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RESTORATION ADVISORY BOARD
FOR
NAS JRB / ARS WILLOW GROVE

- - -

Wednesday, September 14, 2005

6:00 p.m.

- - -

Horsham Township Public Library
Horsham, PA

- - -

V A R A L L O Incorporated
Litigation Support Services
1835 Market Street, Suite 600
Philadelphia, PA 19103
215.561.2220 215.567.2670

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2 PRESENT:

3 Jim Edmond

4 Russ Turner

5 Ed Boyle

6 Charanjit Gill

7 April Flipse

8 Jeff Dale

9 Kevin Kilmartin

10 Mark Medvesky

11 Jack Lebeau

12 Rick Myers

13 Dan McCaffrey

14 Sherri Jones

15 Karen Grassi

16 Ron Sloto

17 George Hoffer

18 John Martin

19 Margaret Smith

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A G E N D A

1. Welcome/Naval Air Station Items/Comments
2. Air Force update of their remediation sites
3. Navy updates
 - a. Plans for a proposed soil removal action at the former Fire Training Area (Site 5)
 - b. Hydrogeologist presentation: "Monitoring Well Installation Primer"
 - c. Update plans to install additional groundwater monitoring wells and obtain groundwater samples at Site 3 as requested by U.S. EPA
 - d. Proposed Site 1 Privet Road compound monitoring well installation
4. Closing remarks
 - a. Discussion of where next RAB meeting will be held, Horsham Library or Air Station
 - b. RAB member questions and comments
 - c. Set date for next RAB meeting (January 2006)
Meeting adjourned



1 RAB 9-14-05

2 MR. EDMOND: Welcome,
3 everybody. Thank you all for coming,
4 especially the community members. This
5 is our 26th RAB. This is our ninth year.
6 Next year we go to year No. 10. So we're
7 here and thank you for coming again. I'd
8 like to again welcome everyone. Your
9 participation is what we need. Without
10 you guys we have no RAB, so thanks for
11 coming. Tonight the agenda -- does
12 everybody have an agenda? As always,
13 people that are new to the RAB, there's
14 some RAB sheets over there. One is a
15 sign-in sheet and the other is to be a
16 RAB member. Once you're a RAB member,
17 you're on the mailing list and you get
18 documents to review, you get a mailing
19 letting you know when this meeting is and
20 things of that nature. So if you could
21 remember, please fill out the form.

22 We'll get started this evening.
23 The Air Force will give a quick update on
24 their POL site and we'll move on.

25 Gill?



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2 MR. GILL: Thank you, Jim.

3 Thanks for coming. We literally don't
4 have a presentation today because we gave
5 a presentation the last time, but we have
6 made a little progress. We are doing our
7 quarterly sampling and we have actually
8 finished recently. So we'll have another
9 presentation at the next RAB meeting
10 where we will present the results of the
11 sampling results and we'll discuss the
12 next project for fiscal year '06. And
13 that's all we have. We haven't done that
14 much.

15 MR. EDMOND: Well, the Navy
16 side of it we've done a little bit more
17 so you'll get something out of this.
18 We've done a lot of stuff over the summer
19 as we told you we were going to do. Some
20 of it we haven't got to yet, but Ed
21 Boyle's going to update you on Site 5.

22 Ed?

23 MR. BOYLE: I'll give an update
24 on Site 5, the fire training area. Then
25 we're going to have a presentation from



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2 Kevin Kilmartin in reference to the
3 hydrogeologic description of a well.

4 There was some questions from the RAB the
5 last meeting. They wanted to see what a
6 well actually looked like.

7 Site 3, the 9th Street
8 landfill, we're going to give an update
9 on that and the Site 1, Privet Road.
10 Like Jim said, the last few months we've
11 had a lot of meetings with the
12 regulators. And Site 3 especially there
13 was really nothing that was going on with
14 the site. We weren't moving along. We
15 had done some work out at the site, RI
16 work in 1997, and additional work in
17 2000, and really hadn't done anything in
18 the last couple years. We were working
19 on higher priority sites. So we have
20 each site moving along. And Russ and
21 Kevin are going to discuss the Site 3 and
22 Jeff will go over Site 1.

23 In reference to the Site 5, the
24 fire training area, we've discussed this
25 site a couple times. I think at the last



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2 RAB I had mentioned we had a lot of
3 things out there. One was we were
4 working on funding to do the removal
5 action, the removal action of about
6 230 cubic yards. Jeff had given a
7 presentation earlier on that. We were
8 working on funding for that. We were
9 working on an action memorandum. That's
10 basically a requirement to do the removal
11 action. And we were working on funding
12 actually to do the work plan and the
13 field work. The action memorandum was
14 signed last week by the CO. We've had
15 regulatory approval of the work plan.
16 And as of the middle of today, our
17 schedule is to be out in the field the
18 middle of October. With that, I'll turn
19 it over to Kevin.

20 Just also to remind you of the
21 site, this site is Site 5. This is the
22 area where we're going to do the removal
23 action. It's approximately 65 feet long
24 by 10 feet wide and it has a 25-foot
25 radius. The depth of contamination is



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2 about 2 feet, 18 inches to 2 feet. And
3 by the sampling we've taken out there,
4 all this material should go out as
5 nonhazardous. And the primary reason
6 again why we're doing this removal action
7 is so that there will be no institutional
8 controls, no land use controls required.
9 This property can be used for residential
10 use when we're done. Thanks. Anybody
11 have any questions?

12 MR. EDMOND: Then Kevin is
13 going to give everybody -- the community
14 group asked for kind of a description
15 when we say we're putting in monitoring
16 wells, what's a monitoring well. Like if
17 you would drive on the Base, there's
18 literally a hundred of these things
19 around. It's how we sample the
20 groundwater to see if there's any
21 contaminants or what level contamination.
22 Kevin Kilmartin works for Tetra Tech.
23 He's a hydrogeologist and he's going to
24 school you all on how and why we put in
25 wells.



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2 Kevin?

3 MR. KILMARTIN: Okay. All
4 right. Again, this will just be a very
5 short presentation. What you'll be
6 hearing a little bit later this evening
7 is that for some additional Site 1 and
8 Site 3 work, the Navy is proposing the
9 installation of some additional
10 monitoring wells. And as Jim said, one
11 of the comments we've heard in the past,
12 well, what exactly is a monitoring well
13 and how does it differ from any other
14 well. So this is just a real short
15 presentation to show you.

16 Basically, here you see our
17 aquifer. I know we've talked in the past
18 about the aquifer beneath us and that the
19 bulk of the groundwater that we find
20 occurs in these fractures or the breaks
21 in the rock. So what we do simply first
22 is drill a well. We drill an open bore
23 hole in the rock. As it encounters these
24 water-bearing fractures, of course, that
25 open bore hole fills up with water. Now,



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2 if this was a supply well either for your
3 home or a Horsham Township supply well,
4 odds are what you would do is just take
5 all of this out and you would just have
6 this open bore hole for your well because
7 basically the more fractures that you
8 encounter and that are open in that well,
9 the higher yield of that well. And, of
10 course, if it's a supply well, you want
11 to be able to get as much water as you
12 can out of it. But for environmental
13 work, we're typically not so interested
14 in yield as much as knowing exactly from
15 where within the aquifer that water
16 sample's coming from.

17 Through numerous talks in the
18 past, we've talked about the quality of
19 the shallow groundwater at a site versus
20 the quality of the deeper groundwater.
21 Now, if this was just a big open bore
22 hole and water was flowing in from all
23 different depths, any water sample we
24 took here would basically just be an
25 average of the water quality of all the



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2 different fractures. So what we do is we
3 retrofit that bore hole. By that I mean
4 we build a well within the bore hole
5 typically using PVC pipe. And what we'll
6 do is we'll set a well screen, which is
7 basically the slotted portion of the PVC
8 pipe that lets the water enter the bore
9 hole, pack it with filter sand around the
10 pipe or the screen, and then put an
11 impermeable seal above it. So the only
12 place that water can enter this
13 particular well is the water that's
14 entering from that fracture right there.
15 And what we often do even here at the
16 Base is we'll install two different wells
17 within a single bore hole by putting the
18 impermeable seal in between the screens
19 and then just repeating the process a
20 little shallower.

21 So you can see here this is
22 just one hole in the ground, that this
23 pipe here will give us the water quality
24 at that depth, this pipe here will give
25 us the water quality from that depth



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2 fracture. And so what we're doing again
3 is not so much worrying about the yield
4 or how much water we're pumping out but
5 knowing exactly the quality of the water
6 from the different depths at that
7 specific point at the ground surface.

8 The second way that these wells
9 really differ from your typical supply
10 well is for a monitoring well we
11 typically have no plumbing associated
12 with it. There's no permanent pump
13 inside the well, no transfer piping
14 leading to any other place, you know,
15 into a house or what have you. So when
16 we periodically go out to grab our
17 samples, we just bring a portable
18 submersible pump and a generator.

19 And that in a nutshell really
20 is how our monitoring wells differ from
21 your typical supply well.

22 MR. EDMOND: Any questions for
23 Kevin?

24 RAB MEMBER: How big is that
25 bore hole you're talking about?



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2 MR. KILMARTIN: The typical
3 ones -- well, they can be any size based
4 on your needs. The typical ones that we
5 install here at the Base, the open bore
6 hole is about 8 inches in diameter and
7 each of these pipes is 2 inches in
8 diameter.

9 RAB MEMBER: Jack Lebeau. What
10 is it that you want to be analyzing for
11 around here? Is it something specific to
12 the area to the Willow Grove Base zone or
13 is it a general thing?

14 MR. KILMARTIN: Well, typically
15 at the start of your investigation it's a
16 very broad range of chemicals or
17 analytes. And then as you learn more and
18 more specifically about that particular
19 site you're investigating, you sort of
20 zero in on a certain set of chemicals.
21 For example, at Site 5, which we just
22 heard about, our main concern are what we
23 call the VOCs or the volatile organic
24 compounds, but that's a very
25 site-specific, you know, analysis. If



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2 you go to another site on the Base, maybe
3 metals are a concern. So a sample there
4 would be analyzed for metals and maybe
5 VOCs also.

6 MR. EDMOND: When we did the
7 original what they call the site
8 assessment, they put in the wells, like
9 Kevin said, we would look across the
10 spectrum for anything. And then once we
11 found certain levels, we would narrow
12 that down and then do more testing to
13 figure out exactly what the level of
14 contamination was for those chemicals and
15 were they from us or were they from
16 another source. Some of the things we
17 find are naturally occurring in the soil
18 and water and other things are prevalent
19 throughout the entire region. TCE and
20 PCE is just prevalent. Horsham Water and
21 Sewer Authority strips their water for
22 TCE and PCE. The Navy Air Station strips
23 their water for TCE and PCE. It's
24 prevalent throughout the Montgomery-Bucks
25 County area if that helps with your



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2 question.

3 RAB MEMBER: Thank you.

4 MR. EDMOND: Any other
5 questions for Kevin?

6 Thanks, Kevin.

7 I guess we'll move on to Site
8 3, Russ.

9 MR. TURNER: That should be me.

10 MR. EDMOND: Russ Turner is
11 also from Tetra Tech. He's the program
12 manager for us at Willow Grove.

13 MR. TURNER: Okay. We wanted
14 to talk about Site 3. Of the four sites
15 that we've been investigating for ten
16 years, over the last ten years and making
17 regular presentations at the RAB, Site 3
18 has been the one site that's lagged for a
19 number of reasons. Now the Navy for a
20 variety of reasons, funding for one and
21 interest in the site, is reactivating the
22 investigations here. So the Navy has
23 asked us to do some additional
24 investigations there and we want to
25 explain what those are tonight. But



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2 first since we really haven't talked
3 about Site 3 much in the RAB, we want to
4 give a little history of the site itself,
5 what went on at the site, what the
6 compounds of concern are at the site,
7 where its location is, and a little bit
8 about what's around the site. So those
9 are my objectives for tonight. And still
10 it won't be a long time.

11 The 9th Street landfill, this
12 is a historical -- Jeff, do you remember
13 the date of this photograph?

14 MR. DALE: 1978.

15 MR. TURNER: 1978, okay. So
16 this landfill operation and the other
17 things that occurred there occurred
18 between 1960 to 1967. So it had already
19 been shut down for 11 years at that
20 point. And just to give you the overview
21 here, one of the other sites, the antenna
22 field landfill, was the predecessor of
23 this landfill, which shut down in 1960
24 approximately. Things other than typical
25 landfilling operations occurred here, but



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2 let me tell you what occurred. Municipal
3 waste was disposed here, some industrial
4 type wastes from activities at the Air
5 Station were disposed here. So what did
6 that include? Sometimes reportedly paint
7 wastes, solvent wastes, asbestos metal
8 scrap, sewage sludge, as well as a lot of
9 probably much more municipal type waste,
10 the household waste that you typically
11 would see in most landfills. The kind of
12 operations that occurred here
13 historically were trenching, interment of
14 wastes, burning of wastes, and then
15 covering of the landfill with soil.

16 After that operation ended, in
17 addition to that, then a salvage yard was
18 operated on the surface of the then
19 inactive landfill. We don't really know
20 how long, but we know that occurred. And
21 salvaging things, empty drums, PBC
22 transformers reportedly, just things that
23 have no other place to go ended up there
24 before it was either disposed of or sold
25 off as excess, discarded equipment.



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2 Now, there was a remedial
3 investigation performed at the site that
4 started in the late '80S actually, but
5 phase 1 RI occurred in 1993. There were
6 some data gaps. When I say RI, I mean
7 remedial investigation where the Navy was
8 sinking those kind of wells that Kevin
9 was talking about, performing surface
10 soil, subsurface soil sampling and
11 analysis as well as sediment and any
12 surface water sampling and analysis.

13 Are we okay there so far?

14 Okay. One thing I didn't stress very
15 well is this is Horsham Road, so this
16 would be the golf course, the
17 Commonwealth Golf Course, this sort of
18 large area over here. And something I
19 want to point out while I'm on this slide
20 is that there are wells, these would be
21 downgradient wells -- in other words,
22 groundwater flows to the northwest, which
23 is about like that more or less. There
24 are wells here, here, and here. There's
25 a, quote, background well up here,



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2 background meaning upgradient well up
3 here to see what the conditions of the
4 groundwater are before entering the zone
5 of the site. There are background wells
6 here as well also.

7 MR. EDMOND: Russ, if I may,
8 the three wells Russ was talking about
9 along the perimeter to the golf course,
10 we call them sentinel wells -- sentry
11 wells because what we do, those wells are
12 tested to make sure nothing is getting
13 into the public. We know which way the
14 groundwater's rolling. We know where our
15 fence lines are. They're right adjacent
16 to our fence line so we can assure the
17 community that nothing is going past our
18 fence line if anything's out there at
19 all.

20 MR. TURNER: And then just in
21 conclusion of that historical part, the
22 information that was gathered in that
23 remedial investigation field activities
24 was reported out in a remedial
25 investigation report that was finalized



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2 in April 1998. And there were informal
3 comments from EPA and some of which have
4 been acted on since then, but that RI
5 report was never finalized. So what the
6 Navy has assigned us to do now is to
7 prepare for a new remedial investigation.
8 As part of the previous remedial
9 investigation, human health risk
10 assessment was performed, but we'll be
11 redoing that now since a number of years
12 have passed. And we'll tell you in a
13 second about the new data we'll be
14 collecting. So new data, new human
15 health risk assessment and all new
16 remedial investigation report will be
17 submitted to be current with the current
18 standards.

19 Now, specifically about the
20 field work that's required for the new
21 remedial investigation report, the
22 preliminary report noted that the
23 downgradient well as well as the
24 upgradient well had approximately the
25 same concentrations of perchloroethylene,



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2 the solvent we just talked about a few
3 minutes ago, common degreasing type
4 solvent used in vehicle maintenance, for
5 instance. As a result of an informal EPA
6 comment or request, the Navy installed a
7 series of those nested wells that Kevin
8 just described, two wells, at an
9 oil-water separator located at the corner
10 of the Army Reserve hangar. So if you're
11 driving along Horsham Road, you see the
12 Army Reserve center with the big airplane
13 here currently.

14 MR. EDMOND: P3.

15 MR. TURNER: Big airplane. I
16 mean P3. And there's also the large FAA
17 radar turning. That's the vicinity where
18 you're looking. The other corner of that
19 building was an oil-water separator,
20 which is a process tank system
21 essentially for separating oil and water
22 resulting from activities in the hangar.
23 So we postulated at this point earlier
24 that the oil-water separator was the
25 source because typically, you know, if



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1
2 they're doing maintenance, there could be
3 leaks, and we did find PCE in that well.
4 Unfortunately, we didn't have any well
5 further upgradient to say the source
6 isn't further upgradient. So now all we
7 have are wells with PCE in it and so we
8 need to find a well that has no PCE in it
9 so we can say the source is the oil-water
10 separator or the source is somewhere
11 else. There's an Army maintenance
12 facility here, vehicle storage facility
13 here. Unfortunately, they could also
14 possibly be the source. Now, the other
15 thing is there's also Site 5 that we
16 talked about a few minutes ago also over
17 here.

18 So we propose to put in a
19 series of wells here, two wells really,
20 to try to determine if the source could
21 possibly be further upgradient. And
22 depending on the results, we'll be doing
23 additional work. What we'll try to do is
24 identify the, quote, source area for the
25 PCE. If there is PCE in this well here,



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2 it implies that the, quote, source area,
3 historical disposal area, would be
4 further upgradient, which would be
5 somewhere in here, in which case we would
6 put soil borings to identify if there's a
7 soil to groundwater connection and a
8 source of PCE to get into the groundwater
9 flow. If this well cluster is clean, no
10 PCE, no solvents, no VOCs let's say, then
11 we're back to our expectation that this
12 Army hangar was the source because
13 there's nothing in the middle. There's
14 just concrete runway in the middle, in
15 which case, clean. We would put that
16 same series of soil borings and do the
17 investigation back at the Army hangar
18 where there's a trench drain, you know,
19 the door opening, trench drain along the
20 whole thing, which actually goes to the
21 oil-water separator. And historically I
22 remember seeing a drain out back. So we
23 watch for those things too, you know. We
24 don't want to ignore that. So there will
25 be a series of soil borings put in there.



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2 Ed, that's basically it for
3 this presentation. Is that about right?

4 MR. BOYLE: Yes.

5 MR. TURNER: That's about it.
6 Any questions?

7 MR. EDMOND: You want to show
8 them the three wells you put in for the
9 new wells this summer that are there?

10 MR. TURNER: Right. Remember
11 the Site 5, the former fire training
12 area, which is located maybe centered
13 about here more or less. We had similar
14 questions there, but the question was
15 actually the reverse, how far
16 downgradient can the contamination plume
17 be going. We had existing wells. They
18 don't show on this map, but I don't have
19 a map to show them. We had existing
20 wells as far as here. We had existing
21 wells up along the flight line here, I
22 guess one about here, but they didn't
23 define the downgradient extent of the
24 plume. And so this summer, one month
25 ago -- actually, the analytical results



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2 came in today for part of that work -- we
3 put in one well here -- two wells here, a
4 nested pair of wells here, one well here,
5 coincidentally right by the Army
6 maintenance facility, truck maintenance
7 facility, and we put another well up
8 here. And Kevin would have to tell you
9 about the strike and the dip of the rock
10 and the reasoning for putting them in
11 there, but it's technically a little bit
12 over my head to try to explain it anyway.

13 Does that cover what you
14 were --

15 MR. EDMOND: Thanks, Russ.

16 MR. TURNER: I'm done unless
17 anybody has some questions.

18 RAB MEMBER: I actually have
19 some questions.

20 John, do you want to go ahead?

21 RAB MEMBER: All right. I was
22 just wondering what the time table for
23 these different wells is. In other
24 words, we're not going to play hop, skip,
25 and jump here and just keep jumping back



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2 and forth. I mean, we must have an
3 agenda that would show some results. In
4 other words, you get an agenda that's
5 more forward looking. I can't see where
6 we're forward looking on this.

7 MR. TURNER: Okay. Let me see
8 if I understand the question. The
9 question is why after all these years
10 these wells or are these all the wells
11 we'll need? Are those parts of the
12 question you're asking? Are we trying to
13 think forward in placing them?

14 RAB MEMBER: Yeah. It appears
15 to me that most of this stuff is gone
16 over and over and over and over, we're
17 just going back and forth and back and
18 forth.

19 MR. EDMOND: John, let me try
20 and explain to you. We put these wells
21 in, these two wells here. We found
22 contamination. This was an outfall here
23 with distressed vegetation and we didn't
24 know if it was emanating from the 9th
25 Street landfill, so we put these two in.



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2 Those two showed contamination. This is
3 the oil-water separator here. So now
4 these wells were put in to find out what
5 was the outer edge of the contamination
6 coming from 5. What this is supposed to
7 do is try and give us an idea if the
8 source from here may be coming from this
9 direction and it really isn't the 9th
10 Street landfill and it really isn't the
11 hangar. So it isn't a hop, skip, and
12 jump as much as a checker game. If you
13 move here and if you find something, then
14 you know you've got to go in a different
15 direction. If this is clean, then we
16 know, well, we need to move this way.
17 It's kind of like a detective game.
18 You're trying to cut out your suspects.
19 See, here you got a lot of suspects. You
20 have a landfill. You have an aircraft
21 hangar. You have a vehicle maintenance,
22 vehicle storage. And then you have Site
23 5. So you have a lot of things happening
24 in a small area. You can't clean up the
25 whole site because it's just not



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2 practical for you as a taxpayer for us to
3 say, okay, we'll throw \$15 million here
4 and clean everything up. It's just not
5 good fiscal responsibility. So it's
6 better to kind of like put your wells in
7 where you think things are, define your
8 area you're going to clean up, and just
9 strike on that area. And that's what
10 we're trying to do. That's the agenda.
11 This well is because everything -- the
12 water is moving in this direction. So
13 we're putting a well here to see if maybe
14 the contamination is less than here.
15 Then we'll know, well, it isn't from
16 here. If the contamination is more than
17 it is here, then we'll go back and say,
18 okay, this is probably the area of
19 source. And that's why we're doing it in
20 that way.

21 MR. TURNER: You know what,
22 there's another part to that. The
23 question came from the RAB the last time
24 how much does it cost to put a monitoring
25 well in. And I don't know if we have an



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2 average number. It varies so much
3 according to the materials, the rock
4 you're boring into, but it's many
5 thousands of dollars, maybe \$30,000,
6 maybe 20, depending. An easy well is
7 less. So you can't just make Swiss
8 cheese -- you can but our budgets
9 generally don't allow us to make Swiss
10 cheese. The other thing that happened at
11 Site 3 is we had budget constraints and
12 it was considered a lower priority. And
13 that's why it's been sitting -- less
14 activity investigating Site 3 over the
15 past few years and concentrating on Site
16 5 because it's close to the Horsham
17 Township well. The RAB agreed if you
18 have a limited budget, that's what you
19 want to concentrate on.

20 MR. EDMOND: Right.

21 MR. TURNER: So what Jim said
22 plus each well the capital cost is high,
23 we put them in in phases.

24 MR. EDMOND: Then once you put
25 these wells in, eventually once the site



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2 gets cleaned up, you have to close them
3 all out. You have to cap them and take
4 them away. I mean, you can't just leave
5 these pipes that are sticking out of the
6 ground this high for eternity. The State
7 will say if you're not using it, you have
8 to close it. So that's more money. So
9 instead of just putting a whole bunch of
10 wells in and doing it that way, with the
11 limited amount of money we get to do this
12 kind of stuff, it's kind of like a
13 detective. You're trying to take your
14 best shot at where you think it is, put
15 your well in and see if it agrees with
16 your assumptions. And then from what you
17 learn from that well, if you need to, you
18 look at all the data and figure out where
19 you're going to put the next well.

20 RAB MEMBER: Well, Jim, I don't
21 want to hurt your feelings, but I don't
22 think we're getting anywhere.

23 MR. EDMOND: It's a slow
24 process, John.

25 RAB MEMBER: But the taxpayers



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2 aren't going to stand for it forever.

3 RAB MEMBER: If the
4 taxpayers -- if Congress -- it's not the
5 taxpayers. If Congress said here, Willow
6 Grove, here's 50 million bucks, go out
7 and figure out all your ills, we could do
8 that, but they're not giving us 50. They
9 may give us 2 million this year. So
10 you're kind of like trying to do the best
11 you can with a limited budget. Because
12 Willow Grove has no ecological risk,
13 ATSDR, the Agency for Toxic Substances
14 and Disease Registry, which is part of
15 the CDC, the communicable disease center,
16 part of the United States government,
17 came out and looked at the Base, looked
18 at all our contamination, our sites, they
19 looked at the flora, the fauna, what we
20 do, the human imprint on our property,
21 and they said you present no risk to
22 human health or to the ecological balance
23 of the area. So the Navy says, well, if
24 you're not high risk, you're down at the
25 lower end of the food chain when it comes



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2 to money. Their money has to go to
3 strike where there is a risk to human
4 health or to the ecosystem. So it's a
5 two-edged sword. Because we're not that
6 polluted, we don't get that much money.
7 If we had much more problems, they'd be
8 throwing a lot of money at us. But
9 because our problems -- I mean, to us
10 they're significant, but in the big
11 scheme of things in the big Navy and the
12 United States, our problems are very
13 minute in comparison.

14 RAB MEMBER: Jim, if I could
15 just add, one thing to remember, John, is
16 they mentioned right along the country
17 club property boundary they put in wells,
18 sentinel wells, which would check what's
19 the quality of the groundwater leaving
20 the site, and those wells show that there
21 is no impact leaving the site.
22 Therefore, this particular site, Site 3,
23 was given a lower priority. And what
24 they're doing I think is a very prudent
25 investigation where they're doing it



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2 stepwise going back to try to find that
3 as opposed to, as Jim was explaining,
4 sticking a whole lot of wells and knowing
5 you have to install, eventually you have
6 to clean, but you have to spend a lot of
7 money to monitor and sample every three
8 to six months. So it's a step phase. I
9 think the pace of the investigation may
10 seem frustrating to you, but it's
11 probably commensurate with the amount of
12 risk that this particular area poses to
13 the environment and to the human
14 population around.

15 MR. EDMOND: I mean, funding on
16 things like this, John, and to everybody
17 here is based on risk assessment. And
18 our risk assessment is low. So it's kind
19 of like a mission. If you're flying an
20 operational mission, you know, if it's
21 one tank you're going after, you might
22 send two planes. If it's a regiment of
23 tanks, a battalion of tanks, you're going
24 to send a whole lot of planes. That's
25 kind of a military analogy for this. We



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1
2 don't have a lot of risk so the Navy's
3 not -- there's only so much money that
4 gets put into the budget. This money is
5 controlled by Congress. Congress says,
6 Navy, this is your part of the pie. And
7 then big Navy divides that pie up amongst
8 all its bases worldwide to clean up.
9 This money is controlled by Congress.
10 It's not controlled by the Navy. I mean,
11 they're not saying we're only going to
12 spend, you know, \$50 million on cleanup
13 and a hundred million dollars on
14 airplanes. This money comes from
15 Congress just for cleanup. That's it.
16 And the Navy only gets one chunk of that
17 pie. The Air Force gets a chunk. The
18 Army gets a chunk. DOA gets a chunk.
19 Department of Energy gets a chunk. So, I
20 mean, the pie is not that big. We're
21 getting a sliver and somebody else is
22 getting a bigger piece, but they have
23 bigger problems.

24 RAB MEMBER: Speaking of the
25 pie, what about the bottom line? When



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2 you finally do plot your contamination
3 zone, are you considering something like
4 bioremediation? It doesn't sound like
5 this is a big emergency at all. It
6 sounds like this is something you can
7 sort of play with for a bit and get rid
8 of in a gradual way perhaps.

9 MR. TURNER: I think I
10 understand the question. Essentially,
11 what happens is there's an EPA-moderated
12 process, site discovery, remedial
13 investigation, feasibility study, what
14 kind of technologies can be used, what
15 kind of remediation would be effective,
16 so you've jumped into that. At this
17 point for 9th Street landfill, it's not
18 the source -- it's not the sole source of
19 the PCE in the groundwater. And so 9th
20 Street landfill is a Superfund site so
21 it's governed by law and the Navy has
22 agreements with EPA how to proceed. So
23 anything we find will be outside --
24 likely anything we find here it can't be
25 influenced by the site. But let me get



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2 back to your question. What kind of
3 technologies would be considered? For
4 that reason, the concentrations are so
5 low, they're above MCLs, the maximum
6 contamination limits permissible for
7 drinking water for PCE; however,
8 technology doesn't give you much to work
9 with at that level except just to
10 maintain monitoring, make sure that it's
11 not impacting human health, water
12 resources people are drinking. I think
13 that would almost certainly be the most
14 you could do with it.

15 MR. EDMOND: And if I could
16 add, Russ, what we'll do when we get to
17 the remediation phase is do a feasibility
18 study. And the feasibility study will be
19 presented in its draft form. After we,
20 the military, and EPA and PADEP review
21 it, it will have alternatives and you
22 folks will get a chance to have your
23 opinion on what alternative we should
24 use. I mean, it's not a binding opinion.
25 Don't get me wrong. But it's like Site



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2 5. The community said Site 5, maybe
3 that's the site we want you to work on
4 first and that's what we did. We tried
5 to the best of our ability to do what the
6 community wants, but sometimes the
7 constraints of what the community members
8 want and what funding is don't always
9 match. But you guys will get a shot at
10 choosing the remediation process once we
11 get there.

12 MR. TURNER: And let me finish.
13 There's another important part that will
14 be included in the feasibility study and
15 it's what we're searching for now. It's
16 if there's a source of contamination at a
17 level that's causing this diffuse --
18 that's sufficiently high -- if there is a
19 source of PCE at a level sufficiently
20 high to remediate, then that has to be
21 brought into the feasibility study; hence
22 we have to look for it. Until we've
23 found the source, we have to look for it.
24 There may not be a source. It may be
25 there could be an old leach field, not



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2 uncommon. When this facility was built,
3 it was built with a sanitary sewer
4 system. It was an up-to-date system back
5 in the '50s. So it discharged through
6 pipes to a wastewater treatment plant.
7 However, it's not uncommon for people
8 working in facilities like that they may
9 have dumped things in the back, they may
10 have had a hidden disposal. It's
11 possible. The point is we're looking for
12 that potential of that hidden source
13 that's causing this diffuse groundwater
14 contamination. If we find a source that
15 can be dug up, there are other
16 technologies, bioremediation, for
17 instance.

18 MR. EDMOND: Site 5, we're
19 removing that soil because we know that's
20 the source of the contamination. So
21 we'll remove the soil, get rid of the
22 source. Just biodegradation, the PCE and
23 TCE will start going down, natural
24 attenuation.

25 RAB MEMBER: Question partly



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2 about Site 3 and then also kind of
3 getting to the new wells on Site 5, which
4 might be a little unfair since you just
5 got the data back.

6 MR. TURNER: No problem. We
7 have Kevin here for the hard ones.

8 RAB MEMBER: You're talking
9 about PCE and you were talking about
10 bioremediation. And the process would be
11 dechlorination of that compound PCE to
12 TCE to vinylchloride and finally ethene.
13 You're seeing PCE in the wells around the
14 9th Street landfill. Are you seeing any
15 of the degradation products?

16 MR. TURNER: Not really, no, we
17 haven't really.

18 RAB MEMBER: So the bugs
19 seem -- have you done any monitored
20 natural attenuation parameters?

21 MR. TURNER: No, at Site 3 we
22 have not.

23 RAB MEMBER: And the new wells
24 in Site 5, have you looked at like
25 bottled fatty acids, natural attenuation



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2 parameters?

3 MR. TURNER: I want to answer
4 the same question for Site 5. In 1991 we
5 started looking for -- well, in response
6 to your comment here at the RAB, there
7 was an FS submitted at that time. It had
8 considered bioremediation, but the RAB
9 didn't feel it gave it -- bioremediation
10 as well as chemical oxidation, those kind
11 of technologies. The FS had considered
12 these technologies. The RAB felt that
13 they were given short shrift and the Navy
14 opened back up and we reevaluated the FS
15 based on that. At that time we did a
16 round of monitoring well samples for
17 monitored natural attenuation parameters,
18 the kind of indicator parameters in the
19 soil, in the rock, in the groundwater you
20 can use to give you an indication whether
21 biological alternatives are going to be
22 usable in that type of geology unit.

23 Okay. Now, back to your
24 question I think was the new wells that
25 we just installed, we installed five new



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2 wells and we sampled all five for
3 monitored natural attenuation parameters,
4 the same ones we did in the earlier round
5 in 1991 or 2, whenever it was. In
6 addition to that, we did a complete round
7 of groundwater samples at Site 5.

8 RAB MEMBER: Are there products
9 in Site 5? As I recall, there was, but
10 there was no buildup of VC so the --

11 MR. TURNER: I don't remember
12 seeing VC, maybe a little bit in one or
13 two wells, being vinylchloride, the
14 penultimate step to final degradation of
15 these compounds.

16 RAB MEMBER: Do you know
17 offhand for enhancing you're going to put
18 in there emulsified soil, HRCs, lactate?

19 MR. TURNER: Both, all of
20 those, yes. Our engineer, we have a guy
21 who has had some experience doing these
22 jobs, and it's either a couple of
23 chemical oxidants and maybe three or four
24 biological agents. And there's two ways
25 of doing the biological remediation. One



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2 is just putting in nutrients and if that
3 works, great. Another one is you might
4 have to add bugs, you know. And they
5 have to be -- there have to be check
6 points as you go along.

7 RAB MEMBER: I would just say
8 if you're not getting vinylchloride, your
9 bugs are there already, you don't need to
10 add anything, just get an alternative
11 carbon source.

12 MR. TURNER: I think that's
13 probably right.

14 RAB MEMBER: Any idea when that
15 will be happening? The soil removal's
16 October.

17 MR. TURNER: The FS is going to
18 await the resampling of the wells. So
19 first resampling was done last month.
20 Analytical results started arriving
21 today. We'll have a report of that in
22 about 50 days. And then from there we'll
23 start up on the FS again.

24 RAB MEMBER: Thank you.

25 MR. TURNER: Anyone have any



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2 pot shots or any tough ones?

3 RAB MEMBER: I need a little
4 information from Jim down there.

5 MR. EDMOND: Yes, sir.

6 RAB MEMBER: Correct me if I'm
7 wrong. How many of these RABs are there
8 around the country?

9 MR. EDMOND: Every Base that
10 has an NPL list, what they consider DOD
11 Superfund, is mandated to have a RAB.

12 RAB MEMBER: You have access to
13 that pamphlet? I know I had one at one
14 time.

15 MR. EDMOND: I can give you one
16 of these, which is a book describing the
17 entire --

18 RAB MEMBER: That's what I'm
19 looking for.

20 MR. EDMOND: That's yours.

21 And it will show you what our
22 piece of the pie is. If anyone else
23 wants one of these books, we have two
24 left, but I can get more. It's great
25 reading.



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2 RAB MEMBER: My question was,
3 has any of those in this book been wiped
4 out?

5 MR. EDMOND: Yes, sir. You'll
6 go through here and you'll see cost to
7 complete, it's finished. Here's NASJRB
8 Willow Grove. This is what we were
9 funded to date, 6,867,000. And they
10 think it will take another 6,235,000 to
11 complete it.

12 RAB MEMBER: Your boys down in
13 Washington will fess that up.

14 MR. EDMOND: This is Willow
15 Grove Air Station here. It shows you a
16 little writeup about us. It's
17 Philadelphia, Mechanicsburg. This is all
18 the Pennsylvania sites. It's state by
19 state. That will be good bedtime reading
20 for you, John.

21 If that's it for Site 3, we'll
22 move on to Site 1. Jeff Dale from EFA
23 northeast, part of the NAVFAC community,
24 part of the Navy, will give us a brief on
25 Site 1. Site 1 if you all remember is



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2 the Privet Road compound. It's the other
3 side of the Base, the Easton Road side,
4 right across the street from where I work
5 as a matter of fact.

6 Jeff?

7 MR. DALE: Now, I'm mainly
8 giving this to make the community aware
9 that we're doing something because it's
10 going to be very visible because the work
11 is going to take place right along 611.
12 Other than that, it's not going to be too
13 exciting. As you know, our Privet Road
14 compound Site 1 is up here and, like all
15 the other places, waste was stored and
16 burned and buried and some shipped
17 off-site. And the Base supply wells are
18 here and these were both contaminated
19 with chlorinated solvents just like the
20 other sites. And through our
21 investigation of the supply wells, we've
22 determined that the contamination in
23 these wells occurs at depth mostly 2 to 3
24 hundred feet or more deep. And the
25 geology suggests that there's a source



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2 somewhere below us here on the page
3 contaminating our supply wells. And we
4 said, hey, EPA, you know, it's not us.
5 It's not our landfill. It's right next
6 to our wells contaminating it. It's
7 something else. And obviously we're not
8 the first people that have tried to make
9 this case to the EPA that it's not us.
10 So to try to determine where the
11 contamination is at depth, we're drilling
12 a deeper well here to see if it's coming
13 at depth in this direction and a
14 shallower well in this area to see if
15 it's coming from somewhere shallow down
16 here. And we're hoping that the EPA
17 would then evaluate who it could be off
18 the Navy property. And this well is
19 going to be further up here or in this
20 area. We're working with utility
21 clearances and things like that. And
22 this well will be just after the parking
23 lot for the main gate. There's a grassy
24 area up here with some new fire hydrants.
25 And this is in an open parking lot area



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2 here. And we're just letting you know
3 because you're going to drive by in a
4 month or so and see a big drill rig there
5 for a couple days and people working and
6 calling Jim up and asking him why. The
7 next presentation we'll have pictures of
8 that going on and the results -- well, I
9 doubt results of the sampling by then,
10 but it depends when the next RAB is. Now
11 you can pepper me with 20 minutes of hard
12 questions.

13 RAB MEMBER: Where on 611 --
14 where's that bottom well?

15 MR. DALE: This is the main
16 gate.

17 RAB MEMBER: I want to find out
18 because I grew up on the other side of
19 C&C Ford, so I want to make sure if it's
20 coming from my house.

21 MR. EDMOND: The well by the
22 bottom there is right by the O'Brien
23 club.

24 RAB MEMBER: That's good. It's
25 not because of me. That's Kellet



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2 Aircraft. And where's --

3 MR. DALE: Kellet Aircraft is
4 somewhere up here and there's a couple
5 other businesses in that area.

6 RAB MEMBER: The Ford agency is
7 further down.

8 MR. DALE: About here, I guess.

9 RAB MEMBER: Because there's
10 really nothing except for what there?
11 Where's Hankin's house at?

12 MR. EDMOND: Right there at the
13 bottom.

14 RAB MEMBER: But I'm saying
15 there's nothing between there and --

16 MR. EDMOND: We don't know.
17 That's why again it's like being a
18 detective. That's why we're putting
19 those two wells in to figure it out
20 because we know -- we're fairly certain
21 that it's not emanating on Navy property.

22 RAB MEMBER: But I'm saying I
23 grew up there and it's not because of me
24 either.

25 MR. EDMOND: But, I mean, we



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2 have done testing. There's a PA site, a
3 gas station. They had underground
4 leaking storage tanks. And we put some
5 wells at the community's request around
6 Tinius Olsen. They were nervous Tinius
7 Olsen was the source of our pollution.
8 When we put in the wells around Tinius
9 Olsen, we found there was MBTE in our
10 wells and that only comes from unleaded
11 gasoline. So that told PADEP that they
12 had a problem with the gas station across
13 the street. So, see, these wells not
14 only serve the purpose of helping the
15 Navy, but it also helps the community
16 figure out maybe it's not the Navy, it's
17 somewhere else, and it leads the State in
18 the right direction or EPA in the right
19 direction.

20 MR. DALE: The way the
21 Superfund law is written, you know, we're
22 the Superfund site and we're pretty much
23 guilty till proven innocent.

24 MR. EDMOND: And as all of you
25 know, the government has the deepest



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2 pockets. So we're guilty until we prove
3 ourselves innocent more or less. And
4 this is what we're trying to prove, our
5 innocence on this matter.

6 RAB MEMBER: Obviously, you're
7 putting them over here because of
8 potential suspicion of somewhere else.
9 Monitoring wells surveying the area of
10 either municipal or private wells, have
11 they indicated on the east side of Easton
12 Road that there is any potential or other
13 contamination detected in other wells off
14 the Base?

15 MR. DALE: To my knowledge,
16 PADEP and/or the EPA have done some work
17 in that area and some sampling, but I
18 haven't seen the results. But I know in
19 one of our reports there's a Horsham well
20 further down maybe by --

21 MR. EDMOND: Down by Moreland
22 Road.

23 MR. DALE: Near the Lee's
24 hoagie place maybe and that has some
25 contamination in it. And I believe a



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2 supply well out around County Line Road,
3 which may be Warminster or Warrington,
4 also has contamination, but it's the same
5 two contaminants that were very common,
6 degreasers and solvents.

7 RAB MEMBER: You have Geller
8 and Holtz that used to be there.

9 MR. DALE: But we are trying to
10 get all the old files from it to present
11 to EPA and make a better case.

12 MS. FLIPSE: There are very few
13 residential wells left along 611. One of
14 the supervisors from my section went out
15 last spring and tried to find them all
16 and get samples. And I have most of the
17 data in my office. And a lot of it is --
18 there's a groundwater divide up there,
19 which USGS has kind of drawn a map, and
20 most of the wells are on the wrong side
21 of the groundwater divide to be really
22 providing much useful information for
23 here, but I do have some data from the
24 other side of the road, yes.

25 RAB MEMBER: This is sort of



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2 new to me. One problem I have listening
3 to all this is why the heck do we have to
4 dig a well for \$30,000 to get information
5 that sounds to me like you could punch a
6 hole in the ground to hit some water and
7 sample it? I mean, what's that, a couple
8 hundred bucks?

9 RAB MEMBER: It's bedrock so
10 it's not that easy to go down.

11 MR. TURNER: There's no direct
12 push technology.

13 MR. EDMOND: Bedrock at the
14 Base is anywhere from 6 to 18 feet.

15 MR. DALE: This well is going
16 to be 350 feet deep and there's a capital
17 cost of just drilling that well and
18 constructing it. But before we construct
19 it as a well, we partner with USGS to
20 bring in equipment that can isolate the
21 zones at depth so we can collect discrete
22 samples from the fracture zones Kevin
23 described and hopefully find the most
24 contaminated zones and construct the well
25 at that location. And that work is an



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2 additional cost. So if our 350-foot well
3 hits six or seven of these fractures
4 zones, we're going to sample all six or
5 seven, find the most contaminated one,
6 construct the well there.

7 RAB MEMBER: So it really is a
8 multi --

9 MR. TURNER: It's costly, but
10 at least it's maximizing what you can
11 gain from the expenditure.

12 MR. DALE: We may find six
13 clean zones and know the contamination is
14 confined in one area, and hopefully you
15 can further pinpoint the source.

16 RAB MEMBER: That's a good
17 answer. Thank you.

18 MR. EDMOND: Because our water
19 wells are over 350 feet deep. This is
20 our water we drink and use for fire
21 protection. So you're getting water
22 rushing in from all those fracture zones
23 so you know the water's contaminated, but
24 you don't know where the water's coming
25 from. The way the hydrogeology is of



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2 this area, it doesn't always run in the
3 same direction. It can run this way at
4 one level and this way at another level
5 and deeper it runs in a third different
6 direction. So it's really a
7 complicated -- and as April was saying,
8 USGS, there's what they call the Stockton
9 formation, which cuts across the south
10 end of the Base. The Stockton formation,
11 everything to the north is one separate
12 story and everything to the south is a
13 different separate story.

14 MR. DALE: Jim, the whole Base
15 is the Stockton sandstone. You're
16 talking about a different kind of rock
17 called diabase that cuts through and that
18 forms a barrier to groundwater flow.
19 That's why most of the residential wells
20 are south of that and the groundwater's
21 moving south and anything north of it in
22 our area the groundwater's generally
23 moving north.

24 MR. EDMOND: The hydrogeology
25 is really complicated. That's why we



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2 have guys like Kevin and Jeff and now
3 Karen to try and figure that out for us.

4 RAB MEMBER: The other thing
5 that you get out of a well cluster like
6 this where it's different zones,
7 packering off or isolating those zones is
8 you can take the water level between the
9 lower zone and the upper zone, determine
10 whether the groundwater flow is going
11 down or up. And that will also play how
12 you deal with it and more where the
13 contamination might go.

14 MR. DALE: Well, what we really
15 want to do is spend money and show that
16 the contamination is not the Navy and the
17 Navy won't have to spend their money
18 cleaning up somebody else's problem.

19 MR. EDMOND: We can turn it
20 over to State.

21 MS. FLIPSE: Nobody gave us any
22 money either. Just so you all know, the
23 reason I haven't figured it out yet is
24 because our budget's been very, very,
25 very tight also.



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2 RAB MEMBER: I have a question
3 real quick. They built one of those -- I
4 don't know, the water substation, the
5 square buildings, Horsham park there.

6 MR. EDMOND: A pump house.

7 RAB MEMBER: A pump house. Can
8 maybe test wells also do a double
9 purpose?

10 MR. EDMOND: No, because
11 there's a pump in the well.

12 MS. FLIPSE: It's an open bore
13 hole.

14 MR. DALE: The way we do it is
15 kindly ask the municipal authority to let
16 us take the pump out of their well and
17 then we would bring in the special rig
18 that USGS has with these packers. I'll
19 have pictures at the next RAB. Then we
20 would isolate those zones and collect the
21 samples and it would function as if we
22 drilled six or seven wells.

23 RAB MEMBER: How much does that
24 cost?

25 MR. DALE: Tens of thousands of



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2 dollars.

3 RAB MEMBER: That's what I'm
4 saying is --

5 MR. EDMOND: The problem is
6 sometimes your municipal water doesn't
7 want that well. You have to take that
8 well out of service for two, three, four,
9 five -- maybe a week and then you're
10 minimizing the water that they have the
11 capability of pushing to homes.

12 MS. FLIPSE: We haven't done it
13 to the supply wells off-Base, but we did
14 do that or USGS did it to the Navy supply
15 wells where you could do one at a time
16 and have water out of well 1 while well 2
17 had the pump pulled and the packers in it
18 and everything. So it's possible to do
19 it. It's difficult to convince a
20 municipal supply company that they can do
21 without one of their supply wells,
22 especially since we've had a couple years
23 lately where there's been a drought, you
24 know. They don't want to be without that
25 well.



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2 RAB MEMBER: I understand. If
3 you have an existing hole to see if you
4 can use it because that part is here and
5 here's the Base here and the problem
6 child is here, so-called.

7 MS. FLIPSE: There may not even
8 be a well specifically where your pump
9 house is.

10 MR. TURNER: There's none we
11 know of.

12 MR. EDMOND: It's fire
13 protection too. A municipal water
14 authority is worried if they have a major
15 fire and their well is off-line, they're
16 not going to have enough water to provide
17 to the residents and to put out the fire.
18 So there's a lot of --

19 MR. TURNER: You know what,
20 Jim, there's no well in that category
21 that the Navy would be looking for.
22 There's just none.

23 MS. FLIPSE: They're not in the
24 right place.

25 RAB MEMBER: But meanwhile this



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2 gentleman's going to do all this well
3 stuff and now -- my parents still live
4 there. I don't. But once you find your
5 findings and the government's safe now --

6 MR. DALE: The Navy.

7 MS. FLIPSE: The Navy is and
8 then either EPA or the State, DEP, will
9 try to find some funds to continue the
10 investigation.

11 RAB MEMBER: But I'm a resident
12 of an area. I sit here and say, look,
13 this doesn't stop now; right?

14 MS. FLIPSE: Well, hopefully if
15 the legislature and the Congress give
16 some money to the environmental agencies
17 who are charged with doing investigations
18 where you just don't know who the
19 responsible party is.

20 RAB MEMBER: Well, they could
21 be gone.

22 MS. FLIPSE: Right. And the
23 suspect here, which is long gone.

24 MR. EDMOND: But the thing is,
25 just so you know, your water is clean



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2 you're drinking from your tap. Anything
3 that's happening is deep.

4 RAB MEMBER: I understand. I'm
5 just trying to save money. My dad says
6 I'm cheap. I'm trying to save you guys
7 money.

8 MS. FLIPSE: We look for that.

9 MR. EDMOND: We look for that
10 all the time.

11 MR. TURNER: We're all
12 taxpayers too.

13 MS. FLIPSE: The wells may not
14 be from what we understand of the geology
15 up here -- USGS has done a lot of work.
16 So from what we understand of the geology
17 and even where people's residential wells
18 are, they're on that side of 611. That
19 might be useful, they may or may not, and
20 they may or may not be deep enough and
21 you may or may not actually have
22 enough -- like a lot of people have a
23 residential well and can't tell you how
24 deep it is, if it's open hole or not. So
25 if you go to their tap and turn it on and



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2 sample the water, it doesn't tell you
3 anything because you don't know where
4 it's coming from.

5 MR. EDMOND: And just so you
6 know, I mean, we're a team here. Besides
7 the community, EPA, PADEP, USGS, we've
8 all worked together. I mean, USGS has
9 done so much geology and hydrogeology up
10 here, we probably know this area better
11 now than anybody that's known it in
12 years. PADEP shares their information
13 because PADEP does things that maybe are
14 on 611 and have nothing to do with us,
15 but they have information that we can use
16 to pinpoint or to take things off. So
17 it's a team effort. We're trying to use
18 the taxpayers' dollars as best we can.
19 We each have little pots and we're trying
20 to pool our information and our data, so
21 it's working pretty good.

22 RAB MEMBER: What's the legal
23 limitation on placement of these wells?
24 It's on the Base. I understand that.
25 But it sounds to me if I was playing



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2 checkers you might want to put one on the
3 east side of York Road.

4 MR. EDMOND: You get into all
5 kind of real estate issues, easements.

6 How long did it take us, Ed, to
7 get one in the golf course?

8 MR. BOYLE: I wasn't part of
9 that one, but it does take a while. You
10 have to go out and get an easement and
11 then real estate has to determine the
12 value of the property and do an
13 assessment.

14 MR. EDMOND: That's long and
15 drawn out.

16 The golf course took us,
17 Russ --

18 MR. TURNER: Just to sample,
19 permission just to sample. And USGS
20 logged the geology down the bore hole and
21 it took months to get permission. And,
22 in fact, last we heard they said they
23 probably won't cooperate any further.

24 MR. DALE: We feel we can get
25 enough information with the wells



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2 installed in our property boundary,
3 whether on one side of the road or the
4 other. It won't affect our information.
5 It's obviously easier to drill on our
6 property because the first thing you have
7 to do is get permission.

8 MR. EDMOND: And while we're
9 drilling on the property, lawyers aren't
10 involved. As soon as you go off, lawyers
11 are involved. And everybody knows what
12 that's like.

13 Any questions for Jeff? Okay.
14 Well, that's about it. I just wanted to
15 ask everyone is this meeting area all
16 right or would you like to move it back
17 to the Base?

18 RAB MEMBER: Back to the Base.

19 MR. EDMOND: John, I have to
20 ask you, is the coffee all right?

21 RAB MEMBER: But the chairs
22 aren't worth a crap. I keep moving
23 around in the chair to get comfortable.

24 MR. EDMOND: Consensus? Here?
25 The Base? Okay. We'll send out a



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2 questionnaire and I'll pool the entire
3 group. And whatever, eight on one side,
4 nine on the other, the nine will win.

5 RAB MEMBER: What stops you
6 from doing it every other?

7 MR. EDMOND: Nothing. We're
8 trying to do what the community wants to
9 do. We had problems with people getting
10 on the Base because of security and their
11 cars being searched. I mean, for people
12 with stickers it's not hard to get on the
13 Base. But for people without stickers,
14 it can be a trying experience if you're
15 not used to going through the gate and
16 having people with guns look at you and
17 things like that. Now, Rich Peffal, he
18 doesn't mind. He shows his Montgomery
19 County Police badge and he's in. But
20 I'll send out a questionnaire.

21 Also, Sherri, when is the Cheap
22 Trick concert?

23 MS. JONES: 2 October. We have
24 a free concert for the community 2
25 October. The gates will open at



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2 4:00 p.m. You can bring your lawn
3 chairs, bring blankets. There is no
4 assigned seating at all at the concert.
5 It's an open air concert. There will be
6 some food vendors on a very small scale,
7 free limited parking. As you know, we
8 don't have a whole lot of parking on the
9 Base any longer. And more details will
10 come out in the community. We sent it
11 out to the Chamber just recently to get
12 it out. But we want everybody to come.
13 This is for the community for everyone to
14 enjoy a nice concert. Hopefully, we'll
15 have the beautiful weather back and it
16 will be a great night.

17 Another one just so everybody
18 knows, I'll take this opportunity, 15
19 October is our traditional annual Navy
20 birthday ball. And this year we're
21 holding it on the Base so we can invite
22 the community members to participate in
23 the ball. It's an evening wear event
24 vent. It's a nice time to get out and
25 get dressed up, but the ticket prices are



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2 extremely low because this year we want
3 to include as many people as we can.

4 MR. EDMOND: That's Sherri
5 Jones. For people that don't know, she's
6 our public affairs officer for the Air
7 Station.

8 Well, without anything else, I
9 had the next date for the meeting --

10 RAB MEMBER: Excuse me. I'm
11 sorry. I don't want to be rude or
12 anything, but it says member questions
13 and comments. Why hasn't the BRAC word
14 come up tonight?

15 MR. EDMOND: Because this is
16 not a forum for that, for one, and, two,
17 it's still out there.

18 RAB MEMBER: I understand that.
19 Okay. Worst case scenario, what we talk
20 about on all these wells and all this
21 other stuff, worst case scenario the Base
22 goes to Army Reserve centers and the Navy
23 goes to McGuire, which I can't see where
24 you're going to fit, what happens to your
25 jobs?



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2 MR. EDMOND: That's yet to be
3 determined.

4 RAB MEMBER: Fair enough. I
5 only asked the question because who takes
6 possession -- you guys will still be here
7 I'm sure; right?

8 MS. JONES: Yet to be
9 determined.

10 MR. EDMOND: Yet to be
11 determined. I mean, not to say the B
12 word, but this is still in Congress and
13 the president -- I mean, nothing is final
14 so we're not taking any stand on whether
15 we're here or gone. It's in higher
16 authority's hands.

17 RAB MEMBER: So next month
18 we'll know for sure.

19 MR. EDMOND: Looks that way.

20 RAB MEMBER: Ask fast Eddie.
21 He knows.

22 MR. EDMOND: He may come to the
23 next meeting. Who knows. We'll ask
24 April. She knows.

25 I have it down for January, but



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2 would we like to have it in December?
3 December would be three months from now.
4 January's four months. I didn't know how
5 people feel with the holidays. Would you
6 like to have it after the holidays or
7 before the holidays?

8 RAB MEMBER: After.

9 MR. EDMOND: Then we'll hold
10 the next meeting on the 18th of January.
11 Tentatively, it will be here, but that's
12 yet to be determined. I'll send out a
13 questionnaire so we can make sure
14 everybody gets their fair say. And with
15 that, any other questions, comments? Oh,
16 yes. The community has asked maybe if
17 the Air Force and the Navy could go back
18 at the next meeting, if not the next, the
19 next following meeting after that, and go
20 back over all the sites. I know the Navy
21 had ten active sites, the Air Force had
22 four or five, I think, and give an update
23 on where those sites were.

24 MR. GILL: We have seven sites.

25 MR. EDMOND: And give an update



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2 from the beginning to the end, more or
3 less a history of the NPL of the IR
4 program at Willow Grove.

5 RAB MEMBER: You don't have to
6 be here for two hours doing this, but as
7 a summary as a big picture because we
8 have a lot more new people here and we
9 started out with, whatever, 20 sites,
10 five are closed out and done, some are
11 halfway, you know, a couple -- whatever
12 it is, just a nice big picture where we
13 started nine glorious years ago.

14 MR. EDMOND: This started nine
15 years ago. We started this maybe 15
16 years ago.

17 RAB MEMBER: If you want to go
18 back 15 years, go ahead.

19 MR. EDMOND: We'll have a
20 summary of the whole thing.

21 RAB MEMBER: That will be good
22 for the community too. We can see a
23 snapshot.

24 MR. EDMOND: What we're going
25 to try to do, I've talked to Ed and Russ



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2 about this, we've had fact sheets out, I
3 think four fact sheets out since we
4 started, but the last one was like 2000.
5 So we're thinking of producing a new fact
6 sheet up to date for 2005. So that way
7 not only will it be available for the
8 RAB, but we can put them out in the
9 Chamber of Commerce for whoever wants an
10 update on what we're doing. People who
11 don't come to the meeting but have an
12 interest, this will give an update on
13 where we're at.

14 Well, see you after the first
15 of the year. Have a great holiday.

16 (Whereupon the meeting
17 adjourned at 7:20 p.m.)

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CERTIFICATE

I HEREBY CERTIFY that the proceedings, evidence, and objections are contained fully and accurately in the stenographic notes taken by me on September 14, 2005, and that this is a true and correct transcript of same.



Kimberly A. Otherwise
Certified Realtime Reporter
Notary Public

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