAC IN MIN MIN MIN THE WAY 11 41 A 4714 33 18 mm W 17 W14 station (7) Sitté 104. E 17 tell [4] Parts at 14 met 2014 stat volation [3] 24:10; 57:00, 94 votatitaation [2] 30/3; 64:17 voltaggio [4] Sidt 75th; Strift Strik **98-14**

volume [2] 22:10, 17

volumineus [2] 8:17

VALUE [74] 80£17, 16, 16

week [2] 21:13; 90:10 wellt [1] 22:24 welling [2] 22:23; 45:21 want (26) 9:9, 15; 11:2; 18:6, 22; 28:22; 29:15; 30:21, 22; 49:6; 51:7, 13; 55:14; 56:16, 19; 61:1; 63:17, 1会 72:1会 74:10, 20; 7会1会 7金1会 82:25; 90:7 wanted [14] 2:22; 8:8; 10:5; 22:18; 62:10; 64:3; 65:18; 74:8; 75:3; weste (2) 9:5; 30:4 weeked [1] 49:19 wast [13] 20:10; 23:2; 25:18, 21; 30:10; 32:10; 30:10; 42:10; 55:3; 67:20, 21; 60:17; 73:16 warin /166 S.Sr. 20:54: 30:25: 40:10: \$2:17; 50:18; 67:4, 5; 7, 10; 50:4; 88:10; 88:25; 70:0; 71:10; 83:30 wantes (1) 77:10. Weeks [1] 46:4 water [43] && 8:56; 8:1; 12:4; 40:17; 48:17; 18, 22; 50:8, 12; 51:8, 跳 独 题:17: 路底 & 位 11. 12. 14. 精炼机构 经海马不振增加 21: 804 & 18 30, 21, 36: 504 2 4 7 78:17 ` water /17 7:55 vong [10] 11,00; 36.0; 30:12; 42:12; 100 16 17: 81% 10: 6001; 72:1; 4 4 10 34 100 THE ways (7) 53-6 WE FIRST AND AND THE TA TA 無 的 就 降 酶 难 的 75. 之 沈耀城 鵝 跳 机木棉 机 双 18 30 18 16 17 18 14 16 17. 20 404 M 16 26 20 104 6 8 W THE REAL PROPERTY AND AND ADDRESS OF MARKET PARTY. 14. 16. 16. 17. 38. 30. 30. 174. 2. 4. unique (15. ance 186 4 30 304 6 214 7 4 2 18 5612 MA 25 667 9 667 M. 36 36 55 55 3001, 38, 38 **建筑武装 整新 306 年 18 18** 40 MM 18 - OLG & 41 MM **通信 銀代 推 坑 推 跳 趴坑 除 10水 拖地 20% 超电 超**级 204 30 30; 307, 12; 12, 17, 30, 36; 3000; 3001; 301, 10; 300; 3010 经基本性 無 题 题 "我们是是'我一种' 旅行 地 知此 经报 统 16 16 16 16 16 16 16 16 16 14 38 406 4 14 16 25 38: 46% 支担 株 34 個人 电 株 地 機構 独 杨维 经收货捐款 400. 高 75. 拉: 40万. 87%, 万 74. 300 MENT 5342 4 76 76 76 27 28 24 20: Set, & 8 71, 14 16 20: 86/15 选择报报报报 40. 14. 34 384. 31. 35

. w .

571, E N. 15. 16 15. 3 4 7, 15, 16, 17, 18, 30, 34; SEL 8 12 18 22 23 25; 604 8 10 17. 22, 23, 24; 81:2, 3, 5, 6, 8, 8, 12, 14 16, 22, 24, 26: 62:1, 2, 7, 9, 10, 12, 14, 18, 21; 63:6, 7, 17, 19, 22, 23, 84:3, 4, 5, 8, 7, 22; 85:10, 14, 18, 67:12, 14, 17, 18; 68:8; 71:15, 18, 18 20, 25; 73:4, 13, 15, 20, 22, 23, 25: 74:1, 5, 7, 8, 8, 20, 22, 24: 75:1, 2, 3, 7. 10. 11. 21: 78:5. 6. 7. 10. 13. 22: 77:3 5 10, 11, 14, 16, 19, 20: 78:3. 4. 7. 10. 24. 25: 79:18. 17: 80:3: 81:5, 16, 20, 22, 24; 82:5, 12, 14, 25; 83:2, 14, 22; 84:5, 7, 17, 13, 23, 24; 85:4; 87:1, 4, 22; 88:2, 4, 6, 9, 21; 88:4. 15. 24; 90:1, 2, 10, 16, 17; MES 824 7 we'd [1] 59:20 we'll (2) 3:27: 4:7 wellte [48] 7:3: 12:12, 14: 13:18, 17. 1集 1集 22. 2次 1条11, 21; 21:14, 17: 28:11; 28:5; 34:5; 38:4; 38:73; 40:14 18 42:15 16 24: 47:12 14: 48:35 48:36; 50:1; 51:2; 52:4; 55:20, 22: 50:54: 50:11: 50:7: 71:12 作 74年 76年 25. 16 765 16 80:10; 86:0; 87:4; RE we've pay and milk done. 47:50, 21, 54; 48:0; Stab 56:50; 50.21; 57:10; 50:11, 36; 73:21; 744L 42: 784 764, 16: 78:14: MA 18 MIN .treatment [1] 78:15 West 77, 726 mes [15] 1460; 1822; 27:10; 202; 3817, 16 386; 376, 16, 16, 17; 367 weeting [70] 194 194 201; 3034 Std. A 13 Mt. 324 50:16 ook |4 7d; 864; 45th; 88:14 7616 766 778 7614 16 18 804; 814; 88:17; 98:12 volumed [15 , 78:1. 100 /40 217, 32 47, 432, 74; SOUR STATE SELTE SELTS, SELT, 7: 69ch 70ch 70c04; 70c4; 70c21; ARM & ADM TR 645 10 30: 88/16, 17; 88:6, 13; 87:86 well-documented [1] 55:12 week [14] 16:8, 8; 17:14; 21:20 27:14 10: 20:1; 30:6; 61:1; 62:1 66/16 76/16 76/4 7

11:8, 14; 12:8; 14:25; 16:4, 8, 11, 18: 17:10, 18, 20: 20:8, 19: 21:7, 8 9; 22:3, 24; 23:21; 24:16; 25:2; 28:16; 28:12, 24; 30:5, 10; 31:29; 32:21; 35:7, 10; 37:20; 41:13; 42:13; 43:4, 6; 46:17; 52:4; 164:22; 55:17, 18; 56:1, 2; 58:7; 61:12; 62:4, 19; 85:17; 87:6, 7; 71:15; = 78:3, 18, 23; 74:2, 9, 24, 25; 75:2, 3; 76:6; 77:6, 12; 80:3, 14; 84:13; 86:16; 86:5, 6, 7; 91:2, 21 weren't [3] 21:22; 39:17; 74:7 west [1] 42:6 weetinghouse [1] 78:8 WER [13] 14:1; 43:1; 48:5, 12; 51:8, 25; 52:3, 10; 63:7, 21; wetter [1] 63:14 what's [10] 12:25; 15:20; 23:15; 57:4; 61:3, 10; 66:7; 66:8; 66:7, 20 whatever [10] 9:14; 46:22; 52:26; 56:12; 64:10, 23; 66:15; 74:12; 88:15: 91:12 whetnet [2] 31:12; 43:4 when [57] \$7; 4:11; \$:16: 15:4, 4, 16, 21; 18:1; 20:11; 21:3, 12, 22, 23; 22:\$ 18, 23, 24; 23:4; 25:7; 28:18; 284; 2828; 31:2, 4; 32:22; 32:12; 37:18; 38:5, 17; 41:4; 42:13; 44:13; 47:3; 68:4, 18; 51:5; 52:4, 10; 62:4; 60:14; 60:12, 14, 26; 67:7; 70:4, 18; 71:20; 73:23; 75:24; 80:14, 15; 84:7, would [108] 2:10; 4:10; 54; 51; 10; 80:22; 96:10, 17 whenever [1] 18:1 where (20) 12:21; 14:5, 2; 10:30; 18:21; 32:20; 36:1; 38%, 8; 40:13; ... 44:13: 46:4 17, 25: 40:17; 82:4 17, 24: 50.54: 63:4: 67:8: 71:6: 16: 78.4. 73. 75. 77.金、映彩、概念。 where's [7] 28:12 whether M 10:10: 30.00: 04.00: 72:11; 78:10, 00:00 MB which (63) 2:12; 2:10; 30% 3 10:10, 25: 11:10; 10:00: 7-00 10-20: 17:1: 20:00 00:00 24: 51:22; ST:10 844 MA 8718 M white [4] 51:54; shirt 22; 70.0 the [13] 2:16, 24; 2:18; 18:00 P 17:16 38:0 38:36 38:4 & 30:14 00:16: 72:23: 80:10 ANT (2) 20:10; 40:00 🐰 over [2] 8:4; 47:8 nhale [4] 32:3; 38:30; 38:10; 42:4; my [10] 30:2; 41:10; 42:10; 40:4; 58.6, 13; 70:16, 21; 78:8; 85:2 will [24] 4:22; &1; 72:25; 31:16,

43:11; 45:11; 46:18; 53:3, 8, 11,-16 25; 58:0; 59:22; 43:6, 4; 80:2; 89:11; 90:22, 23 williamoport [2] 3:11; 89:9 winds [1] 71:24 wipe [3] 18:3; 32:23; 33:20 wine [1] 44:19 wiek (2) 2:11, 12 within [6] 22:3; 30:10; 48:18; 53:12; year've [7] 38:10; 62:24; 63:12; 86:19: 94:5 without [5] 9:25; 41:11; 67:24; 91:7, year [36] 10:4; 18:14; 20:4; 22:20; witnessing [1] 64:17 wen't (4) 12:20; 85:10, 18; 88:23 wording [1] 78:8 Vigodo_6() 60:71; 91:6, 13; 92:6 work [9] 4:2; 40:11; 41:2; 42:24; 50:15, 10; 50:22; 67:10; 60:18 · worksbie [1] 63:15 worked [4] 5:23; 4:3, 5; 25:7; 20:17; 78:12 westeer [2] 17:0; 57:1 wartners [5] 17:16; 28:6, 8; 32:54; 32% worthing (4) etc. 12:2; 20:0; 36:10; 20:0, 19 works (3) 4:16; 40:4 wery [1] \$8:18 were [4] \$2:14; \$6.5; 60.6; worth [1] SES 476 74 16 86 85 17 186 ML 22 17:20 12:20 14:20 St. 17:21: 18:17; 38:18; 36:5; 11; 38:18; 38:4. 马马科·阿勒 新海 新糖 30% 444. 14. 302 11. 16. 3015 GUT street was see to the wat to 4 M M M M M BOIG MA THE STREET SEC. SALE THE STREET FIF BIR 7014 749 705

year (f) see

years [8] 11:50; 47:51; 80:10;

7321; MET

pet [2] 18:3: 18:3; 19:5 yelm [3] 78:14, 16 yest [3] 78:13, 15, 18 year's [2] 63:3; 67:10 yeu're [26] 16:17, 20; 29:25; 30:2; 31:18, 18; 36:14; 36:5, 6; 47:4; 51:1, 3, 5, 17; 82:4; 84:1; 86:16, 19: 69:22; 70:13; 71:9; 74:11; 76:20; 79:9; 80:19; 63:3; 66:20; 62:7 69:15; 74:22; 75:22; 86:12 26:20; 28:21; 30:2, 18, 20; 36:13; 50:15, 17; 50:15; 60:21; 60:2; 70:25; 71:1, 4 7, 4 724 74:13, 17: 75:22: 78:21; 82:4; 85:20, 22; 88:20, 24; E7:7, 12; 80:14; 80:28; 90:2, 10 yeurs [2] 30:14, 22 yearell [1] 2:36

- Z -

2000 [1] 44:T. 2000 [7] 5:4; 31:3, 20; 32:20; APPENDIX H

1	MEETING OF THE
2	PENNSYLVANIA COUNTY FARM BUREAU
3	LOCAL EXTENSION OFFICE
4	WITH ROBERT MARTIN,
5	NATIONAL OMBUDSMAN FOR THE EPA,
6	PERTAINING TO THE
7	DRAKE CHEMICAL INCINERATOR
8	
9	TRANSCRIPT OF PROCEEDINGS
10	
11	
12	DATE: MARCH 4, 1998, 10:12 A.M.
13	
14	PLACE: ROUTE 64
15	MILL HALL, PENNSYLVANIA
16	•
17	
18	
19	
20	
21	
22	
23	
24	ORIGINAL
25	

PROCEEDINGS

MR. ROBERT MARTIN (NATIONAL OMBUDSMAN):
This is a meeting with Bob Martin, National Ombudsman for
EPA, and the Clinton County Farm Bureau. Thank you all
for having me here. I hope I don't take up too much of
your night. I know you're very busy and I'm sure you work
very hard.

As I mentioned earlier, I just want to make sure I've heard what you think I need to hear and what I need to know as I finish what I do at the end of this month. I am scheduled to finish my final report on Drake by March 31, which will be distributed to obviously EPA, both at the headquarters and the regional level, and also to everyone who has an interest in this project as well.

I am interested in the remark you made just a moment ago about the moss bags and the sampling. Is that something that you care to make for the record just so we can tie down what the concern is there?

MR. THOMAS BOSSERT: The moss bags or other things monitor what is coming down from the air.

MR. MARTIN: Right.

MR. BOSSERT: Of course what affects moss bags theoretically would affect our land, and it appears that -- the moss bags or whatever kind of leaves, maple leaves or what have you, are good indicators of what is

there and what isn't there. And our concern is that we know what happens on our land. The data collected from them apparently is pretty accurate. I'm not in that field. I don't know for sure, but I think there is background data sufficient at this time that if we see indicators from testing that is done in the future, as per the last conversation, how soon can we expect results? With that data I think it is the basis for our position as to who is responsible for contamination, -- and that was the position we assumed as PFB in this case; that we don't think we can stop you. We think we have a concern, a legitimate concern. Down river people are going to suffer if that stuff gets away, I'm sure. Therefore, we didn't stand in front of this project. We only stand where we want to have somebody responsible for the liability that it could create.

1

2

3

4

5

б

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. MARTIN: That's the reason we are here.

MR. BOSSERT: And I think that the whole setup at this point in time is going to show us that. I'm confident, and I think PFB and the County is confident, that that data is going to show us what we need to see. And we're -- I'm satisfied, and I don't know, but I guess everybody else can speak for themselves. I think we've been on point with this position for -- how long has it been? I don't know. We've been pounding this subject

around for a long time.

MS. COREENA MEYER: Three years.

MR. BOSSERT: I guess three years. So we're prepared to listen at this point in time, and what we hear dictates to us what we do as individuals and in the best interest of the Farm Bureau. So we're listening and very, very attentive as to what the moss says and what the leaves say, which I think are novel in idea and apparently are being accepted in the community -- in that scientific community very well. So we're kind of impressed with the fact that some of these ideas are initiated here, which is not unusual for us. We always have good ideas.

MR. GREG CRYSTALL: Can I put it into context for Bob for a minute? My name is Greg Crystall.

I'm from EPA. This pretty much resulted from conversations with Peter Cosmyer about sampling farm products, milk, produce----

MS. MEYER: Meat.

MR. CRYSTALL: Meat, vegetables. And the Farm Bureau, after hearing that idea, thought there was some merit in doing something like that; but then with the Department of Agriculture and the State Department of Agriculture and the State Farm Bureau, the Department of Environmental Protection, and some other folks, it was

decided that the best way to do the particular sampling that we needed to protect the farmers' interests, to get background data, and to see if there was some way to monitor, was not to actually put numbers related to dioxin levels in Clinton County products, because no other county in the state has numbers associated with it. Right away, it was, well, Clinton County has this. Everybody has this. And we didn't even start the project yet. So in order to avoid that, we came up with the idea with Dick Leah from the Corps of Engineers and a waterways experimental station in Mississippi and two Penn State professors from State College, and I guess the pathology department, to sample moss bags around the community. ended up that we have over two years of background now on dioxin and metals, the moss bags, and two seasons of maple leaves that we've sampled for background. And we've committed to continue this fifty-five day moss bag rotation and analysis through the project, and after the project, to protect the interests of the farmers in Clinton County.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

This is something that our opponents say
was a back door deal, a back room deal, that totally
disrespected anything that Peter Kostmayer had in mind,
but these are the folks that needed the thing to happen,
and I think that they are satisfied with the efforts we're

taking to protect them. So that's just to put it in perspective.

2

5

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MS. MEYER: Can I add to that?
MR. CRYSTALL: Please.

MS. MEYER: The reason we went the route we did with the moss bags and the maple leaves, and the actual moss that was on the ground, was after speaking with these Penn State professors, Dr. Davis and Dr. Skelley, we had them do a little bit of research into what products could be tested that would have background testing elsewhere within the United States to compare it to. And we found that milk and meat and vegetables were not going to provide a comparison. The only thing would be the leaves and the mosses. The moss bags were brought into play because they're a natural conductor. And we felt that there was no way we wanted to put individual farmers lives on the line and leave them hanging in the air while everybody sat nice and tight in their nests. That was not fair to us. We were pushed to this, -- to do the testing and do whatever to protect ourselves because, and I'll lay it on the line for you, AIR went to some of the processing plants and tried to get them not to take Clinton County products, which, you know, if you want to talk about a back room deal, -- we'll lay it on the line. That's a back room deal.

MR. MARTIN: I understand.

1

2 MS. MEYER: The back room deals that 3 they're talking about took place at the Department of 4 Agriculture, and you can ask me anything, and I will tell 5 you. These guys know, I'm up front. I will not feed you a line and hope and pray that it's right. I'll tell you the 6 7 EPA was there, DEP, Penn State, the Department of . 8 Agriculture. Senator Korman's office was there. A representative from Mike Hanna's office was there. 9 10 Pennsylvania Farm Bureau, the State, and Clinton County 11 Farm Bureau Local. And we had a number of meetings down 12 there to decide what direction we wanted to go. We were 13 approached to join the lawsuit with AIR. We decided that 14 that was not going to help us in any way. If it failed 1:5 everybody was a loser. This was the only way that we 16 could not only protect the farming community, but protect the community as a whole. That's why we went the route we 17 went. And you were at -- at the meeting you were at I was 18 19 there, and I even have -- it's taped. I have it at home. 20 We did bring up the testing. And, you know, the people who want the testing don't have anything to lose in that 21 department. They don't have farms. They eat and drink 22 from the grocery store. They don't have anything to lose. 23 But they wanted to force us into a position by scaring us, 24 and for awhile it looked like, you know, that may be the 25

route we would have to take, because we had, you know, a processing plant writing letters; and, after contacting them, it wasn't what was being said to me. It was that they were concerned because they were only hearing one side of the story. After hearing both sides of the story we assured them that with this testing anything that spiked was going to raise our attention, and that Penn State was working on it. That assured them that if there were any problems they could come to us. And I haven't received a call since.

25.

But, to be perfectly honest with you, we don't believe in joining the lawsuit. We never did. I mean, we thought about it, but we knew that it was not going to work for us. So we went this route and I think it was the best thing we ever did. We've been threatened. We've had -- I've had numerous, numerous phone calls just irate, -- because when certain people don't get their own way, and they feel that we're gaining the respect of the agencies, they get angry. And we even had an AIR member come to our board meeting and sit there and tell us that they were going to follow our milk trucks, get milk out of these milk tankers and test it; and, if they couldn't do that, they were going to go to the processing plants, get their disbursal routes, and test the milk off the shelves. So go give you an idea of radical, -- that's radical. So

does that give you a little bit of an idea of what we've dealing with?

MR. MARTIN: Yes, it does.

MR. BOSSERT: I don't think -- I should add that I don't think PFB has ever been in a position that we thought that we had to take reprisals against anyone in the process.

MS. MEYER: No.

MR. BOSSERT: People did what they wanted to do, but I don't think -- if somebody was offended, I don't think this organization every felt that we were in a position that we would want to take reprisals or contest it. You do what you want to. We do what we want to do. That's the feeling I have. Again, here I end up speaking for the Pennsylvania Farm Bureau, and I don't want to assume that vest at this point in time. But I don't think we ever got into that muckraking situation.

MS. MEYER: The only letter that we ever wrote in that was in contradiction -- I mean, we left the paper say -- we left them say whatever they wanted. And I do have a copy of the response letter to comments made in the paper by AIR and by Rusty Bottorf, that we did contradict that. There was one rebuttal letter that went out, and that clearly stated our position; and they basically left us alone after that. We had just had

1 enough. 2 MR. DAVID SNOOK: That was the letter to 3 the editor. That went in under a letter to 4 MS. MEYER: 5 the editor and it was -- it stated our position very clearly. And what I really don't enjoy is the, "Well the 6 7 Farm Bureau is doing this. The Farm Bureau is doing that." We have not had any contact with Rusty or with AIR 8 9 since Vickie came and gave her spiel at that board 10 meeting. And I really get upset about the fact that they 11 have no clue what we're doing, but they'll spout and say, "They're doing this and they're doing that." They have no 12 13 idea. MR. MARTIN: And when was the last time AIR 14 sat down with you? Last year, I imagine, or before that? 15 I couldn't tell you. 16 MS. MEYER: 17 MR. SNOOK: September or October. It was September or October of MS. MEYER: 18 just this past year and it was -- it was horrendous, and I 19 can tell you right now that it was ----20 MR. CRYSTALL: That was one meeting I 21 missed too. 22 MS. MEYER: Lucky you! 23 I think in retrospect in this MR. BOSSERT: 24 process -- I think the Pennsylvania Farm Bureau is one of 25

the organizations that has looked at this process in the 2 right fashion, in a positive way, and I think our efforts 3 are going to stand as an effort in this process. ongoing effort, and which I think it is the only 5 organization in the area that has something in mind like б that. The others are -- if they're defeated they're done. 7 This process that we have adopted and are advocating is an 8 ongoing process that continues, and will continue post-9 burn, which is very beneficial to this community. And I 10 think in time the various people in this community are 11 going to realize the effort that the Pennsylvania Farm 12 Bureau did here, that it was the right thing to do, and 13 that it was the positive thing to do, and that it has 14 lasting effects and implications. I think the 15 Pennsylvania Farm Bureau should be proud of themselves in 16 this county. MR. MARTIN: So you all decided to select 17 moss bags as an indicator for dioxin contamination? 18 19 MS. MEYER: That was from Penn State. State said that --- and we're trusting them because they 20 are the scientific force that is in this area, and they 21 22 know what they're doing. MR. BOSSERT: The criterias were an 23 independent collection agency. 24

Right.

MS. MEYER:

25

1	MR. BOSSERT: That was one of the
2	criterias, and up front in our negotiations, and we
3	advocated that. It came out of one of those meetings, the
4	think tank type thing that we had, and it came to a point
5	that it had to be an independent agency collecting them,
6	and I think that's still the way it stands, Penn State
7	University.
8	MR. MARTIN: Penn State will collect the
٩	moss bags then?
10	MR. CRYSTALL: With Dr. Leah, with Dick
11	Leah. They go out with him. They consult with him. They
12	come to the meetings with the board and help explain
13	things.
14	MR. MARTIN: Okay. Is there now then a set
15	of pretrial burn data from the moss bags?
16	MR. CRYSTALL: Yes.
17	MR. MARTIN: Is there a set of data during
18	the operation of the trial burn?
19	MS. MEYER: Yes. There are six before the
20	trial burn; three sets during; and five sets after. So
21	there are enough sets to do a comparison, and the numbers
22	are not spiking anywhere. I mean, there was one count
23	where it did, but that was from the
24	MR. SNOOK: The hospital incinerator.
25	MR. CRYSTALL: The airport, the

1	airport
2	MS. MEYER: No, that was the
3	MR. CRYSTALL: The metals at the airport.
4	MS. MEYER: No. That before they coated
5	the wires.
6	MR. CRYSTALL: We hung the moss bags on I
7	guess galvanized steel rail at the hospital and we got a
8	high hit of zinc. That was the problem. The only
9	statistically significant dioxin that we found was located
10	at the hospital.
11	MS. MEYER: And they have their own
12	incinerator. They have a medical waste incinerator. That
13	is from what 19 60 something.
14	MR. CRYSTALL: It has no air pollution
15	controls really.
16	MS. MEYER: Right, and it operates under
17	the regulations set forth when it was put into place.
18	MR. MARTIN: Right.
19	MS. MEYER: So it's not operating under
20	current regulations.
21	MS. CRYSTALL: Do you want a full set of
22	the moss bag data and everything like that as well?
23	MR. MARTIN: That would be helpful.
24	MS. CRYSTALL: Okay.
25.	MR. MARTIN: The next interval then for

1 collection of the moss bag data is forty-five days from 3 MR. GEORGE DRUMBOR: The last samples were 4 collected the week of February 9th and 10th. He was in 5 town for a public meeting because they were collecting----6 MR. CRYSTALL: And those should be 7 available in June I would imagine. 8 MR. DOTTERER: There is a conflict in my 9 recollections here. Help me. The meeting was sometime 10 ago and you people were outlining where you had these 11 tests -- the moss bags. You had a diagram there down 12 along the creek, -- and the hospital, and various places around here. Well, the report that AIR put out finally in 13 14 Williamsport was that you had no local testing -- if not **, 15** Williamsport. MS. MEYER: That's the air monitoring. 16 17 MR. CRYSTALL: That's weather data from the 18 air monitoring. MR. DOTTERER: Weather data. 19 MR. CRYSTALL: And the fact is, we used six 20 months of Lock Haven data, and we used six months of 21 Williamsport data, and then some area----22 MR. DOTTERER: Because I remember from what 23 I read there, they were saying you weren't using local----24 MR. CRYSTALL: That's what they've been 25

1	saying for the last four years and
2	MR. DOTTERER: No local testing conditions.
3	MR. CRYSTALL: We have not used a full year
4	of local meteorological conditions to run the air models.
5	MR. DOTTERER: They were talking about air.
6	MR. CRYSTALL: Air modeling. That I
7	think we've beat that one to death in all honesty.
8	MS. MEYER: That doesn't deal with the moss
9	bags.
10	MR. DOTTERER: Well, that's not the way I
11	remember it though. I must have had it wrong.
12	MS. MEYER: Well, AIR might have claimed
13	that, but all of this data, the Penn State professors
14	go out and help collect it. They know where it's at. All
15	of the moss bag data and all of the statistical data that
16	we get is from right here. It's from Penn State.
17	MR. DOTTERER: Well, I remember they were
18	emphasizing in these reports about collecting information
19	from Williamsport and over
20	MR. CRYSTALL: And over Phillipsburg and
21	Pittsburgh.
22	MR. DOTTERER: Yeah
23	MR. CRYSTALL: Weather data.
2 4	MS. MEYER: Weather data.
25	MR. DOTTERER: But they said you were not

collecting data from the local area here. 2 MR. CRYSTALL: Well, they generalized like that. We didn't collect weather data, but we've got all 3 . of this other data from this area. MR. DOTTERER: Okay. 6 MR. MARTIN: Well, Greg, just for the record, maybe we could clarify that. Where are the moss 8 bags? I mean, how many moss bags----9 MR. CRYSTALL: 'There are four moss bag 10 collection stations which are located in Clinton County. 11 One of them is at the airport right near the Monroe Farms 12 site. MR. MARTIN: The Piper Airport? 13 14 MR. CRYSTALL: Yes. One of them is in 15 Castanea. There is one at the hospital, -- and the other 16 one was----MR. BOSSERT: Haggens [phonetic] ----17 MR. DRUMBOR: It's the high school athletic 18 19 field. It's at Fourth Street at the railroad track. 20 MR. MARTIN: But there are moss bags at each of the ----21 MR. CRYSTALL: At each of the air stations 22 as well. There are separate moss bag locations and there 23 are also moss bags at each of our air sampling stations. 24 MR. MIKE OGDEN: The four that you cited

25

were the four air sampling stations. 1 MR. CRYSTALL: Right, and there's four 2 3 other ----MR. OGDEN: And then there are four more 5 more distant in the community. There is one at McElhatten adjacent to the Army Reserve Center. There are two 6 7 roughly along Bald Eagle Creek along -- I believe it's Youngsdale----8 9 MS. MEYER: Youngsdale Road. MR. OGDEN: Youngsdale Road, over at Bald 10 11 Eagle Creek -- Castanea. 12 MR. OGDEN: We have all that on a map, Bob, that we can get for you very easily and it will identify 13 14 those. They key point is that there are four independent locations, and then there are four that are co-located 15 16 with the station -- what I call the monitoring -- the air monitoring stations that we've got established with MRI 17 and OHM. And the intent there is to at some point try to 18 correlate, if we can, the data that comes from the MRI and 19 OHM stations, and see if there is some way we can 20 correlate with the moss bags that are co-located at those 21 22 locations. I just wanted to make it clear MR. MARTIN: 23 for the record that the moss bag stations are in the 24

25

community.

1 MS. MEYER: And the date that you're looking for is with our June meeting of 1997 -- was when 2 she came, and it was Vickie Sempley [phonetic], and she 3 tape recorded -- she's got a tape recording of what she said to us. But she even threatened to -- she said that 5 ٠6 they had enough people that they could boycott all of the 7 farm products grown in the county, and she really did a 8 number. And I heard it all on the phone between her and 9 Bill for forty-five minutes before we even got to the 10 board meeting. So -- anybody who knows me knows that I 11 will not be threatened. It doesn't work that way. And I 12 said -- she wanted me to bring it to the board. And I 13 said, "No. If you want to do it, you do it yourself." 14 And she was very angry and very upset, and she wanted 15 apologies and she wanted us to make decisions that night, 16 -- and that's not the way we work. And she slammed the 17 door when she left and was not happy.

MR. MARTIN: In the early stages of the public participation process for Drake was it the AIR group who asked, I believe it was Administrator Cosmyer, to sample the dairy----

18

19

20

21

22

23

24

25

MS. MEYER: That was a decision -- we had talked about it -- because at that point I was the liaison between the Farm Bureau and AIR, and they had talked to me about it; and I had asked Peter Cosmyer if that would be

possible. I did not say that was what we wanted done. I asked if that was a possibility. And then AIR went forth and asked him themselves, and asked Roy Schrock if they would definitely do that. And that took somebody volunteering to do that, -- which wasn't going to happen. I mean, nobody wanted to put their farm on the line. even considered having some of the farms tested with a number system, with concealed, you know, names, so it wouldn't be associated with a particular farm, but it was still up for -- you know, anybody could get that information if they subpoenaed it, and those people would be in trouble if anything showed up. So we thought, you know, it's not fair to pinpoint or to point your finger at any one person. Let's do a generic community testing that would have a comparison value in the scientific community, and where they would have other data to go back to and to look at. And that is where Penn State came in, and they were the ones who suggested that this was the only thing that they could come up with that was going to work. That's why we went with that.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. MARTIN: Okay.

MS. MEYER: If -- one of the things Dave and I have talked about is, -- you know, they keep saying about how they want milk tested, and they want milk tested, and if that's the case, then maybe they should

test breast milk, which is one of their biggest concerns. 2 One of their biggest concerns is the babies and the breast 3 If they want to do that, why don't they test breast 4 milk? 5 MR. MARTIN: So you suggested that back to 6 AIR? MS. MEYER: No, no. They -- we just 7 discussed this at a public meeting. MR. MARTIN: Okay. 9 MS. MEYER: Dave and I discussed this. 10 11 But, see, they've not contacted us personally. 12 MR. MARTIN: Um-hunh, okay. 13 MS. MEYER: They've had other people 14 contact us and say, "Will you meet with us? Will you meet 15 with Frank Harrison? Can we come to your house?" -- No. It's -- if they want to meet with us, they can call and 16 talk to us. You know, we're human beings. So we -- both 17 Dave and I have decided that we will decline, unless they 18 have contacted us personally, and then we'll discuss how 19 we want 'em to do that. 20 MR. MARTIN: 21 Thank you. MS. MEYER: Okay? 22 MR. MARTIN: Thank you. I just wanted to 23 get a sense clearly of how all of this started and where 24 it is today with respect to the moss bags and the AIR 25

1 issue. Thank you. 2 MS. MEYER: Are there any questions that you have for us as far as contradicting views? Questions 3 that you've been asked? Or information that you've gotten 4 5 that might pertain to us that we have no idea about? 6 MR. MARTIN: Well, I'm just curious. 7 get one formal communication from you all in November of '96 or October of '96. 8 9 MS. MEYER: It would have been a little 10 while -- a long time ago. MR. MARTIN: Or September of '96, -- a long 11 12 time ago, yes. 13 MS. MEYER: It would have been in '96, 14 yeah. 15 MR. MARTIN: Yeah, concerns about the risk 16 assessment. You had some concerns then. Are there any 17 concerns now? 18 MS. MEYER: I think through having Greg 19 involved at this point -- we have brought all of our concerns to him, and all of those have been addressed. 20 21 Back when Roy was in charge of this project we had a lot 22 of problems, and that's where most of that stemmed from --23 was, you know, trying to get all that hashed out. And as Greg will tell you, if we have any problems we come to 24

him. We outline 'em and we say, "Okay, tell us what

25

you're going to do about this." And I think he's been pretty up front with us, and we've been real up front with him about what we expect to see happen; and so far, so good.

for me?

MR. SNOOK: Okay. Then I guess at this point I'd like to say that we'd like to see this burn get started and over with, and if it meant that we need to cut the times back per hour so that there was an emissions coming up the stack, that that's what we need to do, -- but just get it done. -- Because when you dig it up and put it on the pile -- do it, and get it done anyhow.

MR. MARTIN: Do you all have any questions

MS. MEYER: Your other meetings today, were they similar to this one? Were they along the same lines of the informational process, getting you pretty much upto-date and reinformed about what has been happening?

MR. MARTIN: Well, especially with the Lock
Haven Environmental Advisory Council. They had a number
of questions of how EPA does various things, the
processes, the Super Fund Program, and the Ombudsman
process and whatnot, and we responded to those. That's
generally what that was about. And then this afternoon I
met for a fairly long time with Greg and the Corps of
Engineers and the State about some operational concerns

raised by a former employee at the Drake Facility late So that's what we did this afternoon. 2 MS. MEYER: Okay. I do have one very 3 4 direct question. MR. MARTIN: Um-hunh. 5 MS. MEYER: One of the things that I've 6 caught some flack on is AIR's accusation that your final 7 8 report is being held up because there is information in that that EPA doesn't want out. I don't believe there's any truth to that, but that's what's coming back to me. 10 11 Is your final report being held up? MR. MARTIN: No, the final report is not 1.2 being held up. I have set the schedule for completion of 13 the final report. 14 MS. MEYER: Okay. 15 HR MARTIN: And that is March 31. And the 16 reason behind that date is that I wanted to review the 17 trial burn data, It seemed like a sensible thing to do. 18 Boy, did he get himself in over 19 20 MR. MARTIN: Two, to review the risk 21 lique the risk assessment by the peer reviewers 22 23 MEYER: Um-hunh. MR. MARTIN: And, three, to have an 24 opportunity to come up and meet with you folks on the 25

record all around on the issues. 1 MS. MEYER: Okay. 2 3 MR. MARTIN: And then go final. MS. MEYER: Okay, because that was one of 4 the things that was brought to me, -- was, okay, "AIR says 5 this, and you haven't brought anything up on this 6 7 information. Where do you think this fits? And I wanted 8 to make perfectly clear that we would never want to see that happen. Your report needs to get out as soon as you 9 can possibly get it out. I think that's going to be one 10 of the -- that's been one of the catches, that there's so 11 much -- so many rumors that go around about why it's being 12 held up, and why it's not done yet, -- that I wanted to 13 get a very clear answer on that, and that way I can clear 14 some things up with some people I have to go back to. 15 MR. MARTIN: Well, I'm glad you asked me. 16 You can say that you got it from the horse's mouth. 17 ME METER: Okay, cool . I'm not hard to 18 get slong with. Does anybody else have anything for Bob? 19 No response by any member. I 20 MR. MARTIN: Chay. Thank you. I think we 21 er off the record. The Clinton County Extension February Lvania Farm Board 23 meeting concluded at \$:52 p.m., March 3, 1998.1

25

CERTIFICATION

I hereby certify as the closed microphone stenomask reporter, that the foregoing proceedings were taken by me, and thereafter reduced to typewritten form by me, and that this transcript is a true and accurate record to the best of my ability.

GREENE REPORTING SERVICE

18.

By: Stephen Ce Dreen

Stephen W. Greene,

Court Reporter

GREENE REPORTING SERVICE (717) 398-3020

APPENDIX I

1	MEETING OF THE
2	CLINTON COUNTY BOARD OF COMMISSIONERS
3	FOR
4	DISCUSSIONS WITH ROBERT MARTIN,
5	NATIONAL OMBUDSMAN FOR THE EPA
6	PERTAINING TO THE
7	DRAKE CHEMICAL INCINERATOR
8	
9	TRANSCRIPT OF PROCEEDINGS
10	
11	
12	BOARD MEMBERS: DANIEL VILELLO
13	MILES KESSINGER
14	DEAN BOTTORF
15	·
16	DATE: MARCH 4, 1998, 10:12 A.M.
17	
18	PLACE: CLINTON COUNTY COURTHOUSE
19	LOCK HAVEN, PENNSYLVANIA
20	
21	
22	•••·
23	
24	ODICINAL
25	ORIGINAL
	II

PROCEEDINGS

10.

MR. ROBERT MARTIN: Once again, this is a meeting with myself, the National Ombudsman of the United States Environmental Protection Agency, and the Clinton County Commissioners. This is your meeting. In view of time, at least of my own, I'd like to break up by no later than noon, if possible, today.

With that, I just want to note that I am
here and I have undertaken a series of on the record
meetings in the last two days or so. Yesterday I met with
the Lock Haven City Environmental Advisory Committee on
the record and last evening with the Clinton County Farm
Bureau -- on the record.

Do you have any
questions or do you have anything that you'd like to bring
forward at this session?

MR. DANIEL VILELLO: I think probably the way we should handle this, Rusty, if you would, is we'll go first. Are you willing to take questions from the audience?

MR.MARTIN: Yes, but again, this is your meeting.

MR. VILELLO: Sure. I understand.

MR. DEAN BOTTORF: I have one.

MR. VILELLO: Go ahead.

MR. BOTTORF: One of my questions, Bob,

<u>C&J REPORTING (717) 584-5904</u>

would be obviously the decision has been made by EPA, Region III, to go ahead with this project irregardless of the status of your report. As far as the Clinton County Commissioners, unless someone has changed their mind, we are on record asking EPA to stand their ground -- I'm sorry, to wait until after your report is released. In your experience as EPA's Ombudsman, have you seen this situation in the past where the agency starts the project that you're investigating or is it usually the other way around? The way that would make more sense is that your report comes out and people get a chance to discuss it before any activities take place.

MR. MARTIN: To be fair, the answer to that question is, I've been doing this function for about five years. This is not the first incineration project which I have reviewed that EPA has undertaken. It probably won't be the last either. In most cases when I've been asked to intervene it has been in midstream at an EPA Superfund Incineration Project. This may be one of two cases that I was asked to intervene before operations commenced. I think the decision to proceed with the incineration was memorialized by Regional Administrator McCabe two days ago. Greg, is that correct?

MR. GREG CRYSTALL: Yes.

MR. MARTIN: He signed a decision document

to go forward.

MR. BOTTORF: Okay. I guess my question is, is that typical? Have you seen that happen before in your job? Have you seen this situation take place before since you've been Ombudsman?

MR. MARTIN: The only case I can compare this to was a Superfund Incineration Case in Texas in which incineration had not yet begun, but site operations did go forward while my review was pending -- and incineration had not begun. Does that answer your question?

MR. BOTTORF: Yes.

MR. VILELLO: Mr. Martin, I had heard several times that you had an initial report that was presented and I heard some different terminology as to what took place with that initial report as to whether it was being reviewed or censored or whatever. I'd like you to speak on that, if you could, as to what happened to the original report that we have not received?

MR. MARTIN: Okay. I assume you're referring to my May 8, 1997 Interim Ombudsman Report?

MR. VILELLO: I'm not sure of the date.

MR. MARTIN: There were two. There was a May 8 report and then there's an August report which was released as a draft final report by EPA.

C&J REPORTING (717) 584-5904

MR. VILELLO: Okay.

1

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. MARTIN: The May 8 report, I understand, was released by the Agency in late August or September of last year as it was written. The May 8 report was held by the Agency from May 8 through about September. If I recall, it was probably held about a hundred days. The reasons the Agency held the May 8 report -- there were several. There were remarks from the Agency that the May 8 report contained factual errors, misstatements of fact and technical inaccuracies, so the May 8 report was remanded back to me. I reviewed those remarks. There were two factual errors in the report. believe one error was a statement attributed to former Regional Administrator Cosmyer -- that was misstated and attributed to him. And secondly, there was an inaccuracy about how the tests for dioxins at sites of your -- what we call RCRA, Resource Conservation Recovery Act, and rules that had been promulgated under RCRA. Those errors were corrected. There were no misstatements of fact in the interim report. I proceeded to go forward as I normally would in an ombudsman's process to a final report. That is why I issued a draft final report August of last year which did contain comments that I did receive from our Office of General Counsel, the Environmental Response Team, and Region III as well. I am proceeding to

finish my Ombudsman Final Report and that will be done by March 31st.

2

4

5

6

7

9

10

11

12

13

14

15

16

:17

18

19

2.0

21

22

23

24

25

MR. VILELLO: I'll come back later, but I think we can start.

[Gestures to recognize a speaker.]

MR. CARL RUMBALSKI: My name is Carl Rumbalski. I would just like to go on record as saying that if your report is going to be done by March 31st, I don't know what the big rush is by getting started right now. My question to you is, being that you're an expert in this area and you're familiar with the type of materials that are manufactured as that incinerator runs, it is breaking down over two hundred and fifty poisonous compounds. I'm told that some of these, or many of these can reform and even form into new compounds. Reading the report on the burn, it indicated that there are such compounds as chlordane, DDT, lead, mercury that will be going into the atmosphere. Now, EPA tells us that minute quantities of this stuff kills. This stuff is accumulative. It doesn't break down very fast in the environment. A lot of chemists and scientists don't know what the time frame is on it, but I feel that it's very dangerous releasing this kind of chemical into the environment, this hazardous chemical, because it's going to affect wildlife, livestock, drinking water, and

eventually, human health. Unless we are absolutely sure that this is safe and it's the best solution, I don't think you should move ahead with it.

I believe that elected officials and everyone along the way that has had something to say about it needs to live up to their responsibilities and give a true statement on whether they feel that this is the best choice. If they can't say that, and a newer technology hasn't come along that's better for the release of these terrible chemicals at a lower rate then it will be over the next two years----

MR. VILELLO: Sir, do you have a question?

MR. RUMBALSKI: Yes, the question is,

should it be done?

MR.VILELLO: Thank you.

MR. MARTIN: So your question is, "Should the incineration go forward?"

MR. RUMBALSKI: Yes.

MR. MARTIN: Let me be clear about what my status is within the Agency. I am not a decision making official within the Environmental Protection Agency. As to my expertise in the area, I do have subject matter expertise, but let me also be clear, I am not a scientist or a chemist or a chemical engineer. One of the reasons that my final report will be completed at the end of March

is because I wanted the opportunity to review our Peer Reviewer's comments, our independent Peer Reviewer's 3 comments and Risk Assessment. I understand that their final report has not yet been released. I am not certain 4 what stage of preparation it's at either, but I will be 5 reviewing their written comments. So, that answer to your 6 question is, it would be premature for me as Ombudsman to 7 make a finding until I'm done and I'll be done at the end of the month. 9 10 MR. VILELLO: Does that answer your 11 question? 12 MR. RUMBALSKI: Not exactly. --But then 13 I would like to ask Mr. Crystall a question. Did you wish to proceed -- based on all the information that I have 14 15 given and the information that Mr. Martin has given, do 16 you feel that you, in a clear conscience based on your 17 responsibility to the community, are justified in moving forward? 18 19 MR. GREG CRYSTALL: Yes, I do. 20 MR. RUMBALSKI: And if you aren't, who's 21 responsible to pay the bill? MR. CRYSTALL: What bill? 22 MR. RUMBALSKI: Medical bills or other 23 problems that occur from chemical, caustic chemicals, 24 25 poisons.

1 MR. CRYSTALL: We don't believe there's 2 going to be any problems that occur. 3 MR. RUMBALSKI: Because you don't believe 4 it, that doesn't mean it's not going to happen. 5 if it does, what happens then? 6 MR. CRYSTALL: [No response.] [Mr. Vilello recognizes another speaker.] 8 MR. AL SPETH: My name is Al Speth. 9 public spirited citizen. I've listened to this for two 1.0 years. I've seen what I consider mumbo-jumbo scientific 11 proof and I don't intend to listen any longer. I'm going 12 to leave the meeting; but, my question is, how soon will 13 this project be done so we can get this thing behind us? MR. CRYSTALL: We're hoping we'll be out of 14 15 -- we'll be stopping the feed within eighteen months to 16 two years. Then we'll take six months to take the thing 17 apart and get out of here. Is there any scientific proof 18 MR. SPETH: 19 that's been presented to show if there's been any respiratory cancer or anything else? 20 UNIDENTIFIED SPEAKER: 21 Yes. MR. SPETH: No, I'm asking the ombudsman. 22 23 MR. MARTIN: You are going to allow that 24 question? MR. VILELLO: 25

MR. MARTIN: Okay. The straight answer to that question is that I understand that there is a separate agency that deals with health effects, the Agency for Toxic Substances and Disease Registry. I do not believe that they've completed their final report either and I, you know, can't say until they do. I've been in consultation with them and I will be talking to them before I finish this month.

8.

MR. SPETH: [Addressing the audience.] Have a good time.

[Mr. Speth departs conference room.]

MR. VILELLO: [Recognizes a speaker.] Back in the corner.

MR. TOM BIRCH: My name is Tom Birch. In following -- everybody's report who is finished seems to be on either one side or the other. There's the people who are either directly paid by the federal government or whose jobs are funded by the federal government that say that this thing is the greatest thing since sliced bread. Then there's the other people who are either academics or have been retained by AIR, and they say that this thing is going to kill us. Now, assuming that each one of them has at least some expertise in the matter, my question is, is the science that this thing is based on so fuzzy that nobody knows what they're talking about or, if it is not

that fuzzy, who's lying? 2 MR. VILELLO: I'm not sure that's a 3 question. Is that a formal question you're asking? 4 lying? 5 MR. BIRCH: It's got to be either one way б or the other. Either the science is concrete and we can determine what's going to happen -- in which case one side 7 8 or the other is jerking my chain or the science is so fuzzy that we don't know what the hell's going to happen. 9 10 MR. VILELLO: I'll leave it to you, Mr. 11 Martin, if----12 MR. DEAN BOTTORF: EPA's lying. I answered 13 the question. Is that a good enough answer? EPA is 14 lying. 15 MR. BIRCH: I'd like Mr. Martin to respond 16 to that. 17 MR. MARTIN: Okay. I can only respond on 18 the basis of what I do, okay? -- And I will. What I do is to take my series of complaints from citizens, or it 19 could be any person that feels that, let's say, a wrong is 20 being done and things are too fuzzy. I then work that 21 through my process. My process includes going back to 22 EPA, to our regional office, to experts in headquarters to 23 get their take of that complaint. I also go to experts 24

who do work for the citizens' group. I look to their

25

expertise as well. I try to get both sides of the question. I try to get all sides of the question, because what I have found in doing this job for five years is that in a lot of cases there is more to a problem than what both sides bring to it. My process is going to take until the end of March. I have to review the Peer Reviewer's comments. I had reviewed technical elements provided by the experts who work with the AIR group. I found those to be good comments. I'm in a deliberative process and I'm going to be done at the end of the month.

UNIDENTIFIED SPEAKER: I have a comment and a couple of questions. One,----

MR. VILELLO: Introduce yourself, please.

MS. ROSE REEDER: I'm sorry, Rose Reeder. If EPA has invited experts in in an effort to be complete and thorough, then it seems only logical that we wait until all the reports from the experts are finished. To go forward without the reports being finished negates the whole process. If you haven't heard the comments and Mr. Martin hasn't had a chance to evaluate them, what was the purpose? Was it a farce? Was it to appease us? What was the purpose? There is no completion here.

The other thing is for Mr. Crystall. Your opinion is based on science, is that correct, that this is safe?

MR. CRYSTALL: Yes.

б

1.8

MS. ROSE REEDER: Okay. -- Based on science then Phen-Fen and thalidomide were safe. A number of years later we were left with horrible, horrible results -- permanent heart damage, children grossly deformed. Mr. Crystall, if your science turns out to be inaccurate, what will you do for us?

MR. CRYSTALL: I'm not an attorney. I don't know what to do. I'm not a policymaker and I don't know what will happen.

MS. ROSE REEDER: You're willing to go ahead even though there are many credible scientists who say there are serious health concerns here, yours and ours. Both sides have said that. You're willing to go ahead based on the assumption that science is one hundred percent accurate.

MR. CRYSTALL: I never said that science is one hundred percent accurate, but I'm willing to go ahead based on the information that I've been given and I have seen and that my experts from all the different agencies have told me.

MS. ROSE REEDER: I've heard some of your experts raise unanswered questions. Now, to me----

MR. CRYSTALL: There are a lot of unanswered questions that have no answers and we believe--

2 MS. ROSE REEDER: Right. So to me -- let me just say this. If the unanswered questions prove to be 3 damaging, is there any cost to you personally? Will you 4 5 get sick or is it just Lock Haven left holding the health 6 bag? MR. CRYSTALL: I don't think there's going 8 to be any problem with the project that ----9 MS. ROSE REEDER: See, that's easy for you 10 to say that, but----11 Excuse me, Rose, we're----MR. VILELLO: 12 MS. ROSE REEDER: I know you're limited 13 with time. 14 MR. VILELLO: No, I'm not limited. I could 15 do this for the next ten hours, but I really would 16 appreciate the questions though be directed to Mr. Martin 17 today for the two hour period that he has allotted to us. 18 I think it's most important. We've been waiting for him 19 to come to this community for a long time. 20 MS. ROSE REEDER: Yes, okay. Thank you 21 I ask you the same question based on the lack very much. of absolute security in science, the absolute assuredness 22 23 that it will be safe and based on questions that have been

able to be answered, questions coming from both sides --

what can you do for Lock Haven or what are you thinking

24

25

about the unanswered questions and us being left with the health effects after OHM is long gone? I mean, EPA is a protection agency and they were sure thalidomide was safe. I don't want to be left with something like that.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. MARTIN: To respond, yes, we are the Environmental Protection Agency and our vision is to protect human health and environment -- at least in the Superfund Program I think that's why we're there. I know from a cursory review of some of the comments by the Peer Reviewers to the Risk Assessment that there were questions about whether risk is evaluated by an absolute point at That's a valid concern that I intend to the margins. address in my final report. I want to speak to process next. The interim report I believe was clear that, at least as far as the ombudsman process goes, I felt the process should be complete before operations were I want to also be clear that that does not commenced. represent the position of EPA.

MS. ROSE REEDER: My basic question is that if there are serious -- and this came from the Peer Review, EPA's Peer Review, if there are serious questions that are apparently unable to be answered and have -- there are definite scientific ramifications that are very serious for children's health, how can you even make a marginal assessment? How can they even make a marginal

assessment that it's safe when the question can't be answered? The only answer will be the result. 2 MR. MARTIN: That's precisely the kind of 4 issue I have to deal with in my report. 5 MS. ROSE REEDER: So, again, we should wait 6 until your final report comes through. I mean --MR. MARTIN: I can only say again that I am 7 8 not a decision making official within the Environmental 9 Protection Agency. 10 MS. ROSE REEDER: Yes, I understand. 11 you. 12 MR. VILELLO: Mick had his hand up first. 13 MR. MICK HARRISON: Good morning. 14 Harrison, the attorney for AIR. I have some questions for the Ombudsman and I think we'll elicit some information 15 unknown to the Commissioners and unknown to the community. 16 However, I don't want to preempt other people's questions, . 17 so at your discretion when you think I've gone long enough 18 19 down my list, just ask me to sit down and perhaps I can come back later and finish. 20 MR. VILELLO: I think that would be good. 21 MR. HARRISON: All right. Mr. Martin, have 22 you received information recently in your inquiry from a 23 former government supervisor at the Drake site? 24

MR. MARTIN: Yes, I have.

25

1 All right. Did the former MR. HARRISON: supervisor indicate to you that he had observed fugitive 2 3 emissions occurring during operations of the Drake incinerator? 4 5 MR. MARTIN: Yes, he did. MR. HARRISON: Did the supervisor indicate 6 to you that he had a concern regarding the potential for 7 beta-naphthylamine, BNA, or other toxic contaminants being 8 present in those fugitive emissions? MR. MARTIN: Yes, he expressed concerns 10 11 about not only fugitive emissions, but about content of those emissions. 12 13 MR. HARRISON: Did the witness relate to 14 you an incident in which, while wearing a respirator on 15 the site, this supervisor experienced breakthrough of 16 chemical vapors so that he was breathing them inside of 17 the mask? 18 MR. MARTIN: He expressed an incident in 19 which his respiration, yes, was broken through and 20 compromised. MR. HARRISON: And he indicated that he 21 smelled chemical vapors at that time? 22 MR. MARTIN: Yes, he did. 23 MR. VILELLO: Mick. 24 25 MR. HARRISON: Yes, sir?

18

25

MR. VILELLO: And that's what you're

referring to?

MR. HARRISON: Well, I don't know -- I presume I know what he's referring to and I assume it's the same witness. However, the Affidavit he's referring to is a two page affidavit prepared for Senator Spector in a twenty-four hour turnaround. The information that I'm referring to is information given to the Ombudsman in a three hour interview on the record with a court reporter that went well beyond that two page affidavit, some of which Mr. Crystall doesn't know has been testified to, although he may know, from his own sources, the content. So referring to that affidavit or the Army Corps' Response is not sufficient to address the points I'm making today.

MR. CRYSTALL: I was referring to the Affidavit, plus a meeting that we were in with Mr. Harrison and the person in question and some other folks last Friday.

MR. HARRISON: I appreciate that clarification, Greg, but the information given to the Ombudsman goes beyond both of those sources of your information.

MR. MARTIN: If I can interject?

MR. VILELLO: Yes, please.

MR. MARTIN: Just so everyone knows,

because I want this to be open about what has occurred

with this former employee at the Drake site. He did come An affidavit was prepared by counsel and forward. submitted to Senator Spector. I understand there was a meeting last week with the former employee and counsel and lawyers for the Department of Justice and EPA as well as the Region III technical staff. I have reviewed the Affidavit. I found what was expressed in the Affidavit was critical to an Ombudsman Review of the Drake Incineration Project. That is why on Monday evening we did an on the record, a privileged meeting, with counsel and the former employee. I wanted to explore what was presented in the Affidavit and cover relevant issues. Now, after that I did hold an on the record meeting, yesterday afternoon, with the Corps of Engineers of the State of Pennsylvania, and Mr. Crystall as well, to review that Affidavit and relevant information that was presented before yesterday. I am going to take into consideration in the final report not only the Affidavit, but all of the information provided by the witness on Monday evening on the record and also all responses of Region III of the State of Pennsylvania, and the Corps of Engineers. also be reviewing all of the documents that still need to be reviewed with respect to the site operations before coming to any findings and conclusions in the final report which, as I said, will be done at the end of the month.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

That's pretty much what I have to say on that.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. HARRISON: I understand that. purpose here, Commissioners, is not to --I understood the process as Mr. Martin outlined it before I started asking my questions, and I continue to understand it after his explanation, but the point of my questions is to let the Commissioners know and the public know what information has been relayed to the Ombudsman from, what I think would be considered by some, a source in between EPA, advocates of the incineration process on one side, and AIR, opponents of the incineration process on the other. This information being relayed by a former government supervisor at the Drake site, who has to my knowledge nothing to gain by saying anything other than the truth -- and perhaps, has something to lose by telling the truth about it. Nonetheless, he's had the courage to do that and put this information on the record. My understanding is that this witness' testimony in his affidavit to the government in the meeting that he had with the government, and to Mr. Martin in that meeting with the court reporter, all of this was intended to be on the record and publicly available unless the witness said to some official, " I wish this to be kept confidential." That's my understanding of the witness' intent. He does not seek publicity. He does seek to have known what

happened at the site from his perspective. My purpose in 1 asking a few additional questions is so that you know what 2 3 he wants you to know. It may be a few days before this transcript becomes available for you to know. 4 meantime this incinerator is operational. So I, with your 5 permission, have a few more questions to bring that 6 information out. If you'd rather I can just tell you what 7 it is. 8 9 MR. VILELLO: I was just going to say --I'm not sure, but if you know something just present it. 10 11 MR. HARRISON: With your permission, I'll 12 do that. MR. VILELLO: I'm not sure that Mr. 13 14 Martin's going to be involved with what you know. 15 MR. HARRISON: Whatever is most efficient 16 for you. 17 -MR. BOTTORF: Just say it. You're the 18 expert. 19 MR. HARRISON: And Mr. Martin can correct 20 me if I'm wrong. The witness has brought to my attention, and I understand to the Ombudsman's attention, the 21 22 following problems and observations. One, that during a majority of the time 23 when the incinerator was burning during the shakedown 24

trial period the ash coming from the incinerator after

25

processing, meaning the processed soil, failed to meet the contract criteria for removal of BNA from the soil.

The witness also indicates that flameouts have occurred in the incinerator from time to time.

R

The witness also indicates that what are called "kiln puffs", a release of combustion gases and particulate, from the combustion zone either at the kiln seal or between the primary and secondary combustion chambers have occurred on the site.

The witness has indicated that the quote,
"automatic waste feed cutoff system," unquote, which is
designed to stop waste feed through the incinerator during
operation when a combustion condition or an air pollution
control condition goes out of compliance, that that quote,
"automatic waste feed cutoff system," unquote, is not
automatic. It is basically set to allow a sixty minute
delay before waste feed is cut off, during which time the
machine continues to operate in noncompliance unless an
operator manually decides to shut down. The witness
indicates that there have been occasions which there have
been decisions by operators to take action to allow
continued operation of the incinerator in a noncompliant
condition even beyond the sixty minute period.

The witness has identified frequent operating flaws in the rapid quench component of the air

pollution control device. The rapid quench is the device designed to cool the combustion gases quickly to minimize dioxin formation. The witness indicates that this particular air pollution control device has been problematic. There's been difficulty controlling the quench flow and controlling the combustion gas temperature for dioxin minimization, including frequent flooding of the quench where liquid actually comes out the bottom of the quench, which is not in the design of the equipment. The witness indicates that the scrubber air pollution control device has had several incidents where it operated in noncompliance in terms of PH, the acidity level. · The witness also indicates, for the reasons that I've stated and reasons which I haven't yet spoken of, but which you'll see eventually in the transcript, that he told Mr. Crystall, who is with us today, after the public meeting on the Risk Assessment with EPA's experts -- he told Mr. Crystall that the incinerator will not work. The witness reports that Mr. Crystall replied to him, "I know." Now, essentially it's-

21

2

3

4

5

6

10

11

12

13

14

15

16

17

18

19

20

22

24

25

MR. VILELLO: Mr. Harrison, again, this is all public record?

23

MR. HARRISON: Not yet.

But it will be soon? MR. VILELLO:

C&J REPORTING (717) 584-5904

1	MR. HARRISON: It will be, but I would
2	think you would want to know today since the machine is
3	burning hazardous waste But if you wish to cut me
4	off
5	MR. VILELLO: No, I'm not trying to cut you
6	off. I'm just trying to understand where we're going in
7	reference again to the fact that we have Mr. Martin here.
8	MR. HARRISON: I understand. I'll do this
9	as quickly as I can. I want you to know that the
10	Ombudsman knows this now that it will be addressed
11	eventually in his report along with other information that
12	he receives
13	MR. VILELLO: Okay
14	MR. BOTTORF: May I ask a question or
15	not? MR. VILELLO: Yes, I'm just trying to-
16	
17	MR. BOTTORF: I want to ask a question of
18	Greg Crystall since this is is that true, Greg, that
19	you would say that?
20	MR. CRYSTALL: I talked to Curt and I asked
21	him if he thought it was going to work. He said he
22	doesn't think they have the right people out here. He
23	said that one of his concerns was if it was going to work
24	or not that's a concern that it had to work.
25	MR. BOTTORF: What did you say?

MR. CRYSTALL: I didn't say specifically, 1 "I know it's not going to work." -- I would never say 2 3 I said one of the big concerns was whether it was 4 going to work or not. Everything looks right Risk Assessment-wise. We've just got to make sure it works. 5 MR. BOTTORF: Okay -- so, somebody's lying. б 7 MR. VILELLO: Mr. Harrison, Mr. Martin has 8 the information that you're -- or is about to receive the 9 information that you have now? 10 MR. HARRISON: He has received it. 11 MR. VILELLO: You have received it? Do you 12 want to respond to the information? MR. HARRISON: There's a bit more of it. 13 14 MR. VILELLO: I understand, but most of us 15 in this room probably aren't going to understand what it's all about or----16 .17 UNIDENTIFIED SPEAKER: The sooner he gets 18 on with it the sooner we'll be done. 19 MR. VILELLO: Excuse me. 20 MR. HARRISON: It won't take much longer -you know, five minutes. 21 MR. VILELLO: Okay. Since you know all of 22 23 the information that is being presented, do you want to respond to it? 24 MR. MARTIN: Well, I think Mick should be 25

allowed to finish with his summary of the information that was, and is, being presented from the witness. My process is such that I have to, and have taken, this information -- and will take more, not only from the witness, but from the actual records as I said before. I have to do that and receive what he has said as allegations. I will, and already have, met with our Regional staff, the State of Pennsylvania Corps of Engineers. I may do so again after reviewing relevant site documents. I have remarked earlier, and I will say it again, I have received the information. I view the information at this juncture as allegations. Some of those allegations have been addressed, orally and in writing, by the Region. Some may not have been addressed in detail. I can make no findings for final recommendations until I am done with my process. That's the end of the line.

2

3

5

6

7

8

Q

10

11

12

13

14

15

16

17

18

19

20

21

22

. 23

24

25

MR. VILELLO: Okay, go ahead.

MR. HARRISON: Thank you for that clarification. I just wanted to clarify with the Ombudsman that when he says that some of the allegations by the new witness have been addressed by information by the Corps or EPA, I take it, Mr. Martin, that that means you received their information, but it doesn't mean you've made a finding as to whether the issue has been resolved?

MR. MARTIN: That's correct, but what I do

want to note for the record is that the Affidavit has been responded to by EPA.

MR. HARRISON: I think that's clear and I think it's also clear that the Agency has not had the benefit of the testimony given to Mr. Martin Monday evening.

The additional information presented to Mr. Martin and to me from the witness included that fugitive dust is being released on the site in steam, perhaps otherwise, and that this is evidenced by the discoloration created by the dust from residue left on the buildings and equivalent in the direction the wind blows when the steam is released with the dust.

The witness indicates that he raised a concern with his supervisors after observing ash, after having left the incinerator, being dumped on soil yet to be burned in the stockpile -- which was to be taken from for the Risk Trial Burn process. He raised the concern that there might be a mixing of the already burned ash with the yet to be burned soil prior to the trial burn, the Risk Burn. He reported to his immediate supervisor, and he dismissed his concern essentially by saying, "So what if they are mixing it?" Later the supervisor insisted that the witness' opinion was his own and that mixing had not occurred of ash and soil. The witness

refused to offer such an opinion stating that he was not certain that mixing had not occurred.

The witness indicates that he reported fugitive emissions on a daily basis in his shift report which then became the basis for daily reports -- or should have become the basis for daily reports. He is not aware, however, whether the daily reports actually acknowledged fugitive emissions that he reported in his shift report.

MR. BOTTORF: Is that a felony if someone does that?

MR. HARRISON: I'd rather not speak of that myself at this moment because of my imminent filing of a civil law suit and certain rules of ethics for attorneys that I won't go into, but I understand your concern.

There are other concerns the witness has expressed, but these are some of the highlights. We'll try to make the detailed information available to the Commissioners when we obtain it in the transcript. Then perhaps later, after other people have asked their questions, I have two or three questions specifically for the Ombudsman.

MR. VILELLO: Thank you, Mr. Harrison.

[Mr. Vilello recognizes a speaker.]

MS. MARY ELLEN MCGOWAN: Mr. Martin, I'm

Mary Ellen McGowan. I'm the Treasurer of AIR. I

represent -- work with the money of approximately three 1 thousand people who have contributed to our work in addition to large sums of money from various groups in the 3 community who are not identified, but... I kind of ache 5 for you in your position. As a school teacher involved with different political fields and pools, I feel like 6 7 I've had a tiny, tiny bit of what your job is -- just a tiny, tiny bit. 8 9 I'm really frightened now with the experience I've had over the past few years because I've 10 11 lost trust in my government. You stand as our representative -- the only representative, right? 12 MR. MARTIN: Yes. 13 MS. MCGOWAN: And your job is just --14 15 humongous, and I trust in you from what I've heard of you, but I ache for the position you find yourself in. I thank 16 God there are people like you who will take that position. 17 I just wanted to comment on that. 18 19 MR. VILELLO: Thank you, Mary Ellen. [Mr. Vilello recognizes a speaker.] 20 UNIDENTIFIED SPEAKER: I just have a 21 question that ----22 23 MR. VILELLO: Introduce yourself. , MS. ELIZABETH REEDER: I'm Elizabeth 24 I'm going to talk a few sentences and then ask my Reeder. 25

question. I've lived in the area all my life, as well as my mother. She moved into the high-rises right beside the incinerator. Years back -- early because of respiratory problems, my mother quit smoking about ten years ago. My mother, since the trial burn, has needed to give herself breathalyzer treatments at night. My mother now needs oxygen. She's swelling up in her ankles. getting enough oxygen in her blood, okay? That's probably a blessing for what is about to happen. Nobody seems to have a conscience in EPA, and I'd like to know where I can send the medical bills? She lives in low-income housing. I do, too. I'm only able to work part-time. I have a boyfriend with cancer who I'm supporting at times. I need to know someone's address, because I don't think it's going to improve. can pray, but I don't think anyone really cares and -- I find that kind of appalling. Can you answer my question? MR. MARTIN: Well, I believe I understand

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. MARTIN: Well, I believe I understand your concern and----

MS. ELIZABETH REEDER: Do you?

MR. MARTIN: Well, you may disagree.

MS. ELIZABETH REEDER: I have one parent

left. That's all I have to say. Go ahead.

MR. MARTIN: The Region and EPA do not believe at this time that there are any health effects

that are caused by the Drake Project.

MS. ELIZABETH REEDER: If I hear that one more time I'm going to gag. Okay?

MR. MARTIN: As far as health effects and resulting medical bills, I honestly do not believe there is any financial recourse available from EPA for that. There have been pilot projects sponsored by ATSDR that seek to open medical clinics next to superfund sites for the health effects caused, which may be caused, by those sites. That is all I'm aware of. Okay?

MS. ELIZABETH REEDER: Okay. I have one more question. Since the EPA wants to persist in using my mother as a guinea pig, whether they like it or not, that is the situation, and I can't afford to move her. I want to know how the elderly are going to be able to go to the store which happens to be behind them? It's their only way if they don't have a car, which most of them don't, to get groceries. How are they going to be able to get groceries without having to breathe toxins? Is someone going to afford [sic] their taxis to go to somewhere safer to shop?

MR. MARTIN: Well, I can only remark again.

I'm not necessarily representing the position of the----

MS. ELIZABETH REEDER: Yeah, but these are just things I wonder everyday when I'm trying to relax.

MR. MARTIN: The Agency does not believe. 2 again, that health effects are resulting as a result of 3 the Drake site. MS. ELIZABETH REEDER: Right -- and I'm not 4 5 frightened. I'm enlightened. 6 MR. MARTIN: But I also want to note that I 7 believe the Peer Reviewers were concerned about asthma, 8 asthma conditions here in the area and the potential 9 exacerbation of those asthma conditions as a possible ----10 MS. ELIZABETH REEDER: How about congestive 11 heart failure? 12 MR. MARTIN: From the Drake incineration, -- that is a concern which they noted and I will be 13 14 addressing that. 15 MS. ELIZABETH REEDER: Okay. Thank you. MR. VILELLO: I'm not sure who was next. 16 17 MS. JOYCE NUTTALL: I'm Joyce Nuttall. I was surprised to find out, and I've attended many of the 18 meetings, maybe all of them in the last few years. 19 I was surprised to find out that there is water being discharged 20 off the site. I didn't find that out until the public 21 meeting that AIR put on at the beginning of the month. I 22 don't remember that being addressed in either the first 23 24 Risk Assessment, which we----MR. VILELLO: Joyce, I didn't hear your 25

concern, I'm sorry. The door opened. So what did you. 2 just find out? 3 MS. NUTTALL: That water is being discharged off the site. I didn't know that that was 4 happening. Did you all know that they were discharging 5 water off the site -- as my Commissioners? 6 7 MR. VILELLO: I understood they had a water 8 treatment plant that was treating all water on site. What they do with it after they treat it -- I would assume they 10 have to dispose of it in some manner. I don't----11 MR. MARTIN: Can we get that in the form of 12 a direct question? 13 MR. VILELLO: Yes, please. 14 MR. MARTIN: Is the question that waste 15 water----16 MS. NUTTALL: No. Actually what they told me at their public meeting, the last meeting, is that 17 there is waste water being discharged off the site and 18 19 that after they do whatever they do to it, it's discharged into Bald Eagle Creek. Do I have that correct? 20 MR. CRYSTALL: Through a sanitary sewer 21 22 that goes into Bald Eagle Creek. MS. NUTTALL: I asked quite a few 23 questions, very specific questions, about how they test 24 25 it----

MR. CRYSTALL: Uh-hunh.

1

2 MS. NUTTALL: What they test it for? their findings were. Friday afternoon they dropped these 3 4 off in my office. This was my answer. [Holds up a file 5 of documents.] They said specifically that they would give me an answer to all my questions before they began 6 7 In this large packet which looks impressive, burning. 8 four pages relate to part of one of my questions. 9 did not answer what they're testing for and what their 10 findings are. What it does say in here is that they 11 discharge approximately -- well, a little over three 12 hundred thousand gallons per month into Bald Eagle Creek 13 They didn't tell me what they have found in 14 those three hundred thousand gallons, what they test for 15 specifically, and what they're findings are. They did give me a copy of their permit from the state that says 16 what they have to test for and the limits that they're 17 allowed to be within. When I do the math from this 18 permit, from your numbers, what I find is that they're 19 allowed to discharge three pounds of lead per month into 20 Bald Eagle Creek. They're allowed to discharge up to 21 eighty-two grams of BNA, beta-naphthylamine, into Bald 22 Eagle Creek per month. It may be more because that's just 23 based on this average amount of water of three hundred 24 thousand gallons. But that's what they have discharged to 25

date without the incinerator burning full time. It's obviously going to be more. They said specifically, and I was very specific in asking specific questions, I wrote my questions down and I gave them to the person that they indicated -- which was George Drumbor of Lewis, Allen, and Hamilton, Inc. We have a videotape with my questions on it. They said specifically, and I heard them and many others heard them, that they would answer my questions before the burn started. I was very clear about asking that question and getting an answer. They haven't answered my questions and the burn has started. Are they allowed to do that?

. 6

MR. MARTIN: So, if I could?

MR. VILELLO: Yes.

MR. MARTIN: If I could recapitulate, your direct question is, "Is waste water being discharged from the Drake site as per the conditions of the permit?" In other words, you were reading off the document, "So many grams of this----"

MS. NUTTALL: That's just what they're allowed to discharge, but my question also included, "What are you actually discharging? What are your test results?" They do not provide me with that information.

MR. MARTIN: And you do not know what it is being tested for?

MS. NUTTALL: That's right.

MR. MARTIN: Is that something that you

want to respond to now or later?

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

24

25

. 23

MR. MIKE OGDEN: This is Mike Ogden of the Corps of Engineers. I thought that I gave all the information and I tried to answer your questions as I interpreted them. The information you have there is I think some of the data, if not all of the data, that we have provided. We do have -- we probably provided you with a copy of the permit that we have from the state. That is the components that we test for, a list of those. We have had, to my knowledge, no exceedences of any of the permit conditions. The permit -- as far as the actual results, I quess I misunderstood. I didn't realize that you wanted copies of all of that. That would be a formidable undertaking. I need to talk to Greg and find out how we want to go about doing that, but that is something -- we have all that documented, and it would probably fill a file cabinet with all the testing that we've done for the water treatment plant. If that's what you're looking for, then we can talk about getting that information to you.

MS. NUTTALL: I was very specific. I didn't ask for your opinion about----

MR. OGDEN: I didn't realize that you

wanted the results of every test. MS. NUTTALL: Yes. 3. MR. OGDEN: You want----MS. NUTTALL: I want to know exactly what . 5 is in the water that you're discharging into Bald Eagle Creek, how you're doing the tests, what standards you use, 6 7 so that I know that there is quality assurance. Do you 8 send your test method -- is this an approved test method? 9 I want to know if you're doing this. 10 MR. OGDEN: I can tell you that all of the testing that we do is quality assured by DEP, that we have 11 12 the State's Water Quality folks that come and they visit 13 They do water quality assurance on all of our test procedures. They review all of our reports. We review --14 15 I'm sorry, the tests are run by OHM. We, the Corps, 16 review all of those and we have quality assurance that's

MS. NUTTALL: So then I would like to have the results of not only the tests that OHM does, but of results that are from the split samples. -- Externally.

done by the State Water Quality folks. They come out and

do split samples, as does the Corps take split samples of

17

18

19

20

21

22

23

24

25

all----

MR. OGDEN: So you're looking for----

MS. NUTTALL: I think it's really

unfortunate that you misunderstood my questions. I went

to the effort of writing my questions down.

1.2

MR. OGDEN: I'll go back and review that, and one of the things that I need to go back and do then - typically, we when we get into a copy of documents of that magnitude, there's a cost. I need to get with Greg on that and find out if EPA is willing to forego the cost of reproduction of that magnitude of documents.

MS. NUTTALL: Oh, come----

MR. OGDEN: It's a formality. The Freedom of Information Act requires that I ask the question. I've got to go back -- I'm not saying I can't do it, obviously we can. We just need to----

MS. NUTTALL: But what you actually said -not you personally, but an EPA representative, said that
you would furnish me with all the information that I asked
for before you went ahead. Well, I understood Mr. Crystal
say this morning that the burn has started and I don't
have the information that I asked for. I was very clear
and very specific.

MR. OGDEN: My only comment is that I think that it's an unfortunate misunderstanding, -- that I misunderstood----

MS. NUTTALL: Then 'I think you should stop the burn until I have that information.

[Meeting is interrupted by applause from

	the audience.]
2	MS. NUTTALL: I would say to my
3	Commissioners that they said they would do something, and
4	they didn't, and I would ask
5	MR. BOTTORF: We asked them not to run the
6	incinerator until Bob Martin's report came out, too, but -
7	- you know
8	MS. NUTTALL: Well, maybe if all these
9	things pile up
10	MR. VILELLO: Could I again we're
11	already in our first hour, or over, and I would like to
12	see the questions addressed to Mr. Martin. I really think
13	that it's important that he give us his input today
14	publicly.
15	MS. NUTTALL: Do I have any recourse, Mr.
16	Martin?
17	MR. MARTIN: Do you have recourse?
18	MS. NUTTALL: Do I have any recourse? They
19	said one thing and they've done another.
20	MR. MARTIN: Yes. You always have a
21	recourse.
22	MS. NUTTALL: Please tell me what it is.
23	Would that be through your office?
24	MR. MARTIN: Yes. We will work with the
25	Region and the Corps of Engineers

1 MS. NUTTALL: Thank you. 2 MR. MARTIN: To acquire the information. 3 MS. NUTTALL: To acquire -- but can't they shut the incinerator down because they said they would 4 5 give me all the answers to my questions before they commenced the burn and they didn't do that? Do I have 6 7 that kind of recourse? 8 MR. MARTIN: Well, two points there. 9 I'm not sure what they said----10 MS. NUTTALL: Right, you weren't there. 11 MR. MARTIN: And what you heard. 12 MS. ROSE REEDER: We have it on videotape. 13 MR. MARTIN: Okay, I've not seen that or 14 heard that as of this moment. Two, I'm not aware of any legal requirement that if they failed to furnish . 15 information for consideration, then that it does not 16 17 operate. 18 MS. NUTTALL: So then they're not legally required to do what they say they're going to do? 19 MR. MARTIN: Well, those are two different 20 points. They may be legally required, for example, under 21 the Freedom of Information Act for your request that you 22 referred to earlier, to provide certain information that 23 you have asked for. That's one requirement. 24 aware of any pending requirement that if they don't do 25

that the incinerator does not operate. 2 Thank you. I'm pleased that MS. NUTTALL: 3 you're here. MR. VILELLO: Wait, no. [Recognizes a 5 speaker.] Behind you, ma'am. 6 MS. DIANE BIRCH: My name is Diane Birch. 7 You mentioned a few minutes ago that they put clinics up next to superfund sites. Why, if the EPA thinks that the 8 9 superfund site is safe, why would someone put up a clinic? MR. MARTIN: Is that your question? 10 11 MS. BIRCH: Yes. 12 MR. MARTIN: I'll tell you what I know 13 about the pilot effort that was begun by EPA and ATSDR. 14 Does everyone know what ATSDR is? [Audience makes general affirmative 15 16 response.] 17 MR. MARTIN: Okay. A pilot effort was 18 begun several years ago to put up three or four health 19 clinics near these communities with superfund sites. was done because of health threats that were caused by the 20 sites before remediation, or effective remediation, of the 21 contamination at the sites. EPA and ATSDR recognized that 22 there were health threats to people living next to 23 uncontrolled sites over so many years. They thought that 24

by not only remediating the site, but also by establishing

25

```
a health presence it would be more effective delivery----
                    MS. BIRCH: Do you honestly feel that this
2
    Superfund site is faultless -- that it is running
3
    perfectly? And that there's no need for the ATSDR or
4
    whatever -- that there's no need for the clinic?
5
     running as safely as you think it is? Can you honestly
6
7
     answer that question, that the incinerator is running as
8
     safely as you'd want it to?
                    MR. MARTIN: I intend to honestly answer
9
     that question in the final report.
10
                    MS. BIRCH: Well, could I ask my question?
11
12
                    MR. VILELLO: Again----
                    MS. BIRCH: Mr. Crystall----
13
                    MR. VILELLO: Again, I'm just -- for the
14
     amount of time we have----
15
                    MS. BIRCH: That's all I need, is a small
16
17
     answer from him.
                    MR. VILELLO: Okay.
18
                    MS. BIRCH: Mr. Crystall, yes or no?
19
                    MR. CRYSTALL: Do I think the incinerator
20
     is running as safely as it could be right now?
21
                    MS. BIRCH: Yes.
22
                    MR. CRYSTALL: Yes, I do.
23
                    MS. BIRCH: Yes, you do?
24
                    MR. CRYSTALL:
25
```

MS. BIRCH: Do you think that we need a 1 clinic next to the incinerator? 3 MR. CRYSTALL: That's not my call at all. MS. BIRCH: Then you aren't faultless there. You aren't telling people that the incinerator is 5 going to run perfectly. You don't know that for sure. 6 MR. CRYSTALL: As good as we can get it to 8 run, it'll run. 9 MS. BIRCH: Right. You can't tell us it's going to run----10 11 MR. CRYSTALL: There is expected downtime 12 in an incinerator. There's expected problems that will happen, but we believe it's being run safely. 13 MS. BIRCH: I have one more question of Mr. 14 Martin. All of this stuff that the incinerator is allowed 15 to put into Bald Eagle Creek, why should we have to live 16 with any of it? Why should we have to live with any beta-17 naphthylamine, any of that stuff going in our creek? 18 19 MR. MARTIN: The answer to that is I have not specifically seen the permit conditions for discharge 20 21 of waste water. MS. BIRCH: Okay. Thank you. 22 MR. VILELLO: Thank you. I'm not trying to 23 overlook you, Rose, but----24 MS. ROSE REEDER: It'll be quick. 25

MR. VILELLO: Okay.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MS. ROSE REEDER: Joyce, is mercury on that permit? My question -- she can check it. I was there and -- how many of you were at the meeting and we all heard different people including Greg -- is it Greg Voltaggio?

UNIDENTIFIED SPEAKER: Tom.

MS. ROSE REEDER: Tom Voltaggio say, "Yes indeed, I will answer your questions before the burn." asked very specific questions and wrote them down. He has not even gotten back to me in any way, shape, or form. One of my major questions was the same as what Joyce asked -- and yes, she asked that and, yes, they told her they would get back to her with all the answers, and it was very clear. Things that aren't answered are things that didn't want to be answered in my opinion. -- But in their own Risk Assessment from their own Peer Reviews they talked about excessive mercury, well beyond the reference dose, being emitted into the air. They went back and did some other tests and used different benchmarks and then said, "Well, it wouldn't be that great." However, in my opinion any mercury that is emitted -- and a certain percent will fall into the water, any amount is not acceptable. Mercury goes right to the fish, it goes right into the food chain because they breathe it through their gills. It's immediately taken up by whoever eats it

whether it's an eagle or a human being. Mercury is not on 2 They will definitely be emitting it through 3 the air. The scrubber water's coming down. It should be treated in the water even if it's a minute amount. think that needs to be addressed. I don't think their 5 permit is adequate for the water testing. And if, in 6 7 fact, lead and BNA and these other things are being -- a 8 certain amount is being allowed to go through and it's going directly into our water, then the process is 10 actually polluting faster than if it was left alone. 11 stuff would just inch and biodegrade as it inched towards 12 the water. Do you have a comment on that? 13 MR. MARTIN: I have a question on that. 14 MS. ROSE REEDER: Okay. 15 MR. MARTIN: Is there a discharge 16 requirement on mercury in the permit or what does ----17 MR. OGDEN: I don't have the permit. MS. ROSE REEDER: This happened at the 18 other meeting also. 19 MR. VILELLO: Wait----20 21 MS. ROSE REEDER: No, I have to ask this. I said specifically and I -- now, you were the one that 22 answered it. What is permitted? What things are you 23 testing for? No one in the room, despite the great number 24 of people, no one could tell me what was permitted. 25

1 asked if dioxin was permitted and you said, "No." talked about mercury. No one knew: Mercury is the up and 2 3 coming danger according to the Department of Interior at these sites. Mercury is the up and coming danger because 5 it goes into the food chain so quickly. Mercury is the greatest threat to threatened species like the eagle and 6 the osprey according to government reports that I have. So -- I'm sorry that I interrupted your question. 9 MR. MARTIN: Oh, no. That's okay. What I'm trying to determine is that we have an issue that 10 .should be responded to. 11 MR. OGDEN: I'd have to review the record 12 13 later. 14 UNIDENTIFIED SPEAKER: Why not now? MS. ROSE REEDER: They don't know, that's 15 16 why not now. MR. VILELLO: Carl, you better introduce 17 yourself again for the record. 18 MR. RUMBALSKI: Carl Rumbalski. To get 19 back to the mercury issue, I spoke about it earlier, and 20 Mr. Speth had criticized -- that we weren't experts and we 21 had no scientific basis for what we're doing. I'd like to 22 ask Mr. Crystall does EPA have regulations and limits on 23 the discharge of mercury into the environment? Do you 24

25

know that?

MR. CRYSTALL: I would imagine that there are regulations that do limit that.

. 20

MR. RUMBALSKI: You "imagine" that. -- For lead and chlordane and DDT?

MR. CRYSTALL: I know DDT is not allowed to be used or produced anymore.

MR. RUMBALSKI: Okay. I'm a lay person and I know DDT and chlordane are not allowed and I know there's limits on lead. I would like you people who are the experts and are discharging this to know about it.

answer the questions that were put forth to you in writing, and I would also like you to list any chemicals that are being discharged that we don't know about, that we don't have the names of that are on that site or that are manufactured in the process of the burn that go into that water, because I don't understand how you can legally discharge into the water whether you have a permit or not. That's not only water to wildlife, it's drinking water for large communities in Pennsylvania. Discharging up to three pounds of mercury -- was it mercury or lead? I believe it was lead -- it's very hard to accept. I feel that if we would move forward with this kind of technology and you pointed out, Mr. Crystall, that you are going to do the best and it's going to work, but you don't really

concluded that it is safe for the environment. It's a gamble and I just don't feel like gambling with human lives is something that we should do at this time. We need better research. We need the report to come in from Mr. Martin to be carefully examined. We need complete lists of what's going into the waterways and what's going up into the air in our environment. It is our water and' you people who are working to protect the citizens -- I wish you would do your job.

[Extended applause from the audience.]

MR. VILELLO: That is Mr. Martin's job.

That's why he's here today and hopefully, he'll be taking this information back and addressing each and every concern.

[Mr. Vilello recognizes a speaker.]

MS. MCGOWAN: I have a question for Mr.

Martin. Your report has been delayed for whatever reasons. I don't think it has any reflection on you, but I have a question here. This gentleman said that in order to answer Joyce Nuttall's questions he would have to get a file cabinet full of reports. Is that how you are given information when you ask a question? Do you have to go through files of reports?

MR. MARTIN: I'd like to address the

earlier comment. The earlier comment is, "Why is the report being done at the end of this month?" I wanted an opportunity to review the Trial and Risk Burn data for one thing. Two, I also wanted an opportunity to review the Peer Reviewer's comments. Three, I wanted an opportunity to come up here on the record to meet with people who are concerned about the project. I am going to hold one more public hearing on March 16th here in Lock Haven to give everyone one more bite of the apple so-to-speak before I do my final report.

. 9

.17

To respond to your question now about, "Do
I receive file cabinets full of documents?" Yes. I
review boxes, file cabinets, you name it. Yes.

MS. MCGOWAN: You're not given a summary of, "This is how much lead went out per month or per week or whatever?" Your not given summarized facts that you can use?

MR. MARTIN: I review both summaries and boxes full of documents.

MS. MCGOWAN: Are summaries available for something like this then that Joyce Nuttall could use for her information?

MR. MARTIN: Is the question, "Is that kind of information available to me as I go to my final report?"

1	MS. MCGOWAN: Yes.
2	MR. MARTIN: Yes, it is.
3	MS. MCGOWAN: Then it should be available
4	to citizens, am I right? Not a file full of reports
5	that would take a month to consolidate?
6	MR. MARTIN: Generally I believe it should
7	be, but there may be Freedom of Information Act concerns.
8	That's a legal requirement. Greg, do you want to respond
9	to that?
LO	MR. CRYSTALL: All of the files and/or
11	summaries that are available to Bob are available to the
12	public. Everything that Bob has gotten from us is in the
13	public repositories.
14	MS. MCGOWAN: So all Joyce has to do is go
1.5	to the repository and go through the cases and cases there
16	to find that information, sir? Is that correct?
L7	MR. OGDEN: Not all of the reports are
18	that we've generated on a daily basis are in the public
L9	repositories.
20	MS. MCGOWAN: You don't have a summary
21	report even with the information she needs?
22	MR. OGDEN: We don't necessarily prepare a
23	summary report for all of the tests that we run.
24	MS. MCGOWAN: For what's going out in the

MR. OGDEN: 1 Not necessarily. 2 MS. MCGOWAN: Thank you. 3 MS. BIRCH: Why not? MR. BIRCH: We pay for them. We ought to 4 5 be able to see them. 6 MR. VILELLO: We're going to keep on the 7 same mode that we've been in here. [Mr. Vilello recognizes a speaker.] 9 UNIDENTIFIED SPEAKER: Mr. Martin, I have just one ----10 MR. VILELLO: Would you please introduce 11 12 yourself? 13 PASTOR JOYCE GENSIB: Oh, my name is Pastor Joyce Gensib. My question is not legal, it's not -- I'm 14 deeply concerned that every time we have a meeting, every 15 time we go through this, every time we present facts all 16 we get from EPA is, "We don't have that information." 17 comment I just heard over here is, "We'll give you the 18 answer later." We asked not to have the burn until we got 19 the information and the burn is going to happen because 20 they didn't understand our question. What recourse do we 21 as citizens have? When I was at the EPA meeting and I 22 said to them, "We're telling you we don't want it. What 23 more do you want from us?" They told us that we're just a 24 small contingency. What am I as a citizen of this 25

7 country, living in this land -- am I being told that I have no rights to what I breathe and to what my loved ones 2 3 breathe and to what happens to me? MR. MARTIN: The answer to that question 5 is, no, I don't think we can tell you that ----PASTOR GENSIB: But we're being told it. 7 It's been rammed in our throats. What recourse do we have as citizens to get the information we're asking for 8 9 instead of being told, "We'll give it to you later?" 10 I sat at that meeting which went until 2:00 in the 11 morning, I left after being told I was a contingency, that 12 no matter what I was saying, it had no value. They were 1.3 going to do what they were going to do. Even if you tell 14 me that three and ten million will die, what if that one 15 is me? Or what if that one is my grandchild? Am I 16 supposed to accept that they're just a statistic and not a valuable person to anybody but me? When are we going to 17 18 be listened to? That's what I want to know. How dare 19 they tell us they don't know to a question that's important? How dare they run this when they don't know 20 the answers to our questions? 21 MR. MARTIN: If I can respond? 22 PASTOR GENSIB: I'd like you to respond, 23 please, because I'm concerned personally. 24

25

MR. MARTIN: Okay. You are valuable, and

what you say has value, and I am listening. Your recourse is on the record. That is why I am here on the record, so that all of this is noted. You have recourse with the Region and the Corps of Engineers itself to get the information you have asked for. If it's not provided, please come through me and my office.

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

PASTOR GENSIB: I sat at a meeting when concerns were raised. Statistics that even I, a lay person, could understand and have concern over. When they were asked to give an answer, they would not answer. didn't have the information or they would tell us that it wasn't prevalent [sic]. When we asked why health studies weren't done before this burn so we could have a balance, we weren't given a reason why it wasn't. It just wasn't. What they're doing, as far as I'm concerned as a lay person, is just running over us and they're going to do what they want to do. Is this the land that I'm living Is this the government of the people when I have no recourse and my voice has no value? Even my Commissioners that I vote for are deciding that what's important for this community is not important for its people? little distressed. If I wasn't serving a community of people that I have to take care of, I would probably ask to be moved. But, since your burn is covering six thousand miles, no matter where I go I'm going to get the

fallout. I'm going to get the fallout, so I have no place to go to save my life or to save the lives of my young ones. That distresses me. That distresses me. When a answer [sic] is given at a meeting, "Who's watching over us to make sure everything is right?" And you get the answer, "God," don't mock God. That makes me angry.

Don't mock God because God is watching. God help us if we're lying.

3.

[Extended applause from the audience.]

MR. VILELLO: Do you want to respond to that, Bob?

MR. MARTIN: I have no response.

MR. VILELLO: Okay. I want to give everybody chances to ask questions. Yes, in the back of the room? Please introduce yourself.

MS. TOMA FORESMAN: My name is Toma

Foresman. I very much agree that this process has gone on
a long time and it was supposed to be a democratic process
on each person. If I'm to tell my children that their one
voice means something, we need to know that every voice
put together means something even more than their one
voice. If I send them to school to take a test or to
answer questions, they need material in order to answer
those questions. My question to you and to EPA and to
everyone else that decided to begin this burn -- there's a

lot of unanswered questions; and for you, you've not been able to totally answer things today because you're not finished with your report. Would it have not been better suitable for the burn to wait a few more weeks and for you to have come to the community after March 31st and say, "I'm able to answer your questions to the best of my ability because I do have all the information?" Wouldn't that have been a better thing to do and why can that not be done?

MR. MARTIN: That's a policy decision to give you a direct answer. There are two different processes at EPA. There's the Superfund decision making process which was moved forward at the site with the commencement of the burn, and there's the Ombudsman process. I think the Agency was very clear. The two are parallel. They don't intersect. They're parallel. In my own process of what I do, I can tell you in other cases that the ombudsman's recommendations have resulted in changes in operations at sites.

MS. FORESMAN: Then should they not work together like teachers work together to educate our children or commissioners need to work together for their community or whatever...

MR. MARTIN: That's a very reasonable

point----

1 Should they not work MS. FORESMAN: 2 together? 3 That's a very reasonable MR. MARTIN: point, but it's also a policy issue which needs to be. 4 5 resolved by the Agency itself and perhaps, even the 6 Congress. 7 MR. VILELLO: Mrs. Bottorf? 8 MS. SANDY BOTTORF: My name's Sandy 9 I think that you should know that at our last Bottorf. EPA meeting our attorney, Mick Harrison -- it was almost 10 .at the end of the meeting, he said to Mr. Voltaggio, "What 11 would it take for you not to burn?" He said, "If I can 12 13 prove to you tonight that this should not burn, that this 14 would be harmful to people, will you not burn?" 15 sat there with a blank look on his face. Mick Harrison 16 repeated the question, "If I can prove to you that this is harmful to people in this area -- if I can prove that to 17 you tonight, will you not do this burn?" He never 18 answered him. Mick was so frustrated he left the room. 19 There wasn't anything he could have said to that man. 20 was going to burn and that was all there was to it. 21 [Mr. Vilello recognizes a speaker.] 22 UNIDENTIFIED SPEAKER: Bob, I want to thank 23 you for your involvement ----24

25

MR. VILELLO: Bill, Bill -- introduce

yourself.

2

1

MR. BILL SMEDLEY: Bill Smedley, for the

3

record.

5

Thank you.

MR. VILELLO:

6

7

8

10

11

12

13

14

15

16

17 18

19

20

21

22

23

24

25

MR. SMEDLEY: AIR sent me to Times Beach, Missouri and St Louis to meet with you two years ago to ask for your involvement. We were hoping that your involvement here with the Drake Superfund Incinerator would have more meaning in the long run than it seemed to have to the citizens who were fighting the Times Beach Incinerator Project. I read your comprehensive report that you prepared for the citizens of that area and, frankly, was disappointed that the Agency didn't move on more of your recommendations. We've communicated with citizens' groups around the country who distrust their government as much as we do, who are as afraid as we have been with the ongoing operations with the sites in their communities, and have also documented the problems with the incinerators that they were fighting and also documented the treatment that they received from the Regional Offices of the EPA. We hope that your final report can be

> (717) <u>584-5904</u> C&J REPORTING

completed as soon as possible. We hope that the Agency

entirety, to the public. We feel that that should have

allows you to release the report uncensored, in its

been done with the first report. A hundred days to hold that report was totally unacceptable. If there were inaccuracies in that report it should have been released with the statement that those inaccuracies existed and have those inaccuracies be identified.

As you know, we've been a watchdog group on this Agency. We intend to continue to be that watchdog. We're suspicious for good reason. You've seen a lot of the documentation that we've produced about problems on this site. This recent person that has come forward is the third person that has worked on this site that's come forward with serious concerns about safety conditions on this site and operations on this site. We had hoped after the first person came forward that EPA would do something to remedy this situation. We're very disappointed that they have chosen to start the incinerator today in light of your final report not being released, the final report from ATSDR not being released, and against the requests of our State Senators and Congressman Peterson.

My question to you -- my first question to you is, if the executive branch of this country doesn't listen to citizens and the legislative branch of this country passes laws denying citizens jurisdiction in the court system -- in the federal court system, at the very least denying our due process, where are we to go if we

have no other recourse? Where, as citizens of this country, do we go but to your office acting as an independent government agency? If we can't get recourse from you after the legislative/executive branch has failed us, what recourse do we have? What recourse do any citizens in this country have as we watch the loss of our rights?

MR. MARTIN: I think in this case I know you've been involved in litigation to stop the burn at the Drake site. I'm aware on behalf of that litigation of the results. You are correct that the law does not permit lawsuits to stop -- a remedy at a superfund site which EPA has selected and has gone forward. You may continue to go to your congressional delegation obviously, but the Office of Ombudsman has become an "office of last resort," to be frank, for citizens who feel that they can go nowhere else to be heard effectively and to have changes made. I will continue to do that job.

MR. SMEDLEY: We appreciate your involvement in doing that job. We felt -- and I personally felt, from the beginning that your heart is in the right place. I've told you before, and I'll tell you once again, that you're the only person in the EPA that I feel I trust. I hope you don't let that trust down. I hope you don't let this community's trust down. I have

C&J REPORTING (717) 584-5904

one more question for you that I would like to defer to AIR's attorney to ask. This is the wishes of myself and of also the three thousand people in Central Pennsylvania that have financially supported AIR for the past three and a half years.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

1.8

19

20

21

22

23

24

25

MR. HARRISON: Mr. Martin, the question that I have for you on behalf of AIR is that you received information on Monday evening of this week from a former government supervisor of the Drake site. He has identified to you specific observations of problems at the site with the operation of the incinerator. He has identified the occurrence of fugitive emissions at the location of the incinerator. He has informed you that he believes the incinerator will not work. He told you that in a conversation with the Project Manager, Greg Crystall, that Mr. Crystall himself said, "I know. I know it won't work. You have information from expert scientists from us, and some from EPA's experts, indicating emissions and nonconservative assumptions in the Risk Assessment. you walk out to the site this morning while it's burning contaminated soil you can see fugitive steam coming from locations other than the stack as we speak. In the documents given to you by the former government supervisor of the site, you have documentation that Phenac is in the dust found in the uncontrolled area, on the work area, on

the pad at the site. We have considerably more information. We have information from EPA's own Risk Assessment that the mercury emissions will cause a risk by EPA's own calculations of eight to sixteen times too high by their own standard for environmental effects. documentation from me, my clients, that the EPA lied to the community about not having a reference dose, a danger level, for dioxin. I've given you the documents showing EPA's reference dose for dioxin which means that their Risk Assessment is fatally flawed. What I ask you today on behalf of my clients is, given this information and more, given your statement today that you've not made your own conclusions yet about the nature and extent of problems at the site, that you today make an immediate recommendation to the EPA to hold off on burning any waste at this incinerator until you've had a chance to finish your investigation and make your final report, because the evidence given to your by the former supervisor and others is significant enough so that you cannot rule out the possibility that come the end of March when your conclusions are final that you may conclude that current operations are either illegal or excessively dangerous or So I ask you today in your role as the Ombudsman -and I understand that you can make any recommendation any time you wish, and I petition you under the United States

1

2

3

4

5

6

8

9

10

11

12

13

14

15

16

17

18

19

20

21

23

24

25

Constitution, which is still our right, to make that recommendation today.

1.8

MR. MARTIN: I will respond in two ways.

One, in the Interim Report I did recommend that they not proceed with operations until I was done with my report. The Agency declined. Two, I have received allegations from the witness and information supporting the allegations. I have not yet fully reviewed the documents with which I have been provided. I have not also researched the documents that I need to look at before I can determine the merit of those allegations and the supporting information. I have to do that. I will do that, obviously, before my final report is prepared. I will do that as soon as possible, but until I do so I am not in a position to make a final recommendation.

MR. HARRISON: If I could just clarify my question. I want to be clear, Mr. Martin, and you're free to deny my request, but my request is not for you to make a final recommendation today. That is not my request. I request that you make a preliminary recommendation to hold off on the burning of hazardous waste because of the information brought to your attention which may lead you to conclude when your investigation is finished that operation of the incinerator is either illegal or unsafe or both. I just want to be clear as to what my question

is and I would like a direct answer to it. If you wish to say, "No, I will make a preliminary recommendation," I would just like you to say so for the record. If you're undecided, I would like you to say that for the record. If you're willing to do it, I would certainly like you to say that for the record.

11.

1.3

MR. MARTIN: The answer to the question is

I am not decided right now because I do need to review the
information that supports the allegations provided by the
witness. I will need to consult with the Corps, the
State, and the Region. I of course am prepared to make
preliminary recommendations either way as soon as possible
once I review that information. That will happen in the
immediate future. I do not believe it will wait until
March 31.

MR. HARRISON: Okay. Thank you.

[Mr. Vilello recognizes a speaker.]

MR. DAVID DICOSMO: David DiCosmo from WYOU Television. Sir, if I understand you correctly, you did say you made a preliminary request to hold off until your report was complete. Has anything changed to make you change that preliminary request?

MR. MARTIN: No. There have been -- in fact in view of some of the more recent information I would have preferred that site operations not commence

C&J REPORTING (717) 584-5904

until completion of the Ombudsman process. But again, EPA has made a decision to go forward for several reasons which I believe are listed in a letter to the Pennsylvania Congressional Delegation, among others.

MR. VILELLO: Any other questions from anybody else that has not asked a question yet? Just a minute, Rose. -- Yes, ma'am?

MS. KATHY PETER: My name is Kathy Peter.

The one thing that we were always after was the truth.

Our community -- we have fear within us for lack on your part, the EPA, of the truth. I think with the judgment -- what I really want to say is that our fear is nothing like the fear that you should have with God and what you're doing to this community and all around. That's all I have to say.

[Applause from the audience.]

MR. VILELLO: Okay, Rose?

MS. ROSE REEDER: EPA has chosen to just ignore Senator Spector's request to hold off on the burn. You made a preliminary request that there are enough concerns to wait to burn. I'm not aware of all the new information that's come out the last few days. Are those allegations, if they prove to have even seventy-five percent truth, are they serious enough to recommend a further stronger recommendation to hold off on the burn?

MR. MARTIN: The answer to that is it's possible, but I also want to say it's premature---

2.3

MR. ROSE REEDER: I understand that. I just wondered are they enough that if they prove true, are they serious enough to have merit and be of great concern? It sounds like they are to me. The other question is if they've ignored someone as important as our elected officials -- and we've had Senator Spector and Congressman Peterson and a number of other elected officials, which is a representation of our democracy, and if in the final analysis you also feel it's unsafe and your are a national representative for us, -- can they choose to ignore you, number one? And if they choose also to ignore you, what does that tell us? What should we do? What can we do? Can they ignore you?

MR. MARTIN: Well, yeah. Let me be clear. I've said it before and I'll say it again. I am not a decision making official within the EPA. However, I do find facts and make recommendations to EPA based on those facts. EPA is free to ignore or decline recommendations from me. However, to be fair, I think EPA has said in many letters to many people that if I presented any substantive concerns about safety of the incineration unit or the health of citizens around that unit, they would stop operations.

```
1
                    MS. ROSE REEDER:
                                      Is that right, Mr.
     Crystall? If the recommendation is not to burn, you will
 2
 3
     stop?
 4
                    MR. CRYSTALL: Mr. Martin recommends to Tim
 5
     Fields, Assistant Administrator in Washington, and if he
 6
     tells us to implement the recommendation or stop, we'll
 7
     stop.
                    MS. ROSE REEDER: Would Mr. Woods [sic] go
 8
 9
     by a recommendation----
10
                    MR. CRYSTALL: Mr. Fields?
11
                    MS. ROSE REEDER:
                                      Yes, Mr. Fields.
12
                    MR. CRYSTALL: I imagine -- it's his
13
     option, Bob, whether he accepts recommendations from your
14
     report or not?
                    MR. MARTIN: Correct.
15
                    MR. CRYSTALL: And it is his job to accept
16
17.
     the recommendations or not?
                    MR. MARTIN: Correct.
18
                    [Mr. Vilello recognizes a speaker.]
19
                    MS. LINDA RITTER:
                                       I'm Linda Ritter.
20
     would just like to say, Mr. Martin, that I am not
21
     insulting you actually, but I would be in your place
22
     insulted if my recommendations were not accepted. What is
23
     the point of having an Ombudsman? It's very disrespectful
24
     of the EPA if they do not follow your recommendations and
25
```

I realize -- I don't want to put you on the 1 adhere to it. 2 spot as saying anything right now, but I can't see the point in having you -- if you -- or anybody in your 3 '4 position, you're the liaison -- so if they don't honor your recommendations, what's the point in having your job? 5 6 [After a short pause, Mr. Martin smiles and 7 shrugs his shoulders.] [Laughter from the audience.] 8 MS. RITTER: No, I meant -- let's give the . 9 10 EPA more money and just dismiss your job. MS. ROSE REEDER: No, I want you to stay, 11 12 Mr. Martin. You know I personally 13 MS. RITTER: No, no. want you here because I pray for honesty and integrity. 14 15 know God's presence is in this room. There are a very, very few -- you being one of the very few that I'm very 16 17 sure is filled with honesty and integrity, and I deeply respect you because you're not in a very easy position. 18 appreciate that. I'm very grateful for you. I respect 19 20 you. I want you to know that. MR. MARTIN: Thank you. 21 You're one of the very few 22 MS. RITTER: that I know that is filled -- one of the representatives, 23 you know, people who are representing us, the small peons. 24

25

[Mr. Vilello recognizes a speaker.]

1	MR. GIL BLACK: I'm Gil Black of
2	Organizations United for the Environment, OUE, and I'm
3	also representing the Sierra Club. We were able to defeat
4	commercial hazardous waste incinerators around the country
5	especially over in Gregg Township. That was mainly on an
6	economic basis I have to admit. Nobody really paid much
7	attention to our scientific information, but I was at the
. 8	February 10th meeting, and it seems to me that it was
9	reported there that Pat Costner of Greenpeace had reported
10	at the February 2 meeting that she had found in EPA's own
11	Risk Assessment that they reported the EPA reported
12	more dioxin in the bottom ash than had been reported in
13	the fly ash. The bottom ash when you're doing a soil burn
14	is what goes back on site. Is that wouldn't that be a
15	reason to stop this burn?
16	MR. MARTIN: The answer is, I have reviewed

MR. MARTIN: The answer is, I have reviewed Dr. Costner's statement in connection with the Risk Assessment, and I think the bottom ash issue with dioxin in bottom ash, but I have not yet reviewed what we call our Final Responsive Summary issued by the Region to that analysis. I can't give you a final answer until I've done that. I just got that yesterday -- last night.

MR. BLACK: This soil burn seems to be creating dioxin, because the people from EPA have said they have taken two hundred samples on site and found no

dioxin, and now they're going to put dioxin in.

MR. MARTIN: Greg, do you want to respond to that?

MR. CRYSTALL: The levels of dioxin found in the kiln ash and the fly ash are well below background levels in this area.

MR. BLACK: That's not a sufficient answer.

MR. VILELLO: Tom, did you have one? -
Back there in the corner?

MR. BOTTORF: That's not true, Greg. You didn't read the Risk Assessment correctly.

MR. BIRCH: My name's Tom Birch. The first meeting that was held at Ulhmer Planetarium with the EPA, I asked Roy Schrock and Tom Voltaggio directly in the worst case scenario, "If this thing goes boom in the night and contaminates everything and we lose our livelihood, people are getting sick, what are we supposed to do?" The question was referred to the legal counsel that they brought with them. His response consisted of two words, "Sue us." How do we do that? I mean we've lost our livelihood. We're faced with astronomical medical bills, and we have no money coming in, and yet we're supposed to go and hire an attorney to sue the federal government to get back our tax money in response to a problem they spent our tax money to create in the first place. I'm sorry,

but I don't get this. Now, we go to the courts and they say, "No. You can't sue us," because they're protected by this umbrella shield. How does this work?

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. MARTIN: Well, I'm not in a position to advise you legally as to what your rights are, but there are considerations of sovereign immunity with the United States government. Perhaps Mr. Harrison is in a better position than what I am as to your legal rights and recourses.

If I could answer that MR. HARRISON: First of all, with the sovereign immunity question? question, the government has waived sovereign immunity per a law which you will find in the U.S. Code entitled Section 6961, it's called the Federal Facilities Compliance Act. What it says is that the federal government must comply like everyone else to state and federal environmental laws. They're not exempt. It's true that if the government poisons you not immune. through this process, you can consult with an attorney and they can advise you on how to sue for damages, but there is no remedy at that point in time to bring back your health or your family's health or in some cases certain harm to your property or wildlife. That harm will be The only question would be is there enough money in the world to repay that loss? The federal and state

environmental laws which EPA is bound to follow like everyone else, as is the Corps and OHM, are intended to prevent that type of harm, not to force you to sue after the fact. We're going to put this system to the test tomorrow when we file our suit in State Court. We'll see whether the State Court is closed to us in an attempt to prevent this harm from continuing. I certainly hope that the door is not closed. All we're asking is a chance to prove our case in a fair fight in front of an unbiased judge and we're willing to have EPA put on their evidence, like we will. That's the best I can tell you. We'll know shortly just how closed the door is, and if it is closed tomorrow then our only recourse will be to wait until we have been poisoned and try to document the source of the poisoning in this world which is already over-polluted, and then try to get damages which can't repay us for the loss in the first place.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. BIRCH: My understanding of the effects of the things that AIR fears are going to be produced by this incinerator will not be felt for twenty, thirty, forty, fifty years down the road. Okay? That's a long time to accumulate evidence. There's a lot of other things that could come into play that a sharp attorney could say, "No, that could cause it, too." It just strikes me that the system is out of whack, you know? The

1 deck is really stacked against us. We're paying for it on I think it's a damned pitiful way to run a 2 3 country. 4 MR. VILELLO: Over here, Mary Ellen? 5 MS. MCGOWAN: Mr. Martin, Greg Crystall 6 said that there's a Mr. Fields that you give your report and recommendation to -- just one person in EPA? 7 8 not reviewed by some group of experts within EPA? 9 MR. MARTIN: I provide my report -- was 10 that the question? 11 MS. MCGOWAN: Yes. What is the process 12 when you provide your report to Mr. Fields? 13 MR. MARTIN: I provide my report to Mr. 14 Fields, Timothy Fields, Jr. He is the Acting System 15 Administrator for the Office of Solid Waste and Emergency 16 Response. That office controls the Superfund Program 17 nationwide. He in turn reports to the Administrator of the Environmental Protection Agency. I give my report to 18 Mr. Fields and in his discretion he then shares the 19 20 findings and recommendations of that report with our 21 Regional Office and with other people in EPA Headquarters. MS. MCGOWAN: But it comes down to his 22 making the decision, or Carol Brown, or both? 23 MR. MARTIN: I guess the simplest answer to 24 25 that is that the buck goes to Mr. Fields. Of course he

1 reports to the Administrator. 2 MR. VILELLO: We have ten minutes left of 3 Mr. Martin's time. We'll go through this last round of 4 questions and -- I forget your name already, I'm sorry. PASTOR GENSIB: That's okay. Pastor Joyce 6 Gensib again. Mr. Martin, I have a personal question for 7 you. Having seen how our bureaucracy works, how unencumbered are you to make a fair and just report 8 9 without any pressure, undue pressure, being put upon you as to your continued employment, as to your, you know --10 11 safety? How unencumbered are you by the bureaucracy to 12 allow you to make a free and honest report? . 13 MR. MARTIN: The answer is this is a very pressure filled job----14 15 PASTOR GENSIB: Uh-hunh. MR. MARTIN: Obviously. I will make a free 16 and unencumbered report. 17. 18 PASTOR GENSIB: We do trust you, but I know how bureaucracy is, and I would be concerned as to what 19 20 undue pressure is on you. I understand. 21 MR. MARTIN: MR. VILELLO: Good question. 22 One last question. Go ahead. 23 MS. BIRCH: Diane Birch. It is -- it has 24 been told that Furman Foods and Lay's Potato Chips are no 25

longer going to buy any produce from Clinton County. 2 MR. BOTTORF: That's not what they said. That's not what they said. They didn't say they wouldn't 3 buy. Furman Foods is on record saying that they still 4 5 require testing of produce for dioxins. We should make that clear before -- I didn't want you to go the whole way 6 7 there. 8 MS. BIRCH: Never mind. 9 MR. VILELLO: I'm going to----10 MR. BOTTORF: Why don't we go till twelve? 11 That's six minutes. 12 MR. VILELLO: Don't you want to give us an 13 opportunity to speak? Do you want to say anything? 14 MR. BOTTORF: Uh -- no, but Mick does. 15 MR. VILELLO: Okay. Mr. Harrison? MR. HARRISON: A few last points. 16 17 two or three questions for the Ombudsman and there were a few things I failed to note to you from the new witness 18 that I think you should know. 19 20 The new witness information first. witness indicates that the air monitoring system on the 21 22 perimeter of the site has been relied on to tell the community that nothing toxic is essentially leaving the . 23 site like beta-naphthylamine. The witness indicates that 24

he has reviewed monthly reports indicating that that air

25

monitoring system does not work and has not worked from day one. He also indicates that the contractor or contractors knew from day one that that air monitoring system did not work as designed using the method required in the contract, but they continued to install that and use it knowing that. That's his information.

The second point. He identifies the fact that the water from the scrubber air pollution control device after it is spent, after it has been used, to go through the combustion gases is sprayed on the bar mash which creates steam and fugitive emissions which will have contaminants not just from bar mash, but from the scrubber water and the combustion gases as well.

He also indicates that the contractor knowingly burned during the shakedown trial period at a high rate of feed after he knew that burning contaminated soil at that rate of feed would not remove the contaminants of BNA and phenac essentially from the soil. He raised that concern. His concern was dismissed and they continued to burn at the rate for quite a period of time anyway.

My questions for the Ombudsman are -- you indicated earlier that one of the reasons for the delay in the release of your initial report, your May report, was an indication of two technical errors in that report which

1	you identified or at least partially identified. Were
2	there, in addition, other reasons which delayed the
3	report, and was one of those reasons that EPA had a
4	concern that your report would create legal problems for
5	EPA?
6	MR. MARTIN: I think those let me go
7	back. I answered earlier that the May 8 report was
8	initially held and then remanded back to me because there
9	were concerns about technical errors, technical
10	inaccuracies, and misstatements of fact which may result
11	or might have resulted in legal problems, yes.
12	MR. HARRISON: Okay, but were there was
13	it clear to you that the legal concerns that the Agency
14	expressed in holding your report were limited only to what
15	they considered technical inaccuracies or might they have
16	had legal concerns about what was accurate in your report?
17	MR. MARTIN: My understanding was the
18	report was remanded because of what was in the four
19	corners of the report.
20	MR. HARRISON: The entire report?
21	MR. MARTIN: Yes, the entire interim
22	report.
23	MR. HARRISON: And not just the two
24	inaccuracies that you identified?
25	MR. MARTIN: Correct.

1 MR. HARRISON: All right. Now, in your initial May report you had recommended that the Drake site 2 be retested for dioxin and some related compounds. 3 4 that correct? MR. MARTIN: I think the interim report recommended that the feed be sampled for dioxin. The feed coming from the MR. HARRISON: 8 soil on the site? MR. MARTIN: Correct. 10 MR. HARRISON: And in the report that was 11 finally released in August that recommendation was 12 It was no longer present, is that correct? 13 MR. MARTIN: The draft final report did not contain the recommendation that the site soil be sampled 14 15 for dioxins before going into the incinerator. 16 correct. 17 MR. HARRISON: Now, did you receive information from EPA that convinced you that your 19 recommendation to have additional dioxin testing in the 20 feed was technically inaccurate and without a basis? 21 MR. MARTIN: I think the Region, in written 22 comments to my office, felt that there was not a 23 sufficient basis to test. MR. HARRISON: The Region felt that way, 24

but my question to you is, did you receive information

25

that convinced you, not the Region, convinced you, -- the Ombudsman, that your initial recommendation was without a technical basis -- retesting for dioxins in the feed? MR. MARTIN: In the draft final report I believe I recommended that we issue a fact sheet which describes why that was not necessary. Now, I don't know to this day whether or not the fact sheet was issued or not. I would like to also respond that in my view the issues in both the interim report and the draft final report are not foreclosed. -- So it's not a settled issue.

1.8

MR. HARRISON: To be clear, your final report which is yet to come may still include, or not, the recommendation to do additional testing for dioxins?

MR. MARTIN: It may.

MR. HARRISON: It may. All right. With all due respect, Mr. Martin, and shared respect of the clients has been expressed for your efforts in person, but, nonetheless, I've asked you a direct question and have yet to get a direct answer. My question was: Did you feel as the Ombudsman receiving information from the Region that you lack a technical basis for your original recommendation that dioxin testing be redone in the feed at the Drake site?

MR. MARTIN: And the answer is I think in the interim report. One of the technical errors

identified was a misunderstanding of how dioxin was tested for at the site in my interim report. Okay? 2 3 MR. HARRISON: I understand that as far as 4 it goes. 5 MR. MARTIN: So this process is 6 evolutionary. I did not foreclose that issue. 7 MR. HARRISON: I understand. So do I take 8 your answer to be that the Region identified a legal issue ٠9 regarding how dioxin must be tested for, but did not 10 convince you that there were not other bases in science --11 perhaps risk concerns, that might justify additional 12 dioxin testing? 13 I think the reason identified MR. MARTIN: 14 a misunderstanding of the tests for determining whether 15 the dioxin was present at the site or not. 16 MR. HARRISON: I understand. 17 MR. MARTIN: After that was identified I decided to go with the recommendation in the draft final 18 19 report that the fact sheet be done explaining why testing 20 for dioxin in the soils before going through the incinerator was not necessary. 21 MR. HARRISON: I understand. 22 23 trying to determine what your reason was for making that change that you concluded that there was no technical 24

basis for requesting the dioxin testing? -- That you

1 lacked a technical basis for requesting it? 2 MR. MARTIN: That issue is not foreclosed. I don't know how else to----3 MR. HARRISON: I take that to be that that 5 was not your reason for making the change? I'm just 6 trying to get an answer to my question. 7 MR. MARTIN: Maybe I don't understand the 8 question. 9 MR. HARRISON: Okay, I'm sorry. I thought I was clear. If there is a scientific reason for testing 10 for dioxins at the Drake site -- for example, that initial 11 evidence indicates dioxin may be present and perhaps at 12 13 levels of concern, who decides for the moment the legal 14 question whether an additional higher destruction efficiency level might be required, a 69 requirement for 15 16 burning dioxin -- put that aside, okay? What I'm trying to get at is are there other reasons such as the simple 17 danger of burning dioxin and emitting it into the 18 environment through the stack related reputed emissions, 19 does not that technical basis remain as a basis for . 20 justifying your initial request for dioxin testing or have 21 you eliminated that basis yourself? 22 MR. MARTIN: From a technical perspective? 23 MR. HARRISON: Yes -- not a legal one. 24 MR. MARTIN: From a technical perspective -

- during the remedial investigation and feasibility process, site soils were tested. I believe there were forty-three samples and maybe two hits for a compound 3 known as PCP----MR. HARRISON: Pentobarbital. 6 MR. MARTIN: Yes. There may have been an 7 issue with respect to the compound known as Silvex 8 [phonetic] as well. The Region expressed, in a memorandum 9 done by Mr. Vavra, that there was no technical basis to be 10 concerned about dioxin at the site. I know that AIR 11 believes otherwise, so that is an issue in contention. 12 That's an issue in the Ombudsman's report. 13 MR. HARRISON: It's still open in your mind? 14 MR. MARTIN: It's still open in my mind. 15 MR. HARRISON: All right. 16 MR. MARTIN: As it's open in yours. 17 MR. HARRISON: One last question on this 18 issue. When you were given Mr. Vavra's report were you 19 20 given a document represented as the Weston Summary of Dioxin Testing in the past at the Drake Site and the last 21 sheets that were attached to the Weston Report, were you 22 provided that information? 23 MR. MARTIN: I don't recall that I have the 24 Weston analysis. I have Mr. Vavra's analysis. 25

MR. HARRISON: I understand that.

MR. MARTIN: But I am getting the Weston analysis from the administrative record.

1

2

3

5

6

7

8

10

11

12

13

1.4

15

16

17

18

19

20

21

22

23

24

25

MR. HARRISON: I understand that, but we'll provide it to you in any case. Let me point out for the Commissioners' benefit and your benefit that my reading of that attachment -- which was apparently not provided to your office, indicates that in 1983 and '84 samples were taken at the Drake site and analyzed for dioxin by the They were analyzed for in buildings, tanks and in They found very high levels of dioxins including over a thousand parts per billion of 2378 tetra-dioxin, the most toxic type, in a tank in a building. They found hundreds of parts per billion in the building, and they found hundreds of parts per billion of 2378 tetra in soil using a gas chromatograph electron capture technique which Mr. Vavra and Weston described as a "screening technique." They then sent these same samples apparently off to another lab to use mass spectrometer readings, PCMS technology, saying that was a more precise method. Vavra's conclusions based on the Weston summary of this data was that the follow-up analysis for dioxin was nondetect in the soil and in the building. That's not the truth. You wouldn't know it unless you read that report that should have been attached to Mr. Vavra's memo that

wasn't given to you. What that report attached to that memo says is that they had problems cleaning up the samples, they had interferences and the results from the laboratory technicians was that the analysis was indeterminable in the follow-up tests -- not non-detect, but indeterminable. That's true for the soil testing as well, which means that the best evidence on the record at the moment, which EPA has been misleading you about, is that there are hundreds of parts per billion of dioxin or perhaps a dioxin-like compound in the soil at the Drake site, and the attempts to disprove that by follow-up testing failed. They still don't know whether the initial results were right or whether the results were right for another similar compound or whether they were wrong. the meantime, they're telling the public that the results were zero. You need to understand that and the Commissioners need to understand that.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. MARTIN: Well, I note your concern for the record. I will deal with that issue in my final report and I will consult with the Region on that issue.

MR. VILELLO: Thank you, Mr. Martin.

Again, I appreciate your concerns and I appreciate

everything that you've done along the way to try to make
this incineration project as safe as it can be for the

public of this community. I just have a few comments. I

understand that the burn began today and I find it unbelievable that it has started without this final report. It just causes more distrust, when all along we thought we would have Mr. Martin's report. I'm just convinced this community has to be convinced that it is safe and I don't think they've done that yet. They've had since 1988 -- the DEP and the EPA has had since 1988 to convince this community that this project would be safe and they haven't done that. I find that sad. But, the DEP is the state's environmental watchdog and they better do the best job they can for this community. I hope we can all sit here next year at this time and believe that they have done that.

Again, Mr. Martin, a lot of faith is being

б

Again, Mr. Martin, a lot of faith is being put in your report, your final report, and I wish you well.

MR. MARTIN: Thank you.

PASTOR GENSIB: Mr. Vilello, I know that there isn't time, but I have a concern. I hear your comment now. I heard you say yesterday that you were at the site, you looked around----

MR. VILELLO: Yes, we were.

PASTOR GENSIB: They took you on a tour, and everything was fine, and you were behind this.

MR. VILELLO: What did you hear? I'm

C&J REPORTING (717) 584-5904

sorry, but what did you hear I said?

PASTOR GENSIB: That you took a tour of the site yesterday----

MR. VILELLO: Yes, I did -- not yesterday, but last week.

PASTOR GENSIB: Okay -- that you were content with what you saw, that it was safe to burn and you were behind the burn. Today you're telling us that you're concerned. Are you going to change tomorrow? Where are you?

MR. VILELLO: I didn't change. I'm not changed at all. I said -- I toured the site----

PASTOR GENSIB: You have gone on record against AIR for what AIR is standing for. I am a member of AIR because of my concern against the incinerator. I'm not as learned as some of the AIR members. I'm also not as emotionally involved as they are. I am concerned as a citizen. As a citizen I'm asking you as a Commissioner to make a firm stand somewhere, not today be with us and tomorrow against us. We're not sure where you are.

MR. VILELLO: I appreciate the two questions you asked by the way. I thought they were the best questions of the day. I have stood in the same position. I said from day one that the incinerator has to be safe. We have to be convinced that it's safe. I've

always stood there.

Last Wednesday when we toured the incinerator I looked at the physical components of the incinerator. They showed me the workings of the incinerator, the safeguards. As a contractor I was impressed. Am I not allowed to be impressed? I believe I am. The actual workings of the incinerator I believe are fairly adequate. Now, will it safely incinerator the dirt? I do not know. So, I've never changed my position.

PASTOR GENSIB: We just need our Commissioners -- you're the leaders for us. You're our elected officials. We need you to be our watchdogs for us, and not override what we're saying.

MR. VILELLO: I'm not -- this is an exact example of local government getting a black eye for big government's decisions. We, as Commissioners, cannot override the decision.

PASTOR GENSIB: Local government -- big government needs local government before big government gets their bucks.

MR. VILELLO: I won't argue with that.

PASTOR GENSIB: And local government needs the people in order to be the local government, so we need to know that who we're putting in office are going to be representatives, honest representatives, for our welfare.

1	Not for what EPA's going to do for this community, not for
2	what the government is going to give this community, but
3	that we're going to be safeguarded in our community.
.4	That's my concern and that's what I want from you as my
5	government agent. I don't care what the federal
6	government is going to give you in bucks. I want to know
7	that I can breathe air. I want to know I can live. I
8	want to know that you're watching over my welfare. That's
9	what I need to be assured of from you as my elected
10	officials. Can you give me that guarantee?
11	Will you go on record giving me me personally, Pastor
12	Joyce Gensib, that guarantee?
13	MR. VILELLO: The question is?
L4	PASTOR GENSIB: Will you give me a
15	guarantee that you're working for me for me?
16	MR. VILELLO: I am working for everybody
L7	both sides of the issue. I am trying to
18	PASTOR GENSIB: Even if I am just a little
19	contingency that don't count according to EPA?
20	MR. VILELLO: I never said that. If that's
21	what they
22	PASTOR GENSIB: No, the EPA did.
23	MR. VILELLO: I'm very concerned. I've
24	been involved with this issue for two years.
25	PASTOR GENSIB: Then, Mr. Vilello, I'll be

watching very carefully, and believe me, I'll be calling 2 your office if I don't----3 MR. VILELLO: It pleases me that you are 4 watching, and I will be there. 5 PASTOR GENSIB: We may get on very intimate 6 terms. 7 MR. VILELLO: Thank you. 8 [Laughter from the audience.] 9 MR. VILELLO: Again, your questions were 10 the best questions I heard today and I appreciate you 11 coming. 12 MR. BOTTORF: I would just like to finish 13 by saying that there are so many reports still out there, 14 not just Bob Martin's report, so many reports that are out 15 there and unanswered that anybody that supports a burn 16 without those final reports also has to support getting rid of the agencies that produced the reports. Doesn't 17 18 that make sense? If ATSDR's final report is not released, what good are they? Let's cut the waste. Okay? If Bob 19 Martin's report doesn't need to be looked at -- I'm sorry, 20 21 Bob, but you must go also. [Laughter from the audience.] 22 MR. BOTTORF: If our Senators can't tell 23 government agencies what to do, we've got big problems in 24

this country because that same thing happened in Iraq and

happens in China. This government agency -- and by the 2 way, I'd like to see Mr. Crystall on the stand. He 3 answered a question today. He said that he'd never told our witness that this incinerator didn't work. But what does our witness have to gain? What does this new witness 5 have to gain by saying that Mr. Crystall did say that? 6 Nothing. So, Mr. Crystall I'll be looking forward to 8 seeing you on the stand, sir. I think you should invite your children up for the burn. Where are they? I'm 9 10 disgusted with my government. That's the bottom line. MR. MILES KESSINGER: Mr. Martin, you say 11 12 your report is going to be finished on March 31st. Are we 13 going to then wait for another hundred day delay before 14 EPA decides to release it or don't you have any control 15 over that? 16 MR. MARTIN: I don't have any control with 17 it's distribution. MR. KESSINGER: So you could finish your . 18 19 report on the 31st of March and we may not know anything 20 until next March 31st? MR. MARTIN: I can't speculate. 21 MS. ROSE REEDER: Can your office 22 personally send a copy to our Commissioners so that there 23 isn't any in between persons delaying it -- your final 24

25

report?

1 MR. MARTIN: The procedure has been 2 submission to the Assistant Administrator for review of my recommendations and findings and decision making. 3 the authority to distribute. PASTOR GENSIB: Am I understanding you, Mr. Martin, that you're working to protect us? You're our 6 7 Ombudsman, right? 8 MR. MARTIN: Yes. PASTOR GENSIB: But you submit your report 9 to your Regional Director and then he decides who gets the 10 11 reports even though you're really working for us? 12 MR. MARTIN: Yes. I'm the National 13 Ombudsman, but----14 PASTOR GENSIB: Then what is the purpose of 15 you working for us if your boss can say, "Well, they're 16 not getting the report. We'll decide who gets the 17 report?* 18 MR. KESSINGER: I think that's quite evident when a U.S. Senator couldn't even get the report. 19 PASTOR GENSIB: Uh-hunh. Government of the 20 21 people, for the people, but run by a few people. 22 MS. MCGOWAN: How come CNN got the report, but with some of the information blacked out? What do 23 they have that we don't have? 24

AND THE PARTY OF T

25

MR. VILELLO: Again, thank you all.

you, Mr. Martin. We anxiously await your report. [The Clinton County Commissioners' Public Meeting concluded at 12:07 p.m., March 4, 1998.] <u>CERTIFICATE</u> E hereby certify, as the closed microphone stenomask reporter, that the foregoing proceedings were taken by me, and thereafter reduced to typewritten form by me, and that this transcript is a true and accurate record . 9 to the best of my ability. C&J REPORTING Connie L. Cataldo