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THE UNITED STATES

ENVIRONMENTAL PROTECTION AGENCY

PROPOSED CHANGE TO THE

KEYSTONE SANITATION LANDFILL

SUPERFUND SITE CLEANUP

Date : Thursday, June 22, 2000

Time : 7:00 p.m.

Place : Abbottstown Fire Hall
38 East King Street
Abbottstown, Pennsylvania

Reported By: Kathy F. Neiderer, RPR
Reporter - Notary Public

PRESENTED BY:

HAROLD YATES
Senior Community Involvement Coordinator
U.S.E.P.A.

KELLY A. CHASE
Remedial Project Manager, Site Cleanup
U.S.E.P.A.

RUTH SCHARR
Remedial Project Manager, Groundwater Portion
U.S.E.P.A

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2 PUBLIC MEETING HELD THURSDAY, JUNE 22, 2000

3 MR. YATES: Good evening. I want to thank
4 you all for coming out. My name is Harold Yates. I am
5 with the Environmental Protection Agency. First I would
6 just like to introduce who is with us tonight and we will
7 talk about why we are here. I will give you the who
8 first. Remedial Project Manager, Kelly Chase, with
9 Keystone Landfill, and, also, Ruth Scharr. And also from
10 our regional counsel we have Mary Rugola and Tom Cinti.
11 And I just wanted to acknowledge two officials here from
12 Pennsylvania Department of Environmental Protection,
13 Richard Morgan and Art DellaPiazza.
14 Are there any elected officials present?
15 MR. HOTCHKIN: I am with Congressman
16 Goodling's Office, Doug Hotchkin.
17 MR. YATES: Thank you very much.
18 The reason we are here is for an
19 informational meeting, which we are required to hold
20 during comment periods whenever EPA is going to make a
21 decision concerning a remedy in a Superfund site. We have
22 a stenographer that will produce a transcript so that we
23 have a complete record of tonight's meeting.
24 We have a very simple agenda. We would ask
25 that you bear with us while Kelly Chase basically

1 describes the proposed plan that we have, and afterwards
2 we will go to questions and answers.
3 Before we get started, are there any
4 initial points that anyone wishes to make concerning the
5 agenda?
6 (No response.)
7 So at this point without further ado,
8 Kelly.
9 MS. CHASE: Hi. As Hal said, my name is
10 Kelly Chase. I am one of the project managers on this
11 site. I share the seat with Ruth Scharr. Ruth has been
12 working on the groundwater portion of the cleanup, and I
13 have been involved in the portion that involves the change
14 that we are here to talk about tonight.
15 The proposed change basically -- sorry,
16 there is a little typo here -- the proposed change
17 involves replacing the requirement for a cap on the
18 landfill with an option where we would use an enhanced
19 landfill gas extraction system to actually remove and
20 destroy volatile organic contaminants or VOCs from the
21 landfill. The cap would have just contained the VOCs in
22 place, the contaminants in place.
23 I am going to briefly touch on what the
24 remedy was in 1990. We had some amendments to that in
25 '99. And I'll give an update on the status of the

1 groundwater cleanup. This proposal does not affect the
2 groundwater portion of the remedy.
3 As many of you are aware, in 1990 EPA
4 selected a cleanup remedy for the site. Primarily, it
5 included provision for construction of an impermeable cap
6 on the landfill, an on-site groundwater pump and treat
7 system. It also provided for water filters to on-site
8 residents and construction of a fence around the site,
9 monitoring of groundwater in monitoring wells and
10 residential wells, and surface water and sediment
11 monitoring, as well as deed restrictions on the use of the
12 property.
13 Again, this proposal would eliminate the
14 first component, which was the impermeable cap. Based on
15 additional studies, site studies conducted, EPA amended
16 the remedy in 1999 to include installation of off-site
17 extraction wells, in addition to the on-site groundwater
18 treatment. There are now more wells off the landfill
19 property. And it also provided for water filters to
20 residents, current and future residents, within
21 three-quarters of a mile of the site. And there were
22 additional monitoring requirements.
23 So, as I said, we are here to discuss a
24 change. Why a change? There is really two reasons; one
25 has to do with technology, the other has to do with some

1 changes in the law.

2 Basically, in the past ten years there were
3 advances in the technology that now allow for treatment of
4 these contaminants in the landfill, as opposed to just
5 capping them. Back in 1990 when the original remedy was
6 selected, this type of treatment was considered but it was
7 determined that it wasn't practical or feasible at that
8 time. We just didn't have enough information. So in
9 1997, the responsible parties proposed to use a gas
10 extraction remedy at the site to actually remove volatile
11 contaminants and control methane instead of containing
12 them with a cap.

13 In addition, I said there was some changes
14 to the law, specifically, Pennsylvania regulations changed
15 to allow for methods other than a cap if they were
16 protective and cost effective. Pennsylvania has reviewed
17 this proposal and determined it met these criteria;
18 therefore, the law has changed to allow us the option to
19 do something other than a cap. In 1990 the law required
20 that a cap be constructed.

21 In addition to the gas extraction component
22 of the remedy, there are several other pieces. I will
23 touch on them briefly now and talk some more about them
24 later. One involves upgrading the cover, the soil cover
25 with low permeability soils so that we would have

basically two feet of soil across the whole landfill. There have been places where there's been erosion and may be less than two feet. In addition, there would be monitoring to evaluate the removal effectiveness of the gas extraction system and monitoring of the quality of the leachate.

There are, also, some other pieces of this remedy would be surface water controls to manage runoff and erosion and maintenance of the fence and deed restrictions. These three components were part of the original remedy and they remain part of this proposal as well.

So, again, the focus is on the gas extraction system. Basically, gas extraction would work to remove and destroy the volatile organic contaminants and the methane from the landfill. It will actually separate the contaminants from the soil in the waste fill and pull them out in the vapor phase by applying a blower, a vacuum to a system of wells. These wells would be connected through a series of pipes back to a treatment building where they would be thermally destroyed with a flare.

I have a drawing here. You may not be able to see it very well, but it's in the handouts. This is an example of what a system might look like. You would have

1 an extraction well. The depth of the waste at Keystone is
2 approximately thirty feet. You would have an extraction
3 well that went almost to the bottom of the waste, and this
4 would pull the gases, the methane and the volatile organic
5 contaminants come along with the methane and go through a
6 series of pipes back to a treatment building where they
7 would be destroyed by a flare and then the gases would be
8 emitted through a stack.
9 When this was first proposed by the
10 responsible parties in 1997, EPA felt like we needed more
11 information before we could decide whether this was
12 actually something that would work at Keystone. So we
13 asked the parties to conduct a pilot study out at the
14 landfill. In '98, November of '98, the study was
15 conducted on the eastern portion of the landfill, which is
16 the area of the highest historic contamination, where many
17 of you know where the K-1 well is, is basically where we
18 have seen the higher levels of volatile organic
19 contaminants. We installed an extraction well and twelve
20 monitoring points, monitoring probes, and ran the system
21 for about five days at various flow rates. And the
22 results were good. They indicated that this technology
23 could, indeed, work to control methane and remove
24 contaminants.
25 This is also in your handout. It's just an

1 example of some of the monitoring points that were
2 installed during the tests. This is a gas extraction well
3 and at different distances, I think it's twenty-five feet,
4 fifty feet and a hundred feet from the extraction well, we
5 measured the changes in pressure in the landfill as we
6 drew out gas from the extraction well.
7 These were in the area where we conducted
8 the test, we found an intermediate cover. We went down
9 through waste and then we hit another cover and then found
10 waste again. So some of these are deep monitoring points
11 in the deeper zone, and there are also shallow; this is
12 basically five to ten feet shallow probes. We showed that
13 when we pulled gas out at the extraction well, we saw an
14 effect as far as a hundred feet from that point, and that
15 was considered a very good result.
16 Another one that you might have some
17 trouble reading -- after we conducted the pilot study, we
18 felt it was successful, so we asked the responsible
19 parties to go ahead and prepare a focus feasibility study
20 which would further evaluate the alternative and evaluate
21 costs and preliminary -- provide some preliminary design
22 information. But this is kind of a conceptual picture of
23 what the extraction system might look like. It doesn't
24 have everything here. But this is the area where we
25 conducted the pilot study, the K-1 area where we have seen

the most contamination, and these points are extraction wells (indicating).

As you know, the landfill is shaped like a horseshoe and there are different extraction wells around the landfill. This doesn't show the monitoring points that would also be installed. The wells would be connected through piping back to a treatment building that's proposed to be located in this area (indicating), which is kind of in the area where the current groundwater treatment building is.

As I mentioned before, there's other components to this remedy. One involves upgrading the soil cover. We would have to perform a thorough investigation of the cover during design, and wherever it was less than two feet we would increase the cover; improve -- repair damage and improve drainage and revegetate the cover.

I mentioned before there would be surface water controls in place to manage runoff and erosion. Basically, this would involve the channels on and around the landfill to convey runoff and reduce infiltration. Specifically, we'd be looking at drainage improvements to the southern side of the landfill, Line Road, which has historically been a problem area with runoff. These various pieces would be further developed during design.

1 But we would have drainage controls to deal with runoff to
2 adjacent properties. That might involve detention basins
3 or riprap lined channel, which is basically channels lined
4 with stone so the water will infiltrate and the soil stay
5 in place.
6 The fence is up, but in areas where --
7 there are some areas where we found waste outside the
8 current fence, and this remedy would include a provision
9 to actually relocate the fence to the true boundaries of
10 the landfill.
11 Goals of the remedy, well, I guess first
12 and foremost is we feel that this proposal would actually
13 capture and remove contaminants and destroy them
14 permanently. Also, it would prevent migration of the
15 contaminants to the groundwater and surface water and
16 sediments. And increasing the soil cover will prevent
17 direct contact with contaminated soil and waste and we
18 believe it will effectively control methane buildup and
19 methane migration.
20 In order for EPA to select a remedy, it
21 must be evaluated against these nine criteria. EPA has
22 determined that this remedy does meet the criteria and
23 will be protective of human health, it complies with
24 applicable or relevant and appropriate requirements, which
25 are, basically, federal and state laws, and, most

1 importantly, it satisfies the preference for treatment
2 versus containment. We will actually remove the source of
3 contamination.
4 You will see in the plan that we also have
5 a provision for two contingent remedies. These are
6 included in the event that the gas extraction were to fail
7 to meet its cleanup goals, EPA would have an option to
8 select one of these two remedies. The first is really a
9 modified cap, which would be just cap the top of the
10 landfill to reduce infiltration where infiltration is
11 greatest. It should reduce about seventy-five percent of
12 the infiltration. It wouldn't put a cap on the slopes.
13 The second one is the treatment remedy, which might
14 involve leachate recirculation and/or air and water,
15 basically, to enhance degradation of the waste.
16 Okay, so, I know I am cruising through
17 this. What's next? We had a request to extend the
18 comment period, so the comment period is going to be open
19 until August 4th. At that point if we decide that we are
20 going to pursue this remedy further, EPA would write a ROD
21 Amendment and issue the ROD Amendment. And the next step
22 for the remedy would be design phase and construction.
23 I said I was going to briefly talk about
24 the groundwater cleanup. Again, tonight's discussion,
25 this proposal doesn't affect the groundwater cleanup. The

1 treatment plant has been constructed. It should start
2 operating this summer. Residential filters have been
3 provided to anybody who was eligible and accepted those
4 filters. And monitoring of the groundwater and streams
5 and sediments would begin when the plant starts up later
6 this summer.
7 I would just ask if you have questions
8 about the groundwater portion, if you can hold those until
9 the very end and maybe Ruth can help address those. But
10 that's really the end of my presentation. And I guess I
11 will open it up to questions on the proposed remedy.
12 MR. YATES: We would ask that when you ask
13 a question, that you identify yourself for the
14 stenographer, please.
15 MR. FRANK: I am Victor Frank. I live at
16 76 Clouser Road. I am a neighbor of the landfill. I have
17 several questions.
18 The impermeable cap and the gas collection
19 system was the first thing that we were going to do, but
20 now we decided that we can just somehow or another put
21 some vacuum on this and draw the volatile portion of these
22 chemicals into this system and then burn them. But the
23 rest of the solvents are still down there. Now, it would
24 seem to me that you can mix some of these things with Lord
25 knows what that's in there and get some other compounds

that we have never seen yet. What are we going to do about that?

MS. CHASE: I can try to answer some of that. It is my understanding that most of our contaminant concern out there are volatile and they will respond well to this system. There are also some metals and they won't be -- they won't volatilize and be pulled out by the vacuum system. They would be treated in the groundwater cleanup, as far as the --

MR. FRANK: So it's your position that by applying this vacuum to these various wells, that you are going to completely -- the term I am looking for is turn these chemicals into a gas and remove all of them?

MS. CHASE: There are cleanup goals that we have in place, and one of them would be a ninety percent reduction in the levels of the volatile organic contaminants. I have to look back to see if there are some that don't fit that category, but I believe that the contaminants of concern that are part of the groundwater remedy, aside from the metals, would be treated by this gas extraction system.

And initially it would be operated, we would expect to see -- there has been no methane removal to date, so there is a lot of methane in the landfill. You would initially see a good deal of methane come out.

1 Along with the methane would come the volatile
2 contaminants. And then maybe things would slow down for
3 awhile as it built up again. I guess with the systems,
4 they usually cycle them and, basically, crank up the rate
5 at which they extract them and then turn it down for a
6 while and let it build up again. So not everything is
7 going to come out at once. There definitely would be a
8 gradual scenario.
9 Right now the estimate is that this would
10 operate up to thirty years or so, just the same as the
11 groundwater treatment is expected to.
12 MR. FRANK: Industrial chemicals, such as
13 methylethylketone -- and I don't know that any of that is
14 there -- or trichloroethylene, which is a degreaser
15 industrial solvent-type thing, and you use it in a
16 situation where you basically boil it but then you can
17 condense it right away and you lose very little of it;
18 what my question still is of this trichloroethylene -- and
19 I don't know how much is in there, and, probably, you
20 don't either -- how much of that can we completely turn
21 into a vapor or a gas and extract from the landfill? If
22 you started out with a gallon somewhere in there, will you
23 be able to completely turn this gallon of solvent into a
24 gas and extract it all?
25 MS. CHASE: I don't have an immediate

1 answer for that. It's a fair question.

2 MR. FRANK: The reason that I am going to

3 this length is because if we capped this and we contained

4 this and we kept the rain water from percolating through

5 this and carrying it somewhere where we can't get it and

6 mixes with something else and then gets into the stream of

7 water, the groundwater, and eventually somebody may be

8 miles and miles and miles from here is going to wonder why

9 their water tastes so fantastic.

10 MS. SCHARR: Kelly, can I jump in there?

11 This remedy is working in conjunction with the groundwater

12 remedy. What you have to remember is the risks are with

13 the remedy for groundwater was volatile organics, and so

14 that's why this seems like this is a good approach for

15 reducing the source of the contamination of the landfill.

16 We are, in concert with that, going to be

17 pumping groundwater to capture the contaminated

18 groundwater before it moves off site. But most important

19 is that the people that are within a three-quarter mile

20 boundary of the landfill north of Piney Creek -- and this

21 has to do with how EPA's opinion on where groundwater

22 flows -- those people have been provided filters. The

23 groundwater remedy includes the provision of those filters

24 until the groundwater is determined to be clean to meet

25 the conformance standards that are set forth in the

1 Amendment from 1999. So together it's a protective
2 remedy.
3 What Kelly is trying to bring out here for
4 you tonight is that it's a source reduction. We may not
5 be able to completely remove everything in the landfill,
6 but we expect to see a large reduction in the source and,
7 therefore, leachate won't continue to be a source to
8 groundwater contamination. So together the remedies may
9 end up actually -- it may be that in the end that
10 groundwater may be cleaned up quicker. But the people
11 that may be exposed, they have their filters and they will
12 continue to have their filters maintained until the
13 conformance standard of groundwater is met.
14 MR. FRANK: A question in regard to that,
15 how often will the filtration system in the individual
16 homes be checked?
17 MS. SCHARR: There will be a -- it's six
18 months there is going to be a check on people's filters
19 that were recently installed. Now, there have been some
20 people that had their filter installed in December and
21 they haven't been checked. What we were waiting for was
22 for all of them to be done and have everybody on the same
23 changeout. Most of the homes that received the filters
24 did not even have VOCs detected in their well water.
25 MR. FRANK: Yet.

1 MS. SCHARR: Yes, well, if they haven't for
2 all these years, and there were seven rounds of
3 residential well samples taken over the OU-2 RI, so we
4 really believe that the community has been protected.
5 There will be the changeout eventually. It
6 will probably be a year. I mean, the manufacturers of
7 these units will come out with recommendations or
8 standards for what, you know, how much source or
9 contaminants can the unit absorb before it has
10 breakthrough. But the units that have been installed in
11 people's homes are in series, so it goes through one
12 canister and goes to a second one. So everything that's
13 being absorbed by the first canister, clean water is going
14 through the second canister.
15 So I really don't think there will be
16 exposure. And there will be in six months -- there is --
17 if you have it in your home, you know there's a valve in
18 between the canisters. That's so that we can sample the
19 water once it comes out of the first carbon unit to ensure
20 that it's protected.
21 The remedy, though, the amendment -- I want
22 to get back to the other questions -- but the remedy
23 doesn't require groundwater monitoring of every home that
24 has received a filter; it's fifteen percent of the total.
25 And the reason why that is is because we believe that we

have a good enough understanding, and we will be monitoring quarterly the groundwater. There's going to be monitoring wells around the site, so it's not that -- the individual homes won't be monitored, but there will be quarterly monitoring of groundwater around the perimeter of the landfill. And if the data over time shows that our expectations for how groundwater is moving or how we expect the concentrations to change, if those expectations are different, we will change things accordingly. But we will be watching the groundwater and how our remedy is effective at capturing, and you should see a decline in concentrations once you come on line at the plant.

MR. FRANK: And as these wells, the test wells, as they are tested, then that will be public knowledge, we are going to find out about that so we won't be surprised?

MS. SCHARR: I mean, they will be reported to EPA, the groundwater results, in a report. If the community wants, I can send copies of those reports to the township when they are submitted to me. If the township building would like to be the keeper of them, I can have them cc'd to someone.

MR. FRANK: It would be nice to have this information, speaking just for myself.

All right, let someone else have a chance.

1 Thank you.

2 MS. HARDINGER: My name is Susan

3 Hardinger. I am a neighbor of the landfill.

4 Who is paying for this?

5 MS. CHASE: As you probably know, it EPA's

6 policy to pursue the responsible parties for these cleanup

7 costs. We are currently negotiating the owner/operators

8 to cover those costs. The settlements are looking

9 positive. They are still ongoing. I can't really discuss

10 any of the specifics. But it's our intention to pursue

11 the responsible parties to pay for the cleanup.

12 MS. HARDINGER: I have another question

13 about where the safety information is in this document; I

14 don't see it.

15 MS. CHASE: As far as?

16 MS. HARDINGER: In case of an explosion, in

17 case of an accident, in case of a spill.

18 MS. CHASE: I guess in this focus

19 feasibility study, it's a very preliminary document to

20 evaluate whether this option is feasible. And the next

21 step, if we were to select this, then the next step would

22 be to go to design where we would have a work plan or

23 design of the system, and then that would include all the

24 health and safety for site workers and residents and all

25 the details of the, you know, monitoring that is going to

take place to ensure that the system is operated safely. So it's not really in there yet.

MS. HARDINGER: When you came to one of the slides, you said EPA has determined that this remedy meets these nine criteria but you only touched on the first three. So I would like to know how you determined that this remedy has met the acceptance criteria.

MS. CHASE: I guess I probably should have said seven criteria, because it's our policy that during and after the comment period we will address the last two, the community acceptance and the state acceptance. My mistake.

MS. HARDINGER: How will you determine that the community accepts it or rejects it?

MS. CHASE: I guess we will wait to review all community responses, written responses, and our discussion here tonight, and evaluate feedback from the community.

One reason, I guess, there's been throughout this process -- I have only been involved recently, but it's my understanding that in the past the community was not necessarily in support of a cap, so --

MR. FRANK: I am in support of the cap.

MS. CHASE: Okay, but I guess we have to wait until the comment period is over to really fully

evaluate.

MS. HARDINGER: Just to clarify the record here, as far as the community not being in support of the cap, it was the community that suggested to EPA originally could we look at other ways of doing this, there is some new technology coming along that we would really like you to look at that would be cheaper and we believe more effective. But we were shot down every time we brought it up and were told, first of all -- which I understand is not resolved -- that Pennsylvania would not accept that; but, second, that it wouldn't work and that a cap was the only way to go. So you can imagine why Mr. Frank and some others, including myself, really, really want to understand how you are going to figure out that now we want this.

MS. CHASE: Well, I guess, as you mentioned, there were advances in the technology, and when we first looked at this type of treatment, it was dismissed in 1990 because we just didn't have enough information about how soil vapor extraction, which is basically what this is, was something that was used in oil spills, discrete spills, and where you have more information about what you were dealing with. And now there are new technologies out there that will help us get a better handle on the nature of waste and the different

1 -- the permeability of the waste fill; will this be
2 something that will be able to pull gases through or is it
3 too dense.
4 And based on that study that we did, it
5 looked very promising, and we actually pulled out a lot of
6 volatile organic contaminants in just a matter of days.
7 And compared to, actually, compared to the groundwater
8 remedy, it is more efficient. You can pull with less
9 volume, less air in a shorter time. You can actually
10 remove a lot more of the source, where it's in the air, as
11 opposed to waiting for it to get in the groundwater.
12 I am sorry, there was another part of your
13 question.
14 MS. HARDINGER: That's enough of that.
15 You said there are deed restrictions; what
16 are they?
17 MS. CHASE: The deed restrictions, well, I
18 believe the original remedy just called for restrictions
19 on the use of the property -- no, I guess it envisioned
20 not using groundwater on -- any more groundwater wells
21 being drilled on the property. But this proposal wants to
22 limit the restrictions to the landfill itself. There are
23 some portions of the property that are residential, and
24 they won't be included in this, but we will limit
25 groundwater.

1 MR. CINTI: Yes, it would limit extraction
2 and insertion of new groundwater wells on the landfill
3 property itself. It would also limit any disturbance to
4 the upgraded cover on the landfill and any activity on the
5 landfill that would in any way impair the integrity of the
6 remedy.
7 MS. HARDINGER: So not the entire property,
8 just where you all figure out that there's waste?
9 MS. CHASE: Where the waste is, and it will
10 protect the treatment buildings, the treatment plant
11 that's out there now, the groundwater plant, and anything
12 else that's built if this remedy were --
13 MS. HARDINGER: It says this excludes the
14 building.
15 MS. CHASE: No, I think that if it says
16 that, I believe that it's a mistake. It should exclude
17 residential buildings, properties. I am referring to the
18 groundwater treatment system; that will be protected.
19 MS. HARDINGER: Why hesitating so long to
20 move the fence to where the waste is?
21 MS. CHASE: It wasn't --
22 MS. SCHARR: That's the part of the work
23 that's going to be performed by the owner/operators, and,
24 as you know, there was the litigation and we haven't
25 really started that component of the remedy. So that's

1 why the fence hasn't been moved yet.

2 MS. HARDINGER: Just one more, could you

3 detail for us the cleanup that has occurred since 1987,

4 or, I guess, 1990?

5 MS. CHASE: Well, since 1990 there's been

6 limited cleanup. There has been a fence to restrict

7 access, and we have been investigating the groundwater.

8 Residential filters were installed, and the plant has been

9 built and it should start operating soon. It hasn't been

10 operating yet. And, as you know, the cover was not in

11 place. So it's been limited.

12 MR. LINDSEY: I am Don Lindsey. I have a

13 question on the -- we have a paper to leave with you

14 tonight. Some has already been covered, so I am just

15 going to hit one section.

16 On Page 12 in the plan, Item Number 3, soil

17 cover, the plan calls -- you mentioned that you are going

18 to add enough to get a two-foot cover. Now, that refers

19 to the permeability rate as it is already there, 2.2 times

20 10 to the minus 6 centimeters per second, which doesn't

21 mean a thing to me, but I have had a couple fellows tell

22 me that that translates to .003 inches per hour.

23 Now, if this is right, then I have some

24 questions on meeting that criteria, and I really question

25 whether the soil that's there right now meets that

1 criteria, because the soil -- the Department of
2 Agriculture soil survey says that that was a Glenelg silt
3 loan. Glenelg silt loan in the first 26 inches has a
4 permeability rate between 2 inches and 6 inches per hour,
5 which is a whale of a lot different than .003.
6 Now, you say that you are going to add soil
7 that meets that criteria, and I am just wondering where
8 that soil might come from and how you are going to meet
9 that?
10 MS. CHASE: Okay, well, first off, I guess
11 it's not our -- it's not EPA's -- we haven't determined
12 that what's out there now is 2.2 times 10 to the negative
13 6. That is what the responsible parties claim to be the
14 permeability. There was some discussion back and forth
15 with EPA as to whether that's accurate or not. That's
16 very low permeability.
17 MR. LINDSEY: Very low, like this floor.
18 MS. CHASE: Basically, we don't want to
19 fight over what is or isn't out there. We are going to go
20 out and do a thorough investigation, grid it out and
21 decide what is, you know, an appropriate number of
22 samples, and figure out how deep the cover is out there
23 and what shape it's in. And wherever it is less than two
24 feet, we want them -- we would bring in low permeability
25 soils, which would basically be pretty close to clay to

meet that number, and bring it up to two feet wherever it's less.

MR. LINDSEY: Is that the number that you are going to try to meet?

MS. CHASE: Yes.

MR. LINDSEY: Now, if, let's say that three-quarters of the landfill has two feet of cover on it now, what I present, but it doesn't meet that criteria, will that be changed to meet that criteria?

MS. CHASE: Under the current proposal it doesn't require that -- if it's two feet, it doesn't require to necessarily add more soil.

MR. LINDSEY: They won't add more soil, but if it doesn't meet that criteria, if that's your criteria that you are going to meet and the present cover doesn't meet it, what happens then?

MS. CHASE: If the present cover were two feet everywhere and we felt it was, you know, sufficiently, you know, vegetated and we dealt with, you know, repairs, it would -- under this proposal, it would not --

MR. LINDSEY: So you really don't care what the permeability is there now?

MS. CHASE: We don't know for sure what the current permeability is. It's been estimated at the 2.2,

1 but we feel that two feet -- actually, it would be
2 eighteen inches of low permeability soils with a drainage
3 cover and vegetation in combination with this gas
4 extraction would be protective.
5 MR. LINDSEY: Well, I am just trying to
6 determine what your figures for a low permeability soil --
7 this certainly would be a low permeability soil --
8 MS. CHASE: Yes.
9 MR. LINDSEY: -- but if you are going to
10 accept what's there and it has a permeability of six
11 inches per hour -- which is quite likely, because that's
12 what was there originally, and now it's mixed up with
13 shale and so forth -- is that going to be acceptable? You
14 know, it may not matter, but there's a big discrepancy in
15 figures there, and that should be straightened out.
16 MS. CHASE: It's our understanding that a
17 fair amount of the landfill would have to have
18 improvements to the cover right now. I can't say for sure
19 if it's fifty percent, but it's EPA's understanding that a
20 lot of the cover would have to be improved, and where we
21 make those improvements we will use low permeability
22 soils.
23 But, you're right, the way it's written and
24 the way we envision it right now, if it was two feet
25 everywhere, we would leave it.

MR. LINDSEY: One other question, with your erosion control practices, your riprap ditches and so forth, if you have two feet of cover and you go in and put a riprap channel in, you are going to excavate probably two feet or more, which may mean that you are down into the goodies; how is that going to be handled?

MS. CHASE: I guess I would expect that we would not dig down but work up to improve drainage.

MR. LINDSEY: It is hard to make water flow uphill.

MS. CHASE: Well, we are not going to take away the cover just to install these channels. I mean, they will have to bring up the cover -- for instance, we are requiring a minimum of two feet; if it takes more than two feet to put in the proper drainage controls, then that will be required.

MR. LINDSEY: Okay, good answer. Thank you.

MR. ELKISS: I am Dale Elkiss, and I am a resident of the area. And I am a little confused now with regard to the permeability discussion; what is the objective? Is the objective to get water into the ground or is the objective to keep water out of the ground? Because I can't tell.

MS. CHASE: The objective of the cap was

definitely to reduce, greatly reduce infiltration. The objective here is to reduce it to some extent. It's not going to be to the extent that the cap would. But if with proper drainage controls in place on top of the landfill, we believe we would be able to manage infiltration, reduce infiltration.

We will improve the cover. I am sorry, I am not a soil scientist and I don't have the specific comparison between what the cap would have reduced it to what we will have now, but it still is to control infiltration to some extent, not to the same extent the cap would have, manage runoff better than what's been going on out there, and to provide a protective layer between the waste.

We feel that the gas extraction system will greatly improve the situation by really pulling out a lot of the waste and destroying it and cutting it off as a source in the future.

MR. ELKISS: So is the two feet, the two feet doesn't have to do with water, it has to do with gas?

MS. CHASE: Well, actually, you mention that, it does. I was saying, I guess it has -- to some extent it deals with the water. To some extent there will be concerns about the cover. When we pull out the gas,

they will be pulling it out through these wells that will draw a certain rate, to try to draw at the most aggressive rate we can get to pull out the most contaminants. As you suck out the gases, it will want to come up through the soil, so at some point you can't pull more than a certain level.

There will have to be some -- we may need some improvements to the cover to help manage air intrusion.

MR. ELKISS: So does that mean that we ought to see standards for gas, as well as water, there is some sort of gas permeability numbers that we ought to see in these studies that we ought to look for?

MS. CHASE: Actually, when I said that, I was speaking in the reverse here. What will happen, as we pull out the gases, it will want to pull air down through the cover.

MR. ELKISS: But the question is still the same.

MS. CHASE: Sure. There are -- in the pilot study we tried to run the system at different rates, and some were very aggressive. And what ended up happening is we found at -- we ran it at 25 standard cubic feet per minute, which is about three or four times greater than what a typical system might run to pull

1 methane, and it is much more aggressive to pull out
2 contaminants.
3 When we ran it at 50, we saw it was pulling
4 some air down into the landfill, and we didn't want that
5 to happen. But at 25, it did the job and didn't pull air
6 in and it seemed like that was very effective in removing
7 contaminants.
8 MR. ELKISS: And that's whatever cover was
9 already there?
10 MS. CHASE: That's with no improvements.
11 So we feel like when we make these improvements, it will
12 better the situation. But there's not a requirement right
13 now to, you know, improve the cover to a certain
14 permeability in order to run the gas system. But as the
15 gas system operates, if we need to improve the cover to
16 make it run more efficiently, that might be something we
17 would consider. But right now based on what we saw in the
18 pilot study, we could remove a lot of contaminants with
19 the current cover. So it seemed to be controlling air
20 intrusion fairly well.
21 Sorry, that was a very roundabout response.
22 MR. ELKISS: Well, we just, we want to know
23 when we see the trucks rolling down the road why, you
24 know, and maybe sometimes a little more than it is just
25 going to make it better. So that's the reason for the

1 question.

2 MS. CHASE: I think in comparison to the

3 cap that would have been constructed, there will be

4 minimal truck traffic compared to what would have been

5 brought in to construct a cap. I don't have an estimate

6 until we get to the point where we actually characterize

7 the whole landfill and see how much area we are talking

8 about.

9 MR. FRANK: I am Victor Frank again.

10 Why don't we want to have air introduced

11 into the landfill at some further well induction point to

12 then more volatilize the solvents and pull the volatile

13 parts of them up?

14 MS. CHASE: Right now the landfill is

15 methanogenic. There's a lot of methane. It's a

16 relatively young landfill, but it hasn't been vented. And

17 what we saw in the pilot study was a great deal of

18 methane. And that methane will work to help pull with it

19 the contaminants. In a highly methanogenic environment,

20 you wouldn't want to pull too much oxygen in. It becomes

21 a dangerous situation. As the landfill --

22 MR. FRANK: A much more beautiful

23 pyrotechnic display.

24 MS. CHASE: That's right.

25 MR. LINDSEY: There is one of your

1 proposals here, one page says that you want to exclude all
2 the oxygen; the very next page says maybe we will add
3 oxygen.
4 MS. CHASE: Unfortunately, that is somewhat
5 confusing, I would agree.
6 MR. LINDSEY: Yes, it is.
7 MS. CHASE: That option was put in there,
8 some of our technical staff felt that biodegradation,
9 enhanced biodegradation was something we should consider.
10 We discussed the fact that right now we
11 have a lot of methane and that was not something that we
12 would want to do, but maybe ten years down the road if the
13 methane -- I am just throwing out numbers -- if the
14 methane really reduced and you want to find other ways to
15 help flush things out faster and it wasn't a dangerous
16 situation, you might go with the oxygen.
17 In these oil spills where they pull out the
18 volatiles, they often inject air to help do what you said,
19 enhance it.
20 MS. BROWN: My name is Marsha Brown. We
21 own a property immediately south of the site. I have some
22 comments here, and some questions included in them.
23 We are in agreement that the cap is not the
24 proper solution. The gas extraction system is a better
25 option. This is clearly supported by the fact that four

1 -- I saw you had five days -- of this pilot testing
2 yielded 5.3 pounds of VOCs. Five pounds seems like a lot
3 considering all the remediation that was supposed to be
4 done by the spray aeration system and how much has escaped
5 from the site in the groundwater. I find it disturbing to
6 think how much contamination must be buried here.
7 The historical findings of some of the
8 sporadic and unexplained contaminants found on our
9 property are clearly reflected in the gas tests from the
10 pilot study. The gas extraction well was sampled for the
11 full list of TO-14 compounds, and 14 additional compounds
12 totaling 483 micrograms per liter were detected. This was
13 more than the target list of compounds. They totaled 425
14 micrograms per liter. This raises questions concerning
15 the Health Assessment. Are these other contaminants cause
16 for health concerns? Some of them are types of alcohols.
17 Studies have shown that alcohol combined with many of the
18 contaminants of concern have a synergistic effect. Does
19 their presence change the health risks? Our experience
20 indicates the answer is yes. This has been the missing
21 link in the puzzle to the health problems we have
22 experienced in the past.
23 The gas extraction system cannot address
24 source areas located below the water table. Therefore,
25 the pump and treat system will be responsible for

1 remediation in certain areas, such as at Monitoring Well
2 K-3, known to have wastes deposited below the water
3 table. The fact that testing is still concentrated almost
4 solely on the northeast area makes me question how serious
5 the effort is to design a successful system for the entire
6 site.
7 For example, pumping Wells EW-4 and 6 were
8 installed in the fall of '98 and are located on the same
9 structural alignment as the pilot gas study. EW-4 is
10 located in the northeast area of higher contamination,
11 while EW-6 is on the southern perimeter. Explosive levels
12 of gas were detected at both wells in October of '99.
13 EW-4 has been sampled for water quality, but, to my
14 knowledge, EW-6 hasn't been, and I would like to know
15 why. All of the data indicates that it has the potential
16 to yield high contaminant levels similar to those found in
17 the northeast quadrant. This is information that is
18 needed to design a system that will work. It is
19 incredible that numerous studies over a fifteen-year
20 period haven't characterized the site well enough, except
21 in the northeast area, to come up with a complete design
22 plan, thus the need for an iterative design process that
23 could take years to complete.
24 We have already been approached for access
25 to our property to install two monitoring wells. Another

1 pumping well is needed on the southern perimeter, which
2 probably means another monitoring well, not to mention a
3 sedimentation basin. It's taken at least 28 wells on the
4 northeast side to define the groundwater flow in that
5 area, and there weren't any fracture zones over there to
6 deal with. How many more will you need to the south?
7 The iterative nature of this design plan
8 continues to impact on us and our property for years to
9 come. We do not want to spend our entire life coping with
10 the problems from this landfill. The fact that we were
11 not able to use this farm in our dairy operation because
12 of water contamination still impacts us financially, as
13 will allowing access for remediation purposes. For the
14 emotional and financial health of both responsible parties
15 and neighbors around the site, these issues have to be
16 resolved, and the design process must include a stepped-up
17 time frame for completion.
18 The viability of using bioventing as an
19 additional system should be reconsidered. Bioventing has
20 worked successfully on spills, but has it been proven in
21 landfilled waste? The process involves the addition of
22 oxygen to the system and runs counter to the reasons
23 listed on Page 7 of the proposed plan to avoid
24 introduction of air. The Administrative Record indicated
25 that this would be an option after the methanogenic stage

of waste decomposition was completed but did not indicate how long this would take. It is my suspicion that this would be so far in the future that it would not be practical.

My final comment is directed to EPA and any state officials or political representatives present here tonight. Documentation exists indicating past historical problems associated with methane gas in and around the landfill. These problems were basically ignored by both state and federal regulatory agencies. Because methane is not considered a hazardous material, neither agency gave it the serious attention it needed. It is deplorable that neighbors around this site did not get help from regulatory agencies years ago when they needed it the most. I would ask that you make changes in policy or law to Superfund and other hazardous clean-up programs involving landfilled waste, so that methane gas is routinely evaluated as a serious contributory problem during the initial site investigation. I am sure it would have made a difference at this site.

Two questions I really would like to have answered is concerning the health concerns and why this one well to the south hasn't been tested yet?

MS. SCHARR: I will answer that. As Marsha said, the wells were installed back in 1998 and the design

1 included the installation of seven extraction wells.
2 Extraction Well E-4 was sampled as part of the step pump
3 test in order to figure out what the capacity of the well
4 was that was put in place. We put a pump down and you go
5 through different pumps rates, and that's why it's called
6 a step test. So we had data from EW-4.
7 The other wells have not been sampled yet,
8 because the plant wasn't coming on line. The plan for
9 sampling those wells is to do a full round of baseline
10 samplings before the plant comes on line. So that's the
11 reason why; we weren't to that part of the project where
12 we were ready to come on line.
13 We have many years of data of sampling
14 during the OU-2 RIs, so we believe we have characterized
15 the groundwater. So until the plant was ready to be
16 operated, that well would not be sampled, but baseline
17 will be conducted.
18 As far as the need for additional wells
19 along Line Road, there were monitoring wells installed
20 along Line Road and there is the possibility that we will
21 need an additional extraction well if the contaminants
22 appear not to be captured by the two wells that were
23 placed along Line Road. That monitoring well has been
24 installed with large enough boring holes that we can put
25 in extraction wells.

If we need another well, that will be addressed in a timely manner, as opposed to the way you feel things have gone so far.

MR. FRANK: Twenty years is not too long. I should have brought some water in in case you get thirsty.

MS. SCHARR: As far as the other issues that Marsha raised regarding the off gases and contaminants that were detected in the off gas, there are things you have to remember when we're evaluating health at a Superfund site. We look at the medium that it's being released into and we look at the pathway and who is the receptor. So when we characterized groundwater, we looked at many contaminants. We have the target compound and target analyte list. Target analyte list is a list of inorganics and the metals. Target compound involves the same volatiles, the pesticides.

The cleanup standards in the ROD Amendment, there's about fourteen contaminants listed there. They are the ones that have established cleanup standards, because they were the risk drivers. They were the things that we saw with great enough frequency and at a level that if you looked at the cumulative effect, it would mean it would be an unacceptable exposure. Now, there may be other things that might be in the water, but they would be

1 getting addressed through the same treatment mechanisms,
2 but it's the risk drivers that we are looking at for the
3 cleanup standards.
4 Now, let's move back to air. There were
5 things released into the air that does not have a cleanup
6 standard in groundwater. So when Kelly talked about the
7 fact that they would be taking that air to a treatment
8 plant during the design, they would be evaluating whether
9 or not the contaminants detected in the off gas, whether
10 or not they are fully destroyed. If they are not fully
11 destroyed, then air controls will have to be incorporated
12 into the treatment of the off gas.
13 So even though you might have said some
14 different things, you have to look at the medium, the
15 exposure, the migration route and the receptor. So, you
16 know, we believe we have protective standards for
17 groundwater and we have the main risk drivers. That's
18 what you develop the cleanup standards for, for those
19 things that really represent a health hazard when you are
20 exposed to it.
21 There is another point that you wanted me
22 to answer?
23 MS. BROWN: I still have trouble getting
24 past the fact that after fifteen years if these studies
25 would have been more timely, they would have been

1 protecting us back when we needed it, you know, looking at
2 what is in the landfill, and that's what we were dealing
3 with years ago. I am to the point when we aren't dealing
4 with it anymore, particularly when you want to sit here --
5 this is process is just the beginning in the design
6 stage. We are talking years yet.
7 MS. SCHARR: Well, that's just because what
8 Kelly is talking about characterizing the source.
9 MS. CHASE: To touch on -- I know you can't
10 really see this -- but the original design for the cap
11 called for controlling the methane, and that would have
12 drawn out. It would have been gas extraction, but at a
13 much lower rate. And that design called for almost what
14 you see here, about sixteen wells -- I think there's about
15 nineteen here -- across the landfill.
16 Now, this is what -- we are not in the
17 design phase yet. It hasn't been approved. But this is
18 something that we were looking at. When I say Phase I, I
19 don't want to imply that there's an endless process.
20 What would happen here would be, first of
21 all, we are going to characterize the cover, see where we
22 need to make improvements. And when they put in these gas
23 extraction wells, we tried to determined in the pilot
24 study, like, what influence would a well have, like, how
25 many wells would you need to do the job. And we saw that

1 there was some dispute back and forth whether it was a
2 hundred feet or two-hundred feet. EPA felt it was pretty
3 comfortable that we saw, in the limited area here that we
4 did the testing, that we saw that when you pulled gases
5 out of I think it was Well 19, you saw an effect up to a
6 hundred feet of radius around that well.
7 So this -- what would happen here is we put
8 in these wells initially. When they put the wells in, you
9 also have to put monitoring points around them. When they
10 do this, this new technologies that they have will allow
11 us to characterize the fill and any fractures and the
12 permeability. And we will gather data. We will gather
13 data about the gases.
14 So right now we know this is the hotter
15 area. We have seen that in the groundwater and we've seen
16 that in the gases. Maybe we will find another hot spot
17 when we are putting in these wells and all the monitoring
18 points. At this point we don't know for sure. So when I
19 say Phase I, we will gather data; and when we do this
20 immediately, maybe we find over here, oh, we hit a real
21 hot area, so now we need to put in an additional three
22 wells and this will immediately, you know, go to the next
23 step. It's hard to say.
24 We felt that this was a good starting
25 point. Again, like I said, you got to remember that each

one of these wells will have an influence of a hundred feet. That's what we expect, based on what we saw. If it doesn't, we will have to add additional wells to do the job.

MS. BROWN: If I was looking at the scale right in this little map, but it looks to me like the number of wells you got on there are about four-hundred feet apart, yet you are telling me the radius is a hundred feet, so you are talking two-hundred feet away from -- between wells, but yet they are four-hundred feet apart. Am I correct? In other words, you are going to need twice as many wells, at least.

MS. CHASE: I guess, you know, this is conceptual. I don't necessarily -- I think most of them to me look like they are in the range of two-hundred feet or so apart, I believe, give or take --

MR. FRANK: A couple hundred feet.

MS. CHASE: -- fifty feet here; between 5 and 6 it is closer to three-hundred. But, again, we are not really in the design phase. This is not what we are necessarily ready to approve. This is just something that, you know, to help you understand what the initial phase might look like. If we find, you know, that --

MS. BROWN: We are still talking years down the road.

1 MS. CHASE: Well, if the remedy proceeds,
2 if we approve it, the ROD Amendment, depending on how
3 extensive public comment is, if we were to approve it, we
4 would expect to issue a ROD Amendment this year, and then
5 move into design phase.
6 Typically, in Superfund, a design might
7 take a year. We try to do better.
8 MS. BROWN: Every study that you done
9 you've had to go back and revise it and increase the
10 amount of groundwater flows.
11 MS. CHASE: I think that for a system like
12 this -- and I am not an expert; I am not a designer -- I
13 think it would be more straightforward than the
14 groundwater investigation.
15 MS. BROWN: I agree with that. It is still
16 going to be a long, drawn-out process. Typically, from
17 what I saw, if I read it correctly and interpreted it
18 correctly, the distance on some of the wells reflect the
19 cleavage, some of the areas elongated drawdown, typical of
20 the cleavage in the area.
21 MS. CHASE: Sure, you are going to see a
22 different response in each well, and in some areas there
23 may be clusters. As the one slide showed, in the area
24 where we did the test we hit an intermediate cover layer,
25 and our extraction well was screened across the shallow

1 area and through that soil and in deep area. To be more
2 efficient, the final design, you would probably want to
3 have some wells just dealing with the deep zone so you
4 could pull out a much higher rate, and in the shallow zone
5 you might pull it at a little softer rate. In our test,
6 unfortunately, we didn't anticipate hitting that cover.
7 MS. BROWN: You knew it was there; the
8 whole southern side was refilled.
9 MR. FRANK: I think the reason you are
10 finding this soil is the permit allowed Mr. Noel to dig
11 down to the depth of, like, thirty feet, and not being a
12 good judge, he got down much deeper than that. And then
13 they came in and rebuilt it, and that's why we find,
14 basically, two landfills, one stacked on top of the other
15 one.
16 MS. CHASE: I am aware that there was a
17 time when it was closed in a certain area and then it was
18 reopened. But, actually, the shallow zone, we hit the
19 soil somewhere, like, ten to fifteen feet, and then there
20 was --
21 MR. FRANK: It was only supposed to go that
22 deep, because then you got into the fractured bedrock.
23 MS. HARDINGER: Why did that surprise you?
24 It is so surprising to me that you said that was a
25 surprise to you.

1 MS. SCHARR: Actually, I think Kelly
2 misspoke; that she was surprised, because she was new on
3 the project. But I was aware there was a layer, a soil
4 cover in there. Maybe they were surprised of the depth of
5 it in some areas, but we weren't surprised there was an
6 intermediate cover.
7 MS. HARDINGER: Well, how can you be sure
8 you will go deep enough then, if you don't know where what
9 is, then how do you know how deep to go?
10 MS. CHASE: When the wells are installed,
11 then we would install them almost to the bottom of the
12 waste fill.
13 MR. LINDSEY: How do you know where almost
14 is?
15 MS. CHASE: Well, there is tools that,
16 basically, different ways to look into the bore hole.
17 When they drill the groundwater wells, they actually put
18 cameras down. It's very sensitive cameras that can show
19 where big fractures are, so we can decide where to pull
20 groundwater from. And we can use some of those similar
21 methods to determine what -- also, very simple way is we
22 took borings, we collected the hole core from that well
23 and we looked at it, and we saw soil and we saw waste and
24 --
25 MR. FRANK: It was a surprise.

1 MS. CHASE: So we would do that to
2 determine where the different zones were and where we
3 should pull the gases from.
4 MR. LINDSEY: Don Lindsey again.
5 Going back to this timing deal, it looks
6 like this next year that we are looking at is going to be
7 taken up with tinkering around with the plan and so forth,
8 which means that even to check out the cover to see what
9 you need there probably isn't going to be done before next
10 summer, and then the design will have to be made. So do
11 you have a time schedule on this?
12 MS. CHASE: Well, I guess that we have to
13 go through this administrative process that I am sure you
14 are all too familiar with; and, like I said, if we do
15 select it and we issue this ROD Amendment, my hope is that
16 that would happen this -- late this fall and that we would
17 move into design shortly after that.
18 During design, we would want to
19 characterize the cover and characterize -- put in some
20 additional probes and do as much data gathering as we can,
21 so that's done up front during design, and then we can
22 move right into construction.
23 I don't have a specific time frame at this
24 stage. I am sorry.
25 MR. LINDSEY: So what are the chances when

1 you get all ready to go out for bids for a contract, like
2 you almost were before, somebody comes in and says, Here's
3 another plan I would like you to look at?
4 MS. CHASE: I actually haven't considered
5 that.
6 MR. LINDSEY: And then we are down the road
7 another five years.
8 MS. CHASE: I haven't considered that
9 option, but I can tell you that EPA, based on what we've
10 seen in the pilot study, thinks that this is a good plan,
11 is a good approach.
12 MS. LINDSEY: Well, it was a good plan --
13 the other one was a good plan.
14 MS. CHASE: Yeah, I understand that. Like
15 I said, there have been changes in policy, changes in the
16 laws, and in technology, and I think that -- everybody has
17 a different opinion whether you should cap landfills or
18 treat them, and I think that this proposal will actually,
19 you know, could be very effective in removing the source
20 once and for all. It can only help the groundwater
21 treatment, because it will be less material available.
22 MR. LINDSEY: Only when it gets in place.
23 MS. CHASE: Yes. I can understand --
24 MR. FRANK: Can you notice some frustration
25 level here?

1 MS. CHASE: I know I am new on the scene,
2 but I can understand your frustration.
3 MRS. FRANK: This has been going on since
4 '83; how old were you in '83?
5 MS. CHASE: Well, I am older than you
6 think. But I appreciate the comment; it is flattering.
7 MR. FRANK: If we wait long enough, it will
8 go away; won't it?
9 MS. CHASE: I can understand the
10 frustration. We are bound by the limitations of the law
11 as well and the litigative process. And I am not trying
12 to, you know, make excuses, truly, but as a project
13 manager --
14 MR. FRANK: See this right here, that is a
15 rash from having the wool pulled over my eyes all these
16 years and it won't go away. I am depending on you.
17 MS. CHASE: I can say that we do want to
18 make things better, and I am sorry for your frustration.
19 MRS. FRANK: I have one question --
20 MR. YATES: Excuse me, can you identify
21 yourself?
22 MRS. FRANK: Excuse me, Shirley Frank.
23 My neighbors, the Willows, live across from
24 us; they have the Willow spring, a spring runs underneath
25 Clouser onto our property. I worry about that water with

our grandchildren. Should I worry about it?

MS. CHASE: Springs.

MS. SCHARR: I don't think Willow Creek, the spring there --

MRS. FRANK: Can you give me a definite?

MS. SCHARR: What I'm saying is as project manager on the groundwater portion, since it's not jumping out at me that surface water is a risk, I would say it's safe to play in that spring, because there was a health assessment.

MRS. FRANK: I would like that written down, so if any of them get sick. Because they love playing in the water.

MS. CHASE: We can go back and look at the data.

MS. SCHARR: I can look at what was in the spring specifically.

MRS. FRANK: They like playing in the woods and they like going in there.

MS. BROWN: It is like our property, there is some minute amounts of VOCs, the level is underneath the maximum contaminant level, but they assume it's okay.

MR. FRANK: They told the Willows not to even bathe in this water in '83.

MS. BROWN: That's what part of the

1 frustration comes from, back when they were filling the
2 stuff, that's when you needed some of this information.
3 Fifteen years later, in the meantime, the rest of us have
4 been stuck with -- I am sorry.
5 MR. ZELESKI: Charles Zeleski with Carroll
6 County, Maryland Health Department.
7 I just want to make sure I understand this;
8 no matter what happens with the amendment to the ROD, once
9 the groundwater treatment system is in place and tested,
10 it will be put into operation and it will begin at that
11 point to treat the water and will begin at that point to
12 create decompression to pull any water that's going
13 off-site back into the landfill and there will be an
14 actual treatment process started, and you expect that to
15 start sometime this summer?
16 MS. SCHARR: Yes.
17 MS. CHASE: The building and the plant is
18 constructed.
19 MR. FRANK: One more additional question to
20 that, is this going to draw from all those wells; or are
21 they just test wells, you are only going do draw from one
22 location?
23 MS. CHASE: You are talking about the
24 groundwater?
25 MR. FRANK: What we are going to start

later this summer, that's the summer of 2000 we are going to start doing something?

MS. SCHARR: Yes. Actually, we are already doing something, because the residents that were eligible for filters have all received their filters. So the community has been protected. So there has been something done that's very positive at this point.

There are eight extractions -- seven extraction wells around the landfill. They are not shown on that map there. They are the ones that will be coming on line. Now, they won't all come on line the same day, because when you are starting up a new system, you do it progressively, you turn on one well, do some monitoring and see what's going on.

MR. FRANK: These seven wells are located in some sort of fashion --

MS. SCHARR: They are located in areas where -- I know you can't see this --

MR. FRANK: I can look through smoke, mirrors, none of that scares me. Go ahead.

MS. SCHARR: There is one here (indicating). I have to tell you, I have got new bifocals and I am having trouble getting used to them.

MR. FRANK: It's much like standing in water halfway up your eyes.

MS. SCHARR: EW-7, EW-6. Out here is EW-8 (indicating). This is the well that during our testing, the step tests I spoke about earlier, that was the well that had the most contamination in it. And I didn't come prepared with contaminant level data summary sheets. This was our worst well. Then there is EW-4 here, EW-3, and EW-2. And as Marsha pointed out, they are all concentrated on this side (indicating). You will see this is a very busy map, and that's because there is a lot of wells, there are a lot of sediment and surface water samples taken to characterize this area, because there's the fractures and cleavage, it's trending northeast-southwest.

But this is the K-1 area, and this is our worst area (indicating). Then you come around, and there's EW-1 here, and there is a monitoring -- there isn't an extraction well on this side, however (indicating).

MR. FRANK: Yet.

MS. SCHARR: If these monitoring wells -- which I want to point those out now. This is a monitoring location. This is a monitoring location. This is a monitoring location right here (indicating).

And I just want to point out in these, this is kind of near a cluster or corner of residential wells.

This will have a data log, data to record water level readings, because I do have concerns that when we start pumping in this extraction well and you draw down the water table, we may have some problems for people on their well water. So there will be a --

MR. FRANK: But that's somewhere in the neighborhood of Clouser Road and Chestnut Hill Road?

MS. SCHARR: Yes, Clouser Road comes around and then Chestnut Hill Road here. Okay, that's a monitoring location. You have another set here and here (indicating).

Then there are other wells. There's a number of wells that were put in during the OU-2 RI. They will also be used as quarterly groundwater monitoring wells.

The wells that I just pointed out to you now are the new wells that they had to put in, that we felt we needed in order to show that the remedy is doing its job of capturing the contaminated groundwater.

I just want to make sure everybody is clear, they are not required to make a ring around this landfill and have all the water come into the perimeter of the landfill. They are required to capture contaminated groundwater. So that's why the wells are placed in the areas where we have seen.

1 MR. FRANK: But if you have no means of
2 monitoring the perimeter of the landfill, then how do you
3 know where all --
4 MS. SCHARR: We do; we have all of these
5 wells.
6 MR. FRANK: We know they are going to be
7 tested quarterly?
8 MS. SCHARR: Quarterly groundwater
9 testing.
10 MR. FRANK: Because some of these are
11 nowhere near the edge of where all the stuff went into the
12 ground.
13 MS. SCHARR: Where -- this is the whole
14 landfill right here (indicating). As you all know, we had
15 -- this is Line Road and waste is just about up -- you
16 know, we all know the story -- over here. So there
17 doesn't appear to be waste up here (indicating), but, as
18 Kelly said, because --
19 MR. FRANK: Closer out to Clouser Road,
20 just before the landfill closed there was trash being
21 hauled in from the Metropolitan Washington, D.C. area
22 under the cover of darkness, because the landfill permit,
23 it was expired.
24 MS. SCHARR: Well, you should come up
25 afterwards and give us a good old X on this map. Because,

as Kelly said, they need to make sure that this landfill fence, that the fence is encompassing the trash.

MR. FRANK: I am sure the fence is, because the fence is out at the edge of the road.

MS. SCHARR: Are you saying, Mr. Frank, that there is areas that the trash is out beyond the fence?

MR. FRANK: No, it is beyond the perimeter of where we have the test wells.

MS. SCHARR: See, we have monitoring wells out here, though (indicating).

MR. FRANK: That's down that spring run. That's down in the bottom there, okay.

MS. SCHARR: I was just pointing out the new ones. The new ones are really there because when you put in an extraction well, you want to have monitoring points around it so you can check water level readings, so that you are inducing an inward flow to that well. So that's why all these other wells were needed, even though we have many wells that were put in.

MR. FRANK: If we presume that everything is flowing toward the southwest as well, how many monitoring wells do we have in the southwestern quadrant?

MS. SCHARR: We have this one. We have these wells that were sampled here (indicating). We have

1 proposals for some additional wells, we have
2 ground/property, that haven't been put in place yet.
3 So we have a number of wells that have gone
4 in. These locations were based on all the work that was
5 during the OU-2 RI to characterize groundwater flow, and
6 characterize groundwater flow and the surface water
7 points, because, as you know in this matter, there's a lot
8 of seeps and groundwater discharges to surface water in
9 this area.
10 MR. FRANK: The only thing that concerns me
11 about the seeps and groundwater discharges, it kills the
12 vegetation it comes into contact with, and that's a little
13 worrisome to me.
14 This last year we have received, probably
15 -- we were in a drought situation, but that's about over
16 now -- and the groundwater is probably as high as it's
17 been in the twenty-eight years that we have lived there,
18 and do we notice any difference in some of these test
19 wells that we are checking lately?
20 MS. SCHARR: I can't answer that, because
21 the baseline sampling round will start July 17th. That's
22 when it is scheduled to start. So we are going to do a
23 full sweep of all the wells -- I should have brought that
24 sampling and analysis plan with me, but I didn't because
25 this was really to discuss the proposals to the cap. But

there will be the full baseline sampling done in all these wells this July.

Now, when we get that data back and we look at it and if things are different than what we expect to see, we are going to have to say we have to rethink do we need more wells. We are not limited by the number of wells you see here today. EPA has the authority to put in more wells if that's what's needed to ensure that we are being protected or to ensure that the remedy is functioning and working properly.

Oh, Kelly just wanted to know, this is the three-quarter mile line around the landfill, this area (indicating). She thought it would be good to point that out. The homes in here were homes eligible for filters north of this line that represent Piney Creek. And these homes that are three-quarters of a mile to a mile, those are the homes that will be getting groundwater monitoring if they give us access.

MR. FRANK: Of the eligible residents within the three-quarter mile radius, how many people refused it?

MS. SCHARR: I think three refused the filters. Thirty-five were offered and three refused was the last number that I had. Also, it includes all new people. The responsible parties are required to go and

check with the township to see if there were any new water -- groundwater well permits issued, because all new homeowners within this boundary are also eligible to get a filter.

MR. FRANK: Why would anybody want to move within this ground zero area?

MS. SCHARR: They are, though. Look around; they are.

MR. FRANK: I don't think they are being advised of the fact be careful of any open flames when you get a glass of water.

MS. HARDINGER: Susan Hardinger.

If it took you twenty-eight wells and stuff to figure out what's going on in the northeast part, as Marsha mentioned, I can't tell you how sympathetic I am to her and how I'm a little bit less sympathetic for myself since we are further away, but those of us on the southern part of this thing are incredibly disbelieving when you tell us it took you twenty-eight whatevers to figure out what's going on in that little area, but yet you can tell us beyond a shadow of a doubt that you know exactly what's going on in our back yards with those couple of things that you have there, that you pointed to.

Could you please tell me how you can be so sure, when what you expected to happen in the northeast

1 part didn't happen and it took you twenty-eight more
2 things -- I don't want to say wells, because I know they
3 are not all the same kind of well. But do you understand
4 why it's a little hard to take and why it's so hard for us
5 to listen to Marsha say -- well, what she says makes
6 perfect sense. We could start over tomorrow again.
7 There's nothing you said here -- when you say stuff, like,
8 we will figure out when we do a baseline on July 17th what
9 else we might do, do you understand what that says to us?
10 MS. CHASE: Well, I am not sure -- cut me
11 off on this one if I am wrong, because this is the
12 groundwater stuff -- but as far as, I think what Ruth is
13 saying is we need to get baseline measurements before they
14 start up and we know where things are at. If the plan is
15 to start the treatment plant this summer and to get it
16 running and to bring these wells, the extraction wells
17 on-line, things may change as we start pumping and we see
18 -- you know, if we see that there's an area that's not
19 being captured and should be based on the monitoring
20 wells, and I guess what Ruth is saying that we are not
21 going to start over but there may be additional wells
22 installed, if need be, as things change and based on
23 groundwater movement.
24 As far as the south side --
25 MS. SCHARR: Let me answer that, Kelly.

1 The south side, this was -- I am not a hydrogeologist, so
2 if I get it a little wrong, I am sorry -- but mostly how
3 you figure out groundwater flow is looking at the water
4 table elevations. And the homes along Humbert Schoolhouse
5 Road, which is off this map here, are at a higher head.
6 And when you have wells placed between the homeowner
7 wells, we had monitoring wells put in three levels,
8 shallow, intermediate and deep, because the community also
9 believed there could possibly be a deep groundwater flow
10 zone, which EPA and its consultants have come out and said
11 there isn't that flow zone. That's why the deep wells
12 were put in. As a matter of fact, there wasn't any water
13 at four-hundred feet. But the homes and homeowner wells
14 at Humbert Schoolhouse Road are a higher head than the
15 monitoring wells.
16 MR. FRANK: How much higher; do you know
17 that off the top --
18 MS. SCHARR: I don't know that off the top
19 of my head.
20 MS. HARDINGER: What about the ones -- we
21 believe you about Humbert Schoolhouse Road. We know where
22 we live and we know how deep our wells are, you know, how
23 deep all the rest of the wells are --
24 MS. SCHARR: Right.
25 MS. HARDINGER: -- but what about all the

1 new homes between Humbert Schoolhouse Road down in the
2 valley heading up toward the landfill?
3 MS. SCHARR: The valley here, the Piney
4 Creek tributary -- I apologize if I have the wrong roads
5 here -- the is groundwater discharging to the surface
6 water here, so all the flow is towards here (indicating).
7 The flow is not uphill. If you go out here, if you had a
8 picture of it, if you came across here, the hill goes
9 practically straight up. There are areas down here where
10 it's gently rolling, and then there are other areas where
11 it is, like, huh-huh, to get up the hill. And that's
12 exactly what it's like on the other side of Piney Creek
13 there. And groundwater typically will mimic the surface
14 topography. So we do not believe there is any homes at
15 risk from releases from the site here.
16 The other thing, though, because of the
17 concern, we do have water level readings included in the
18 groundwater remedy. So even though they won't be
19 collecting chemical data over here, they will be
20 collecting water level data, so that we can have something
21 to show people to say, look, the water level readings are
22 still higher on the other side, so groundwater is
23 discharging to the creek on the Humbert Schoolhouse Road
24 and the valley down. That was the purpose for asking the
25 PRPs to continue to collect water level readings on that

1 side.

2 MR. FRANK: By the same token, there may be

3 a fault line somewhere and some of this high water table

4 level at Humbert Schoolhouse Road can also be available

5 over where we are. I mean, it doesn't always have to --

6 you know, it can't cross the creek, that's just baloney.

7 That you can have a fault line or underground river or

8 stream, or whatever we would like to call it, that comes

9 up miles away and basically be at the same level, since it

10 kind of tends to seek its own level.

11 MS. SCHARR: I am not sure, Mr. Frank, what

12 you are saying to me.

13 MR. FRANK: Well, what I am saying is that

14 the water at Humbert Schoolhouse Road, whatever that well

15 head depth is or elevation above sea level, just so we can

16 have some baseline, it can follow a fault line and come

17 back up somewhere else. The fact that it's higher

18 pressure than, say, at the base of the landfill will

19 probably prevent recursion of this water from the landfill

20 into this other water table; because the pressure is

21 higher, it will turn it away. But maybe not, if volatile

22 organics, if they are circulating around. Because they

23 are permeable through the water.

24 A case and point is alcohol; you can take a

25 pint of alcohol and a pint of water and you will never get

1 a quart, because, basically, they fit into each other.
2 It's the same way with some of these other things; the
3 more deadly they are, it seems the better they can get to
4 you.
5 MS. SCHARR: So you are trying to say
6 what's up at Humbert Schoolhouse Road may actually migrate
7 up to where you are?
8 MR. FRANK: Our well, the water level comes
9 within eleven feet of the ground, of the surface there.
10 We are at 680 feet above sea level. I would say that that
11 water, in my mind, is coming from somewhere far away from
12 that general location. In other words, it's not
13 percolating down through the field and coming back out the
14 well. This is coming from probably somewhere down where
15 that same water supply is at Humbert Schoolhouse Road,
16 because there is no reason -- there is a spring in the
17 front yard as well, but that can be fed from there, you
18 know, I have no idea.
19 MS. SCHARR: I can't offer you any more
20 comments on groundwater flow from Humbert Schoolhouse
21 Road.
22 MR. FRANK: All I am doing is just praying
23 that what's on the other side of the road stays over
24 there.
25 MS. SCHARR: You are on the other side of

1 Clouser?

2 MR. FRANK: Um-hum.

3 MS. SCHARR: Well, we will be doing the

4 monitoring, so we'll let you know.

5 MR. LINDSEY: I have one question for you,

6 are you going to take level readings and so forth from

7 those southern wells?

8 MS. SCHARR: The well readings, yes. There

9 is some wells that are owned by the State of Maryland, if

10 we can get the key -- they are on the north side, sorry.

11 The southern wells over here, they are identified as A-Gen

12 wells, we will have water level readings there.

13 MR. LINDSEY: You will be taking water

14 level readings. Would it not be possible just for kicks

15 to run chemical samples on that at the same time

16 periodically, quarterly?

17 MR. FRANK: Once every twenty years, even.

18 MR. LINDSEY: What I am saying is, you know

19 --

20 MS. SCHARR: Well, the problem is when you

21 are an agency, you have authority to require people to do

22 things and it has to be, you know, you have to show good

23 cause for doing that. And what we have said is that there

24 aren't contaminants from the site over there and that it's

25 unlikely that they would get there. But to go collect the

1 water level reading really isn't -- you know, a lot of
2 things that drives this is money, and that's not really a
3 money -- to get water level readings. But it would also
4 show we are right about groundwater flow.
5 But, you know, if we were to see a change
6 in the water level readings and, we say, my goodness, we
7 thought we had it right and it's different than what we
8 thought, we would change it. But until we had just cause,
9 you need a good scientific reason to order a responsible
10 party to spend their money collecting data. So until
11 there's evidence that there is a concern, that there are
12 site-related contaminants there, then we wouldn't be
13 sampling that, because there was a lot of money spent to
14 do the OU-2 investigation and there were a lot of wells
15 put in, and the determination was that site-related
16 contaminants won't be there.
17 MR. LINDSEY: But that would prove that it
18 wasn't there.
19 MS. SCHARR: We believe it has been proven
20 after the OU-2 RI that's been conducted. There has been
21 sampling done of the well, and there will also be sampling
22 done north of Piney Creek. So, you know, you would have
23 to agree that one might expect that these wells would show
24 an increase in contamination if you would expect to see
25 contamination on the other side.

1 MR. LINDSEY: So if you picked up some
2 contamination on the north side, then would you go to the
3 south side?
4 MS. SCHARR: You know what, I don't want to
5 give an absolute answer. It has to be based on the data
6 and analysis and review.
7 MR. LINDSEY: Okay.
8 MS. HARDINGER: You are sure, then, that
9 you've gotten -- you have accounted for all fractures
10 going in a south or southwest direction which could go
11 under that tributary behind the creek -- which I might add
12 looks really nice and big and wide and capturing on that
13 map, but that's not it. You know, that stream is
14 certainly not to scale -- but what you are telling us,
15 those of us that live south of that tributary of Piney
16 Creek, that you are certain that EPA has identified and
17 ruled out as pathways of transport every single fracture
18 that's coming from --
19 MS. SCHARR: I think that ROD decision, the
20 amendments, were rather strong on the fact that flow is
21 not to the south of Piney Creek in that area.
22 MS. HARDINGER: I know what the Record of
23 Decision said, but you are telling me that you're certain
24 that you have gotten a handle on every fracture which
25 could possibly be bypassing that tributary?

1 MS. SCHARR: What we are certain of is that
2 we didn't see a deep flow zone, which is what --
3 MS. HARDINGER: Which you wouldn't see if
4 you missed a fracture.
5 MR. LINDSEY: Another hydrologist also said
6 that that was possible.
7 MS. SCHARR: You know, I could look up in
8 the amendment and read the response, but the Record of
9 Decision, the amendments in 1999, addressed all of these
10 issues and they were responded to at length. And, so, I
11 would rather refer the people to read the amendments to
12 the Record of Decision in 1999 for those issues, because
13 it was many hours spent responding to those same exact
14 issues.
15 MR. ELKISS: Dale Elkiss again.
16 Did I hear you say that you expect
17 groundwater levels to go down in the area around the
18 residential wells as you start pumping, or is it -- I
19 wasn't sure what --
20 MS. SCHARR: I said that we may get -- I
21 expect that if we are pumping -- I expect that we will see
22 drawdown in the area. Because that's what you want to do
23 when you are pumping an extraction well; you want to make
24 an inward rating. Some of those home wells are located
25 rather close to some of the extraction wells.

1 This well, though, up on this side, though,
2 I don't even think it is slated to pump -- I don't know
3 the pump rate, but some of them are only, like, two
4 gallons per minute. That's why this monitoring well is
5 there, to make sure that we don't reduce enough drawdown
6 that we will cause problems for homeowners. Drying up a
7 homeowner's well is unacceptable. It is completely
8 unacceptable.
9 MR. FRANK: Also, contaminating the water
10 supply with volatile organics isn't acceptable either.
11 MS. SCHARR: That is true and that's why we
12 are here and that's why Congress made Superfund.
13 MR. ELKISS: But on the other hand, too,
14 you know, again, I think that by being cautious and people
15 building and adding new wells in that area, too --
16 MS. SCHARR: Well, you know, that's a
17 separate issue from this. But as more people draw water
18 from that whole subbasin, you are going to see a general
19 trend downward. I don't think there is a groundwater
20 protected area, and I don't know who is looking at it.
21 But, yes, there might be some people that may have gotten
22 by with a rather shallow well that may not when a lot more
23 homes come in that are having deeper wells and pull them
24 down.
25 If a well does dry up and you need to get

1 them redrilled -- this is not related to this site -- just
2 remember that when somebody tells you you need a brand new
3 well drilled, question them and ask them, Why can't you
4 just drill the one I already have deeper. If you have,
5 say, a hundred foot well, keep that in mind, somebody
6 tells you you need a two-hundred foot well, say, Yeah,
7 just make that one I have deeper. It's a money saver
8 there.
9 MS. HARDINGER: How many times can the PRPs
10 get right up to the point of implementing this plan to
11 clean up and then say, no, we have changed our mind, we
12 want to go back to court and offer up to you another
13 plan?
14 MS. CHASE: Can I ask you to respond to
15 this?
16 MR. CINTI: Sure. The true answer is they
17 could do it as many times as they wanted to and the Court
18 allows them to.
19 The shorter answer, better answer in this
20 case, is we hope that we are close to a settlement in this
21 case to resolve it.
22 But, you're right, if they were to walk
23 away from the settlement table and we have to pursue it in
24 court, then we would have to follow whatever procedures
25 are in place by the Court and follow it like any other

1 litigants. We don't think that's going to happen here,
2 but I can't tell you absolutely no.
3 MR. ZELESKI: Charles Zeleski again.
4 One, I guess, last question, and that is no
5 matter what happens with this proposed amendment, if it
6 does not come about, then the original Record of Decision
7 and the original cleanup that is scheduled to start
8 sometime in the next few months will continue, then the
9 landfill will be capped and so on; if this is adopted,
10 though, then we have the extra cleanup that would be
11 coming from a gas extraction system, and the end result
12 would probably be a better quality overall or a faster
13 cleanup or both?
14 MS. CHASE: Most of that, the answer is
15 yes.
16 The original remedy had several components,
17 but the two big ones we are talking about here are the cap
18 and groundwater extraction system. So the part that's
19 scheduled to start soon is the groundwater extraction. If
20 this remedy doesn't go through, we are not immediately
21 ready to put the cap on. We still have to go through the
22 next step. And, but, the groundwater remedy is on line to
23 start up regardless of what discussions are going on
24 here. It has no -- the comment period has no impact on
25 that. The groundwater remedy, as soon as they are ready

1 to start the system, is ready to roll.
2 If we don't go with this proposed remedy, I
3 guess we are back to the cap. And I don't have a schedule
4 on when that would be implemented.
5 MR. ZELESKI: But that would still be part
6 of the Record of Decision, that would still be part of the
7 requirement, as far as cleanup is concerned?
8 MS. CHASE: Yes.
9 MR. ZELESKI: So nothing is lost by
10 adopting this or not adopting this, nothing is really
11 delayed to any great extent by adopting this or not
12 adopting this from the original thing?
13 MS. CHASE: Well, by adopting this
14 proposal, it would eliminate the cap. We would make the
15 soil upgrades and we would improve, you know, implement
16 the gas extraction, but we would eliminate the cap.
17 MS. HARDINGER: So, then, PRPs, to just go
18 on with what Charlie is saying --
19 MS. CHASE: Sure.
20 MS. HARDINGER: -- if this is adopted and
21 you all determine you have community acceptance and PRPs
22 say, okay, we will pay, and then before it's implemented
23 they say, no, we have changed our minds, we would rather
24 do a cap, then we go back to square one and to a new
25 Record of Decision, or do you say, okay, you want to do a

1 cap, let's go?

2 MS. CHASE: We are not making this proposal

3 based on the fact of whether or not we get a deal with the

4 owner/operators. They proposed it, that's true. It was

5 their proposal. We evaluated it. The state evaluated

6 it. We feel that it will be protective and effective, and

7 we are moving forward with this. Sure, we hope that we

8 work out a settlement with those parties to do the work.

9 If public comment and everything else that

10 comes into this decides we are still going to pursue this,

11 regardless of whether we get a settlement with them or

12 not, this is the remedy that we are putting on the table

13 now.

14 MS. HARDINGER: Not to belabor it, we have

15 always been told that EPA had the authority should the

16 responsible parties say, nope, we are not doing it, that

17 EPA, we were told, would move forward with the Record of

18 Decision as it is in place and would do the work and then

19 take them to court to get the money back; but I haven't

20 heard you say that tonight.

21 MS. CHASE: Can you address where we are

22 with that right now in court and how this might -- Tom?

23 MR. CINTI: Sure. We do have the authority

24 to issue a UAL, which we have, to the parties and order

25 them to do it. We do also have the authority, if we can't

1 get them to do it, to do it ourselves and then seek the
2 money from them, as you stated.
3 The question in this case is we were
4 presented with an alternative remedy by the parties, which
5 the Commonwealth of Pennsylvania reviewed and under its
6 review indicated that it is both cost effective and
7 protective, thus allowing them to waive this requirement
8 of the cap.
9 Now, where we are right now is we are going
10 through a remedy process, because we have had both
11 comments from the Commonwealth of Pennsylvania and
12 previous comments from the community indicating that a cap
13 is not necessarily preferred here. In addition, we have
14 also had technological changes that would allow this type
15 of remedy. We are going to choose, based on all these
16 factors, including the community's input, which remedy we
17 are going to pursue. In that case, we will pursue that
18 remedy either ourselves or have the PRPs do it.
19 The question of who is going to do it is
20 separate from which remedy we are going to choose. We are
21 proposing this remedy today, because, quite frankly, we
22 think it is a better remedy. But, you're right, if they
23 won't do it and the Court won't order them to do it, then
24 we will do it and then we will sue them to pay it.
25 MS. HARDINGER: So you do have the result

1 to do that -- I mean, you believe in this remedy and, so,
2 if it just comes down to an issue of their saying, we
3 won't pay, you believe in it enough and you are determined
4 enough to go forward with it and go back later and get the
5 money from them?
6 MR. CINTI: We will pursue the remedy
7 either through PRPs -- I am going to try that first. If
8 that doesn't work, then our option is to perform it
9 ourselves and sue them.
10 MS. HARDINGER: So they could hold up
11 paying you, by what you are saying then, by going into
12 court again and saying, we are not going to pay, but they
13 cannot hold up the implementation of the remedy?
14 MR. CINTI: Well, they can, if they want to
15 challenge the remedy in court, which is what happened last
16 time. That will hold up the implementation if it gets
17 held up in court.
18 MR. FRANK: But it was their
19 implementation, I mean, it was their --
20 MS. CHASE: That' right. It would be more
21 difficult for them to challenge it, because this is their
22 proposal.
23 MR. CINTI: It would be very difficult for
24 them to challenge it, but there are bases, however, that
25 they might, due to the fact that we've taken it beyond

1 what they had originally proposed and made it a more
2 aggressive system.
3 MS. HARDINGER: If they propose 2 times 2
4 to the 25th power, whatever permeability, whatever, go
5 with it.
6 MR. LINDSEY: I would like to see that.
7 That is a cap.
8 MS. HARDINGER: Go with it.
9 MR. CINTI: They proposed it, so they have
10 to live with it. That's the way it's written.
11 MR. FRANK: I have a question along that
12 line, if I could, please -- once again, I am still Victor
13 Frank -- if we are going to go over the entire landfill
14 and if there is two feet of soil there now, that's going
15 to suffice. But the permeability is going to be so great,
16 that that's not going to really accomplish what you want.
17 MS. CHASE: Well, that's the way it's
18 written right now. If during -- I guess that we have the
19 option to, you know, improve that if we think it's not
20 enough. We don't, really, again, we had a lot of time
21 fighting over what it really was. We are going to go out
22 there and we are going to do a thorough investigation so
23 there's no argument over what's there, and if --
24 MR. FRANK: Basically, you are going to do
25 perk tests over so many square feet and see what's really

1 happening?

2 MS. SCHARR: They will being collecting

3 soil samples, go out and check samples, do a test within

4 that soil sample.

5 MR. FRANK: Over how big an area will we be

6 testing these?

7 MS. CHASE: I guess we want a

8 representative amount of samples so that we feel very

9 confident.

10 MR. FRANK: Are we going to do one every

11 fifty feet --

12 MS. CHASE: I don't know yet.

13 MR. FRANK: -- or do just one great big one

14 and say that this ought to do it?

15 MS. CHASE: No, I can tell you no to that

16 one. I don't know what the magic number is, but it's not

17 one.

18 MR. FRANK: You know, so we are just

19 lobbing back and forth across the net, but where are we;

20 if their suggestion was if it's not two feet, then we want

21 to put this, basically, kryptonite cover over here but

22 only on the places that's not covered with two feet, but

23 then the grand total of what's going to happen is still

24 not going to be acceptable, because you are liable to have

25 much too much permeability through a lot of it and,

1 basically, be creating a problem?

2 MR. ELKISS: I read some of the engineering

3 study, and they were talking about average

4 permeabilities.

5 MS. CHASE: That's true.

6 MS. SCHARR: The purpose of the soil and

7 soil cover upgrades is really not the purpose of a cap; it

8 was to be permeable, as Mr. Lindsey said. The reason why

9 that's in the report is because they did collect a very

10 small number of samples, take them back to the lab, and

11 they produced the number, which, hopefully --

12 MR. FRANK: They must have taken a sample

13 of blacktop somewhere, because, I mean --

14 MS. SCHARR: Right, but the issue is, in

15 fact, this isn't supposed to be a containment remedy. It

16 is not supposed to be a cap and prevent infiltration.

17 That's why you have such low permeability for a cap is

18 because you really don't want anything going through

19 here. Now there probably will be some infiltration

20 through the cap and it will sort of be like a flushing

21 effect of going through the waste.

22 MR. FRANK: But maybe not, because

23 sometimes as this acid rain is percolating down through

24 these various things, and Lord knows what it is -- I had a

25 question, can we really call industrial chemicals

1 municipal waste?

2 MS. SCHARR: It was permitted to be

3 received as municipal waste.

4 MR. FRANK: Enhanced municipal waste.

5 MS. SCHARR: We got to make sure we clarify

6 that; it was permitted to receive municipal waste, but

7 received other, I think you said construction debris, and

8 are you saying you have knowledge that --

9 MR. FRANK: Well, basically,

10 trichloroethylene, basically, trichloroethylene,

11 trichloroethane, methylethylketone, these are industrial

12 solvents. They wouldn't be construed as being municipal

13 waste, I wouldn't think. I would hope not. Industrial

14 chemicals aren't municipal waste.

15 MS. SCHARR: Right.

16 MS. HARDINGER: It shouldn't be a surprise

17 to anybody that Keystone received permit modifications

18 from Pennsylvania to receive hazardous waste --

19 MR. FRANK: Well, they operated without a

20 permit at all for so many years.

21 MS. HARDINGER: -- skipping the

22 municipal/industrial qualifications.

23 MS. SCHARR: It has hazardous substances.

24 All of those things are hazardous substances, whether or

25 not they had permits to receive from construction, all of

1 those things are hazardous substances.

2 MR. FRANK: So, now, getting back to what I

3 was doing my best to allude to, as this acid rain is

4 percolating through all these various things and, perhaps,

5 creating compounds that no one can recognize, a mass

6 spectrometer -- we know what that is -- you can just,

7 basically, fire something and it will tell you what's in

8 there, from bird feathers all the way into whatever else

9 it might be, and it will tell you what's in there -- so

10 those compounds that are not identified, that may be since

11 you are not really looking for them, that exist within

12 that due to these compounds being formed.

13 That's why I always thought that the cap

14 was going to be the best thing to contain whatever is in

15 there and pump out any fluids that you can, and,

16 basically, neutralize them by oxidizing them, burning

17 them, or whatever.

18 But if these things can continue to go on,

19 idem infinitis, I guess we are never going to reach a

20 solution, because there is other things occurring within

21 this land.

22 MS. CHASE: I am not an expert on landfill

23 caps, but, certainly, it does reduce the infiltration. I

24 don't think it eliminates it. There would always be some,

25 you know, we don't know what is in there. We don't know

if it's, you know, most of it is gone already or if there is a pocket of contamination there. But the cap on top would never fully eliminate things from percolating out of it.

MR. FRANK: Its would certainly slow it down.

MS. CHASE: It would slow it down. As you said earlier, we don't know the bottom of the landfill. There is indications sometimes in the past the groundwater has come up in contact with the waste. If that's the case, no matter what the cover is --

MR. FRANK: Well, that's why the permit limited them to the depth they could go, but somehow or another they confused, you know, three feet, thirty feet; it's all threes.

MS. CHASE: Sure. If groundwater does from time to time come, as the level fluctuates, come up in contact with the waste, then it would always kind of be creating that fluctuating situation, so --

MR. FRANK: You perk it and then everything is all right again.

MS. CHASE: Well, no, don't forget that the treatment plant will be operating, filters are on anyone who had the contamination.

MR. FRANK: My filter just went in in

1 January in a twenty-inch snowfall, so, I mean, that made
2 it more interesting for the guy to install it. I have
3 been enjoying some unadulterated water for the previous
4 twenty-five years that we were there without having to
5 worry about carbon poisoning from these filters.
6 Now, you mention that there is alcohol in
7 there; well, alcohol is produced by the fermentation of
8 these various organic materials, garbage, those sort of
9 things like that. That turns into carbon dioxide and
10 alcohol. We already knew that. Make beer that way, too.
11 MR. LINDSEY: I think one point that I
12 think should be gotten across real clearly to the
13 community as a result of this meeting is that there are
14 two parts of this, and one part of it is going to go ahead
15 regardless.
16 MS. CHASE: That's true.
17 MR. LINDSEY: When this came out, it looked
18 like we threw everything away we did for the last fifteen,
19 twenty years and start all over, and so forth. So I think
20 that's something that's real important to get across to
21 the community, that come July, the water part of it is
22 going to be done regardless of what happens to this part,
23 and it's a separate deal. Because I think that's a real
24 important --
25 MS. CHASE: You are absolutely correct, and

I am sorry if there was some confusion. I have been trying to stress that the groundwater cleanup is separate and it will be in place; and regardless of whether this is selected or not, the schedule for that is not affected by this part of the remedy.

But, thank you, you are right. It's an important part.

MS. HARDINGER: One more quick question about the groundwater.

MS. CHASE: Sure.

MS. HARDINGER: Several times in this green document it says that sometime summer of 2000 the groundwater treatment system will be tested to see if it operates; and could I suggest that we -- I mean, if you really believe it's going to operate, that's a red flag.

MS. CHASE: I am sorry, I am not sure of the exact language.

MS. HARDINGER: It says it in several places.

MS. SCHARR: It says to see if it operates?

MS. HARDINGER: To see if it operates.

MS. SCHARR: Well, actually, mechanical testing of the plant was done last summer. The reason why the plant didn't come on last summer on-line was because

1 of methane was collecting in well holes. We should have
2 known this was going to be a problem.
3 Anyway, that was the problem; methane was
4 starting to collect in the well vaults itself, and that
5 represents an explosive environment. So what they had to
6 do was upgrade, and that's what is going on, actually,
7 right now. If any of you have been out and around and
8 about, you know there has been work going on. They are
9 called disconnected panels. They moved twenty-five feet
10 from the well vaults. The wells themselves have a cap.
11 They have been vented, and the well vaults have been
12 vented. So because of methane being a problem, once you
13 made a place for it to go and collect that's enclosed --
14 and wells themselves have a cap and they are closed and
15 the well vaults are enclosed -- you go in there and open
16 it up and put a photoionization detector down there and
17 say, Oh, my. So, it was an, Oh my, which is why the plant
18 didn't come on-line last year when it was supposed to.
19 So it will be coming on-line this summer.
20 It's slated for the second week of August. And, you know,
21 I hate to give you a date, because it's Murphy's Law,
22 something will happen and it won't come on, but everything
23 did work. There were -- new pumps were being put in
24 place, so things had to be upgraded to what's a hazardous
25 classification. So new pumps were put in and the wiring

1 was changed and seals and things like that. And it will
2 come on, so it does work.
3 MR. LINDSEY: You say each well has been
4 vented, so there is methane coming out of each well now?
5 MS. SCHARR: There wasn't methane detected
6 in all of the wells -- in the extraction wells.
7 MR. LINDSEY: Well, whatever, yeah, the
8 extraction.
9 MS. SCHARR: The extraction wells that we
10 collected. See, methane is probably escaping from the
11 landfill. Marsha will tell you.
12 MR. FRANK: Probably the dairy cattle are
13 releasing some of the methane.
14 MS. SCHARR: With the cover that's on there
15 now, the methane, it's going to escape where it's going to
16 escape. Once you made an enclosure for it, it will
17 collect and it can't escape. So that's why they have to
18 do what they have to do. They have to make sure it can be
19 vented, and they've taken the extra precautions of
20 changing the boxes, rewiring, things like an electrical
21 engineer could really entertain you with, but I can't.
22 But, so, what happened is this was
23 identified as the problem. The original generating
24 operators were reluctant to turn the plant on and start
25 operating. And, you know, I was reluctant to say, Go

1 ahead and see if it is really a problem. And so they had
2 to come in, they did some testing in February, had some
3 engineers go out to do the testing and come up with a new
4 design. And some of these boxes, being explosive-proof
5 boxes, they are not on the shelf; they are custom-made.
6 They are actually out on the site, I was there today, and
7 are being installed.
8 So we should be ready to go in August. The
9 baseline sampling is slated to start July 17th. Now I'm
10 giving out a date.
11 MR. FRANK: It was August 17th a minute
12 ago.
13 MS. SCHARR: No, that's for the actual --
14 MR. FRANK: That's when the big boom
15 occurs. July 4th sounds like a good date.
16 MS. HARDINGER: How will we get copies of
17 the comments and EPA's response to the comments?
18 MS. SCHARR: They are put in the
19 administrative record, the information repository, which
20 is located at the Hanover Library. And what happens is
21 the substantive comments are sort of summarized and put
22 into the response of the summary, which is the third part
23 of the amendment to the Record of Decision. You have the
24 decision summary, and then you have the third component.
25 MS. HARDINGER: That will be at the Hanover

1 Library, that's how we get to read those?
2 MS. SCHARR: Yes, that's where the
3 information repository is located there.
4 I have, though, in the past -- though I
5 wouldn't want to mail it out to the entire community --
6 but people that were interested and people that had a lot
7 of interest, I did send them out copies of the ROD
8 Amendment; and if you would want a copy of the ROD
9 Amendment, we would be happy to have one sent to you.
10 MS. HARDINGER: I would.
11 MS. SCHARR: I know there is some of you
12 that have been with this for a long time and would like an
13 opportunity to read it in the living room, rather than the
14 public library on those little, tiny chairs.
15 MS. CHASE: Maybe anyone who is interested
16 could note it on the sign-in sheet or a separate sheet
17 that you could sign that you want --
18 MS. SCHARR: We do have a very extensive
19 mailing list. There is over three-hundred names on it at
20 this point. What Kelly and I talked about doing later was
21 sending out, like, a little index to everyone that's on
22 our list and saying, If you still want to remain on the
23 mailing list, please send this back; otherwise, we will
24 take you off.
25 What we did this time was send them out to

1 the person who was identified as the addressee or current
2 resident. But there are some people that just don't want
3 to be bothered and are trashing it; and if we don't have
4 to send out that many, we really don't want to.
5 MR. LINDSEY: Did you send out notices to
6 these three-hundred people on your list for this meeting?
7 MS. SCHARR: Yes.
8 MS. CHASE: I think it may have been closer
9 to four-hundred. I don't know how many exactly there
10 were, but we sent out the fact sheets to the community.
11 MS. HARDINGER: But in all of Silver Run,
12 Littlestown and Hanover, there is no place that we could
13 meet that's in the community that's affected by this
14 site? Why in the world did we come to Abbottstown when
15 the landfill is in Littlestown?
16 MS. SCHARR: Can you tell us, somebody tell
17 us where they think we would be accepted? The township
18 building -- now, tonight, the turnout here wasn't that
19 large; the township building would have worked. But the
20 township building is really small, and we are concerned
21 that you won't have enough room. Can you make
22 recommendations of where you think we could meet?
23 MS. HARDINGER: We have, and we will make
24 those same recommendations, you know, ask you again to
25 hold the meeting in the community where we live, where the

1 landfill is, and where we live. There are plenty of
2 places that would meet all the federal requirements for
3 accessibility and hearing impaired facilities, and all of
4 that, and nobody asks. We get a notice saying come back
5 to Abbottstown, which is perfectly nice, but, you know, I
6 wasn't going to drag my neighborhood out here to -- I can
7 go back and tell them what we learned here tonight, but --
8 MS. SCHARR: Well, Susan, could you send us
9 something in writing?
10 What happened on this last go-round, Hal is
11 the one who made the arrangements, and sometimes even
12 though you have identified a place that you think is a
13 good place to have it, maybe they are not available, maybe
14 the fees don't work, or maybe they won't -- maybe they
15 want us to sign certain legal things that the government
16 doesn't sign, so it doesn't work out. But if you can give
17 us a name, I think it would be, you know, a good thing for
18 us to maybe try to get a jump on it to find out for any
19 future meetings.
20 MS. HARDINGER: All the EPA stuff used to
21 be in McSherrystown.
22 MS. SCHARR: Marsha did tell me that there
23 is new fire halls and things like that. We really would
24 like it to be closer to the site. We aren't staying in
25 Abbottstown; we are staying in Hanover. We had to come to

be Abbottstown. It is unfortunate that we end up back out here again. I wish that was one other thing you didn't have to be frustrated about. Jeez, give me the name; give it to me in writing.

And, Hal, can we contact them for future events?

MR. YATES: Yes, just provide us with the venues with the addresses and phone numbers on here, send them to me, and we will see what we can do.

MS. CHASE: Is that it? Does anyone have any more questions?

(No response.)

(The public meeting was concluded at 9:00 p.m.)

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 this copy is a correct transcript of the same.

8-3-00
Date

Kathy F. Neiderer
Kathy F. Neiderer, RPR
Reporter - Notary Public

Notarial Seal
Kathy F. Neiderer, Notary Public
West Manheim Twp., York County
My Commission Expires Aug. 18, 2003