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RESTORATION ADVISORY BOARD MEETING

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THURSDAY, AUGUST 23, 2001

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CORONADO, CALIFORNIA

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22 REPORTED BY: Nancy A. Lee, CSR No. 3870

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1 ATTENDANCE:
2 John Locke
3 Bob Geilenfeldt
4 Bill Collins
5 Daniel Cordero
6 Mark Bonsavage
7 Marilyn Field
8 Richard Wong
9 Robert Campbell
10 Art Van Rooy
11 Leticia Hernandez
12 Jim French
13 Anita Craig
14 Nicole Peacock
15 Vicki Raun
16 Judy Geilenfeldt
17 Dottie Marron
18 Laura Hunter
19 Dis Abelman
20 John Traylor
21 Dick Scharff
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1 CORONADO, CA., THURS., AUGUST 23, 2001, 6:40 P.M.

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3 MR. GEILENFELDT: Good evening, and welcome
4 everyone to the 71st Restoration Advisory Board
5 Meeting for the City of Coronado for North Island.

6 I want to thank all of you for
7 attending. We appreciate your interest.

8 We want to start out by approving the
9 minutes from the last meeting. I'm sure every one
10 of you read those in detail.

11 Could I get any comments on that or any
12 motion to accept those minutes?

13 MR. VAN ROOY: I move.

14 MR. GEILENFELDT: Second?

15 MR. COLLINS: I'll second it.

16 MR. GEILENFELDT: Approved. We'll move on.

17 We start out this evening with a Site 9
18 Removal Action Update with our expert Bill Collins.

19 MR. COLLINS: As most of you know, we've
20 been operating out at Site 9 now for several years
21 pulling contaminants out of the ground, and I want
22 to let you know we're nowhere near complete.
23 There's more than we can shake a stick at out
24 there.

25 So tonight what we thought we'd do is

1 give you a longer update than the usual five to ten
2 minute one with a little handout. There's a lot
3 going on out there, and I want you to understand
4 what it is.

5 Tonight I'll give you a little brief
6 site history. As you can see here, a description
7 of the full-scale system we're going to put in, our
8 water treatment bench test that we're working on,
9 and our discharge options as an alternative to
10 discharging to the sewer.

11 For those that don't know, Site 9 is
12 off in the southwest corner of the island.

13 The site used to be a chemical waste
14 disposal area. It was totally unmonitored and
15 unregulated, and people dumped things from the '40s
16 to the '60s out there. Actually, in certain areas
17 it went clear into the '70s.

18 It's currently unoccupied and unused.
19 It looks more like a Kmart parking lot with some of
20 our equipment on it.

21 When we started the removal action, we
22 had a big extraction system out there to remove
23 soil vapors, and we operated for 26 months. We
24 were very successful with that. We pulled off
25 about 80,000 pounds of mixed VOCs. That was mostly

1 chlorinated solvents with some lighter fuel
2 fractions. Later on we found out that that wasn't
3 good enough. We had some spots that we weren't
4 remediating very well, so we installed a
5 Pilot-scale steam injection system, and we operated
6 that for nine months. And that was quite good,
7 too. We removed another 28,000 plus pounds of VOCs
8 both as free product, which was mostly fuel, and as
9 fumes which is quite a bit of chlorinated
10 hydrocarbons.

11 Having gone through that pilot test, we
12 then decided to implement this full-scale over the
13 site over areas 1 and 8, at least, and that's what
14 we're about. We actually operated -- we continued
15 to operate the one area for a little bit, and we
16 removed some more material. And as you can see
17 here, we pulled off another 57,000 pounds. So the
18 total mass right now is 175,000 pounds of
19 contaminants have been removed.

20 Construction on the full-scale system
21 began this June -- I'm sorry -- last June,
22 actually, to install 38 steam injection wells, 58
23 free product wells, and some vapor extraction wells
24 also. What we're trying to do is to lay out a very
25 big system so that we can eventually go around with

1 our steam injection and heat up areas of the site.
2 And when we get one particular area up to optimum
3 temperature, we'll then move onto another well and
4 heat that area up. Eventually we'll have the whole
5 site quite warm. The fuel and the contaminants
6 will flow readily within the site, and we'll have
7 our extraction wells pumping it all out at the same
8 time and collecting any vapors coming out of the
9 ground.

10 We expect to do product skimming in the
11 beginning, and the reason is we never seem to have
12 enough money all at once for this project, so the
13 steam injection portion will be funded in this next
14 fiscal year. So right now we'll be mostly doing
15 free product recovery, but we will be set up for
16 the rest of it.

17 We had some treatment system
18 modifications out here. You can see that if you
19 had been to the site, you would notice that this
20 particular set up right now appears to be a little
21 bit smaller. There's some missing pieces. We
22 disassembled quite a bit of what we had out there.
23 We had to put on some new concrete pads for
24 operations, and we're bringing in different
25 equipment. Some of it will be more efficient than

1 what we had before, and we needed a new boiler and
2 a few other things.

3 Low temperature steam for desorbing the
4 carbon is going to be not as efficient. We need a
5 high temperature steam pump. And we had
6 insufficient heating of extracted soil vapor prior
7 to loading onto the carbon. That wasn't quite as
8 efficient.

9 We're adding two more vapor phase
10 carbon adsorbers. We're doubling that.

11 We're adding a new low pressure,
12 low-NOx boiler for steam regeneration. This new
13 boiler will meet current code. The old one was
14 wearing out anyway and didn't meet code anymore.

15 We're adding a steam superheater to
16 increase steam temperature and maintain low
17 pressure.

18 We're adding an Air-Stream heater for
19 moisture control. You can see all these things.
20 And a new condenser for our DNAPL.

21 Is this our movie?

22 MR. WONG: This is our movie for the night,
23 and it is going to run.

24 This is just the conceptual design of
25 our full-scale treatment system. You can see the

1 four carbon adsorbers in the upper right-hand
2 corner, and a product recovery tank off to the
3 right now rotating towards you. So it's quite a
4 complex mechanical system.

5 And the labor, materials, and supplies
6 needed to construct the system is not trivial by
7 any means. It's a very complex system. But we've
8 gained a lot of experience through the pilot test
9 that we conducted, and we feel pretty bullish about
10 this system continuing to remediate the site.

11 Here's some of the components that Bill
12 spoke about a few minutes ago. That's it.

13 That's the tank that will store the
14 product. That will separate the water from the
15 fuel and solvents.

16 MS. HUNTER: Bill, is this considered an
17 innovative technology?

18 MR. COLLINS: Well, the steam was for a
19 while. It may have -- it may still be innovative
20 to some people.

21 MR. WONG: I think it still is. It's a
22 technology that has been used in the oil fields for
23 several decades now. It's being applied now to the
24 environmental field. So from the standpoint of its
25 use in the environmental field, yeah, absolutely.

1 It's innovative, but it's gaining popularity.

2 MR. COLLINS: You know, along that line
3 we've been talking to EPA on this, and really we're
4 going to be the first military base to have a large
5 operation like this. In fact, EPA is so excited
6 about it, they've included us in their technology
7 training program. We actually gave them a
8 presentation that they could use, and they actually
9 want to send people out to film what's going on.

10 MS. HUNTER: This system is the first one.

11 MR. COLLINS: This system, right, with our
12 steam injection.

13 So I would say in that case it is
14 rather new, and this is a very big production.

15 MR. WONG: Yes.

16 MR. COLLINS: It's gone well beyond just a
17 little old pilot test, and hopefully it will work
18 so well it will be exported easily to other places.

19 MR. VAN ROOY: Do we have any estimates of
20 how long the full production treatment system will
21 be running?

22 MR. COLLINS: We originally thought that we
23 would run for about two years. That would be to
24 get everything out of the ground. The fuels take
25 the longest. We thought we could get the

1 chlorinated hydrocarbons and the lighter volatiles
2 like that out within about six months, but
3 everybody knows this site has had surprises in the
4 past. But we do know that we can recover quite a
5 bit of material, so I'd say within two years we
6 should be doing pretty good.

7 MR. GEILENFELDT: Bill, does the carbon --
8 those carbon elements, is that what minimizes the
9 impact on the air?

10 MR. COLLINS: Actually, that's where -- the
11 carbon being an activated carbon has got an
12 incredible amount of surface area. One little
13 particle has more surface area probably than your
14 whole body. It's hard to imagine, and it traps all
15 these contaminants.

16 So it does -- without that, it would be
17 hard -- actually hard to clean it up. You'd have
18 to do a lot of incinerating to get rid of it.

19 So the answer's yes.

20 MR. GEILENFELDT: This is all contained.

21 MR. COLLINS: Yes. It's all contained.
22 It's a very good system.

23 MR. WONG: It's a closed loop system to
24 minimize any emissions.

25 MR. COLLINS: Now, one of the things we're

1 looking at out there to make this go really well is
2 that we need to actually extract some of the
3 groundwater -- not a lot. Actually, we're only
4 going to be operating in the top four inches of the
5 groundwater. But we find that with our extraction
6 system and our pumping when we do the skimming that
7 there's quite a bit of contaminant in the top four
8 inches of water, and the way our system is set up
9 we can catch the water. It's hard to stay away
10 from.

11 So what we need to do then is find a
12 way to clean up that water so that we can discharge
13 it later, and so what we've done is we've been
14 working on a test with the subcontractor. It's a
15 complex water problem out there. There are
16 probably hundreds of compounds. It's difficult for
17 different reasons to get rid of.

18 So we've been looking at a treatment
19 train. There's six stages to it. We're going to
20 show you a little bit about it anyway. It involves
21 a variety of different things.

22 We'll have our pre-treatment, removing
23 some of the contamination. Quite a bit will come
24 out when we're actually running it through the
25 carbon and all of that.

1 And then we're going to go through an
2 anaerobic stage where there's no air. And some of
3 the chemicals degrade best when there's no air
4 available. Eventually, though, you end up with
5 things like vinyl chloride and whatever, and they
6 degrade differently, so then we need an aerobic
7 situation for those.

8 And later on we'll still have some
9 chemicals in there that still need treatment, so we
10 can do further treatment with this advanced
11 oxidation. Eventually we end up with an iron
12 cyanide process and treat it some more, and then we
13 do some polish work out there. Activated carbon.

14 Then we get down to what do you do with
15 this treated groundwater? Well, for several years
16 now any water that we've had at the site that
17 needed to be disposed of, we treated it to meet the
18 standards required out at the Point Loma Water
19 Treatment Plant, and then we discharged it to the
20 sewers, and that's worked quite well.

21 But now we're going to be putting out
22 quite a bit more water, and it's estimated that we
23 would have so much that we would have to upgrade
24 our own water lines on base. It's quite expensive,
25 too.

1 So we're looking at some other options,
2 and one of those is an infiltration gallery,
3 discharging it back to the site; and another one
4 involves irrigation to high evapotranspiration
5 plants.

6 The Infiltration Gallery concept is
7 treated wastewater is transported to an array of
8 buried slotted pipes. The pipes are buried at a
9 depth that's below the current contaminated soil
10 level so that the pipes themselves will be right at
11 the groundwater level. That's so that we don't
12 dissolve any new contamination out of the soil and
13 push it down below.

14 You can see it's cheaper to discharge
15 it into the sewer. We do pay a certain rate --
16 like everybody else that uses the sewer system, we
17 have to pay.

18 Irrigation to these plants. We'll
19 eventually set up a little farm yard out there with
20 special plants that have high water uptake, pull
21 the water into the plant; therefore, it wouldn't go
22 down into the ground very far, and then it would
23 evaporate out of the plant. The contaminants
24 themselves would stay behind in the plants, and the
25 plants would be harvested on occasion and then

1 disposed of. This also would be fairly cheap
2 compared to discharging to the sewer.

3 So this fall we hope to work with the
4 state agencies and do some small pilot scale
5 testing out there with both systems.

6 And there's another option to this, and
7 that would be just direct discharge to the bay
8 meeting NPDES standards. But we would rather
9 discharge to the site, and in our talks with the
10 Water Board, they would rather have us discharge to
11 the site, too.

12 The end. Any questions?

13 MS. HUNTER: You said you were going to be
14 discharging a lot more. Like how much more?
15 What's your rate, do you think? Is it MGD?

16 MR. COLLINS: That's a good question. I
17 can't tell you right off.

18 MR. WONG: I think -- let me see. It's
19 dependent on the number of wells we decide to bring
20 on line at any given time. We're going to try to
21 minimize the amount of water, but if we assume
22 about 3 gallons per minute, so depending on how
23 many wells, so upwards of a hundred gallons a
24 minute could potentially be discharged if we bring
25 a tremendous amount of wells on line. But

1 typically we stage the extraction effort and work
2 on areas.

3 MS. HUNTER: So 100 gallons a minute might
4 be the max?

5 MR. WONG: That's just my guess. I guess I
6 could get that information from Bill.

7 MR. COLLINS: We'd have to do some research
8 for you.

9 MR. GEILENFELDT: This is Richard Wong,
10 Laura, that you're talking to. He's the assistant
11 technician here, I guess.

12 MR. WONG: Right. Audiovisual technician.

13 MS. HUNTER: Would you be meeting discharge
14 requirements for discharge back into the site?

15 MR. COLLINS: Correct.

16 MS. HUNTER: You have a discharge
17 requirement permit for that, I imagine.

18 MR. COLLINS: Well, actually, we don't need
19 a permit to discharge back to the site.

20 MS. HUNTER: It's a waste to land.

21 MR. COLLINS: But the water that we
22 discharge is cleaner than the water that we
23 extracted or has been treated so that it will be
24 cleaner, and USEPA doesn't consider that to be a
25 prohibited discharge.

1 MS. HUNTER: I mean, you could be cleaner --
2 this water could be cleaner and still be very, very
3 polluted. So I'm just curious what the standards
4 would be.

5 MR. COLLINS: There actually are no
6 standards set by law. It just needs to be cleaner.

7 This water will be treated to be at
8 least as clean as what we've done before that we've
9 discharged to the sewer to meet those RC/RA
10 standards.

11 MS. HUNTER: That gets diluted by 25 MGD and
12 put hundreds and hundreds of feet out in the ocean.

13 I'm not trying to put you on the spot.
14 I'm just saying that would be a question that we
15 would look at in terms of accessibility.

16 MR. COLLINS: This water is going to be
17 quite clean when it's put back into the site.

18 MS. HUNTER: It would be interesting to know
19 what standards you were planning to meet before you
20 put it back.

21 And my last question is if you use the
22 plants for evapotranspiration, there's going to be
23 some contamination left and you're not going back
24 to distilled water. I'm sure there's going to be
25 something in there.

1 Then if the water evaporates off,
2 contaminants are left in the plant, what's the
3 accumulation rate of the contaminants in the plant
4 materials and what would you do with that?

5 MR. COLLINS: Well, plants necessarily don't
6 live forever before you have to harvest them and
7 put in another group. So I'm not sure exactly
8 which plants we're going to use. We're involving
9 Oregon State University in this, and they have a
10 program that's very big into what we could call
11 phytoremediation.

12 Some of the plants that we use are
13 going to have great capacity to uptake metals out
14 of the water, and others feast upon the chlorinated
15 solvents and everything.

16 MS. HUNTER: So they uptake it, which is
17 good, but then it's in the plant.

18 MR. COLLINS: Then we'll periodically
19 harvest the plant, and the plant itself will be
20 then -- we'll have to take a sample of that and
21 ship it as hazardous waste, I imagine. I mean, the
22 waste has got to go somewhere.

23 MS. HUNTER: Yes. I'd just be interested as
24 part of the whole analysis to follow those
25 contaminants where they go because one option might

1 be that you compost it and reuse it back, and
2 another is you take it and burn it and then you
3 airborne the contaminants that were in the plants.
4 I know some plants do break this stuff down into
5 parts that are less damaging.

6 MR. COLLINS: That's part of the advantage.

7 MS. HUNTER: It's maybe an advantage, maybe
8 not. It's the fate of the chemicals in the plant
9 material that would matter about whether this was a
10 good idea or not really.

11 MR. WONG: But that's precisely the reason
12 why a small plot will be used so that we conduct
13 the pilot test, take a look at all those concerns,
14 and address that before that option is taken to a
15 full scale situation. So absolutely. Good points.

16 MR. COLLINS: One of the things we want to
17 do is we want to control the wastewater so that --
18 we don't really want to dump huge amounts of water
19 into the site. We certainly will design this so
20 that we don't have a flushing effect on the soil.

21 We will have wells out there. We will
22 be monitoring this before we start it and during
23 the operation so that we can tell if we're leaching
24 anything out of the soil, especially with this
25 evapotranspiration idea. We want to be able to

1 control that.

2 And with the other one, with the
3 re-infiltration, those pipes will be laid low close
4 to the water or in the water itself so there won't
5 be any leaching of the soil and the contaminants
6 above there.

7 It would be awfully difficult to make
8 our groundwater at Site 9 more contaminated than it
9 is without taking out new material to do that.

10 So I think this has good promise. It
11 should help -- and if it does work, it should help
12 to control the costs of remediating this site.
13 This is obviously going to be a long-term
14 remediation site. Okay?

15 MR. GEILENFELDT: Thank you, Bill.

16 This is Laura Hunter, incidentally, in
17 control of the Environmental Health Coalition.

18 MS. HUNTER: I wish I was in control, but
19 I'm not.

20 MR. GEILENFELDT: And Marilyn Field, also, a
21 representative with the Coalition.

22 MR. COLLINS: Thank you.

23 MR. GEILENFELDT: Next on the agenda is Site
24 5. Mark Bonsavage and Rich Wong again, our visual
25 technician there.

1 MR. BONSAVAGE: Rich is going to switch.
2 He's going to become the technical expert.

3 My name is Mark Bonsavage. I'm the
4 Navy project manager for this site we're going to
5 talk about, and this is out at IR Site 5 and we
6 call it Unit 2.

7 This one is actually going to see a
8 little action, so that's why we wanted to talk
9 about it.

10 Some of the things that happened
11 recently is we sent out this fact sheet. We mailed
12 this fact sheet out to a list of different
13 regulators or people that were concerned with the
14 site, and it just explains real briefly what we're
15 going to do. And in the fact sheet it also said if
16 you wanted more information, come to this meeting.
17 And I don't know if anybody's here because of the
18 fact sheet. So we're just going to expand on what
19 we talked about in this fact sheet a little bit.

20 The other significant item is that on
21 August 13th DTSC posted their negative declaration
22 which basically means that they looked at this
23 project, and they're responsible for determining
24 whether it complies with the California
25 Environmental Quality Act. They looked at the

1 project and they did determine that it merited a
2 negative declaration on it, which basically says
3 that it does meet the requirements of that act.

4 And that basically -- what happens next
5 is after they post their determination is they open
6 up the project for public review, and that's what
7 we're in now. We're in a 30-day public review
8 where you can look at our work plan for this
9 project, which is in the library, and then send
10 comments to DTSC or the Navy and we'll take those
11 comments and then incorporate them into the work
12 we're going to do.

13 So Rich will go through the details and
14 we'll take questions at the end.

15 MR. WONG: Thanks, Mark.

16 MS. FIELD: I just want to know when the
17 30-day review period was over.

18 MR. BONSAVAGE: It ends September 12th. I
19 think it's in the --

20 MR. GEILENFELDT: Marilyn, I'll provide you
21 with a copy here.

22 MR. WONG: A little brief introduction.
23 Again, my name is Rich Wong. I'm a project manager
24 with the IT Corporation. I'm responsible for
25 overseeing the work at IR Site 5 - Unit 2.

1 What we're undertaking is a Time
2 Critical Removal Action under CERCLA. As Mark
3 said, we'll give you some details on what we have,
4 what we've done in the past, what we have planned,
5 and take you to what's next.

6 IR Site 5 is located in the southeast
7 concern of North Island near Truck Gate 5. You can
8 see the relatively close proximity of the site to
9 the city of Coronado.

10 This figure depicts the location of the
11 IR Site 2 plume, and IR Site 5 is broken up into
12 two units. IR Site 5 - Unit 1 is the former
13 municipal landfill. That is not part of this
14 CERCLA Time Critical Removal Action.

15 What we're really containing with this
16 is the VOC plume that's located inside of the area
17 that encompasses those two rectangular squares.
18 Those two rectangular squares are the former
19 hazardous waste disposal pits that were used at
20 approximately the same time frame that the dumping
21 and waste disposal was occurring at IR Site 9, and
22 we'll talk a little bit more about the history of
23 this site.

24 As Bill mentioned, dumping occurred at
25 North Island in the '40s at this site and ended in

1 the late '60s. The contaminants that were disposed
2 of at this site included solvents -- chlorinated
3 solvents and some fuel hydrocarbons resulting in
4 approximately a 3.4 acre plume of groundwater that
5 contains dissolved phase concentrations of VOCs,
6 volatile organic compounds.

7 The site geology and hydrogeology at
8 the site is relatively simple. This area of the
9 site was the former Spanish Bight Embayment. It
10 was filled with dredge material during the second
11 World War era to create more usable land at North
12 Island. So therefore our containment aquifer at
13 this site is only about ten feet deep. Our depth
14 to groundwater is only about five feet, so we
15 really don't have a very significant problem in the
16 vertical sense.

17 Previous work at this site conducted by
18 the Navy and their contractors indicate that this
19 plume is actually relatively stable, and this plume
20 is stable through the process of natural
21 attenuation or natural indigenous biological
22 entities and bacteria that are in the subsurface
23 that are currently helping to control the migration
24 of this plume.

25 However, this study did conclude that

1 there was a possibility that the plume could reach
2 the slough -- which we could take a look at -- in
3 this area in a reasonable amount of time, and the
4 estimates are in the order of decades to centuries.

5 So the Navy took it upon themselves to
6 undertake a removal action to help facilitate the
7 acceleration of the degradation of this plume by
8 taking care of some of the source.

9 So the objective of this removal action
10 is really just to facilitate source removal so that
11 the natural processes can re-establish themselves
12 and continue to degrade the plume on its own.

13 In order to facilitate source removal
14 at IR Site 5 - Unit 2 we have decided through an
15 analysis of various technologies available to us,
16 and given the site conditions, to use a technology
17 which is referred to as in-situ chemical oxidation.

18 There are a lot of different variations
19 of in-situ chemical oxidation, and the one process
20 that is being used at this site is Fenton's
21 Reagent. And that involves the injection into the
22 subsurface of hydrogen peroxide and an iron
23 catalyst.

24 This reaction, as seen in this fairly
25 complex geometric equation, produces a radical

1 which is referred to as hydroxyl radical, and that
2 particular compound is a very, very strong oxidant.
3 So what will happen when we produce that compound
4 is that we'll actually break the bonds between the
5 atoms -- between the chlorine atoms and the carbon
6 atoms and start destroying some of the contaminants
7 in the groundwater.

8 Typically this process requires
9 acidification of the aquifer, and this site is no
10 different. We will inject some acid into the
11 subsurface to lower the pH. That's required so
12 that we could have this reaction go forth.

13 The other thing that this process does,
14 it may produce heat, and so it's a potentially
15 exothermic reaction, meaning that it will produce
16 heat, and it's something that we take into
17 consideration in terms of our worker health and
18 safety as well as the community's.

19 CHIEF TRAYLOR: Excuse me, Rich. Will that
20 produce any off-gassing?

21 MR. WONG: It has the potential to do that.
22 We did look at that. I'll talk a little bit -- we
23 conducted a little bit of a pilot test, and we
24 looked at that very phenomenon. We really didn't
25 see any significant production of any off-gas that

1 would cause any concern.

2 CHIEF TRAYLOR: Well, the reaction produces
3 carbon dioxide, which is an inert --

4 MR. WONG: Right.

5 CHIEF TRAYLOR: -- harmless gas.

6 MR. WONG: Right. There's that as well as
7 some of the VOCs potentially could off gas as well.

8 Before we decided to get too far ahead
9 of the situation, it was agreed that we should
10 conduct a pilot test to evaluate this technology as
11 a viable remedial alternative for this site, and
12 what was conducted was a pilot test. This is just
13 a picture of our Pilot Test Well Array.

14 The central well was the well where we
15 injected the acid as well as the ferrous ion, which
16 is our iron catalyst, and the hydrogen peroxide.
17 The surrounding wells that are identified by MW,
18 those were used to monitor the reactions, to gather
19 groundwater samples, to take a look at contaminant
20 and mass reduction in the groundwater.

21 And Chief Traylor, to answer your
22 question, we installed vapor monitoring probes
23 around the injection points so that we could
24 collect subsurface vapor samples to look exactly at
25 that phenomenon, and we'll talk a little bit more

1 about that.

2 The results of the pilot test were very
3 successful. We saw the full effect of the
4 injections to at least a 30-foot radius. We saw
5 significant groundwater contaminant reduction up to
6 90 percent in some wells. And then we calculated
7 the mass, and we saw that we were able to achieve
8 at least 50 percent mass removal throughout the
9 25-foot radius.

10 And one of the surprising elements of
11 the pilot test was that we actually facilitated the
12 removal of mass in the saturated soil or the soil
13 beneath the groundwater table where much of the
14 contamination actually resides, so we saw an
15 approximately 70 percent mass reduction in the
16 soil.

17 So based on these pilot test results,
18 we considered the pilot test a success, and we
19 gathered enough information so that we could design
20 and plan for a full-scale source removal using
21 in-situ chemical oxidation.

22 I know some of you have seen this.
23 This is a computer generated animation of the
24 actual pilot test results. I think the biggest
25 thing when I run this animation is to take a look

1 at the pre-treatment concentrations versus the
2 post-treatment. And there'll be some fluctuations,
3 but remember, we're in the heart of a highly
4 contaminated groundwater plume. We're surrounded
5 by contaminated groundwater on all sides.

6 So we can reduce the concentrations,
7 but then we see re-infiltration just because of the
8 gradients, the lower concentrations that we have in
9 our treatment area versus the higher
10 concentrations, so we do see an influx of
11 contamination over time.

12 Just a little point of reference,
13 here's the contamination gradient here on this end
14 of the scale in the red. We're over 100,000
15 micrograms per liter. Those are our observation
16 wells. You'll see the injection wells show up in a
17 minute.

18 So that's our pre-treatment
19 configuration of our plume. After the first
20 treatment, we saw significant contaminant
21 reduction, and now we're seeing some oscillations
22 in the groundwater concentrations due to that
23 situation that I mentioned earlier where we're
24 surrounded by highly concentrated groundwater.

25 But the net effect was that we reduced

1 the contamination significantly as a result of this
2 pilot test. This is after the second injection,
3 and I think the model stops at the third injection.
4 So relative to the original contamination within
5 the pilot test area, we did remove quite a bit of
6 mass.

7 So in preparation for full-scale per
8 our work plan that we submitted to the DTSC, we
9 conducted a pre-treatment study. The purpose of
10 this pre-treatment study was to further refine the
11 conceptual model of the distribution of the
12 contamination at the site, to get a better feel for
13 the geology as that has a direct bearing on how we
14 actually treat the contamination.

15 So this pre-treatment study consisted
16 of collection of groundwater samples from the
17 existing wells that we have constructed at the
18 site, and we also took advantage of the Navy SCAPS
19 rig, and that stands for -- I don't know.

20 MR. FRENCH: Site characterization and
21 penetration system.

22 MR. WONG: It's a direct push technology,
23 and we used a tool referred to as the membrane
24 interface probe, and that allowed us to collect
25 basically realtime data of the soil and groundwater

1 concentrations, thereby alleviating us from having
2 to put in a tremendous amount of wells to
3 understand the distribution of the contamination of
4 the site.

5 We also collected a number of soil
6 samples from some direct push borings, and we also
7 looked at the leachate or the water contamination
8 that might result from water infiltrating through
9 the unsaturated soil or the soil above the
10 groundwater. Is there soil above there that could
11 actually contribute to the degradation of the
12 groundwater at the site.

13 In summary, we were able to define the
14 groundwater plume and the site geology at the site
15 based on this treatment study. We did discover
16 that the TCE in the soil above the groundwater
17 could pose a threat to the water quality at the
18 site.

19 We did see that the highest
20 concentrations at the site were located near the
21 eastern pit. That's where we see the highest
22 solvent concentrations, primarily PCE and TCE, and
23 that we also see the highest groundwater
24 concentrations in that same area.

25 Also based on looking at some of the

1 PRGs, the preliminary remediation goals that are
2 established by the EPA, that some of the vadose
3 zone soils and the unsaturated soils could
4 represent a potential risk to human health should
5 the site ever change its use in the future.

6 This is just an animation of our
7 pre-treatment study. And what we've done here,
8 this is basically a qualitative depiction of the
9 contamination at the site. For reference, here's
10 our relative scale, but just keep in mind that the
11 warmer colors are the more higher concentration
12 areas.

13 These are the locations of the former
14 pits, and you can see that the higher
15 concentrations were detected in the eastern pit
16 area. In the upper right-hand corner you can see
17 the qualitative ion counts that give us an
18 indication of the type of contamination we're
19 dealing with. Clearly, we're at a very high
20 concentration in the middle of that former
21 hazardous waste pit.

22 See the advantage of the SCAPS rig? It
23 gives us a tremendous amount of sample data density
24 so we can run these animations and these models
25 with a little bit more confidence than just using

1 direct soil in groundwater samples.

2 So based on our pre-treatment study, in
3 addition to treating the groundwater which was the
4 primary focus of this removal action, it was agreed
5 to that we probably should take a look at and
6 remove some of the unsaturated soils that could
7 again contribute to the further degradation of the
8 groundwater at the site and could pose future risk
9 to human health and the environment.

10 So currently what we're planning on
11 doing at the site is conducting a limited
12 excavation of approximately 600 cubic yards of
13 material. At this time we're proposing on
14 excavating that material, placing it in sealed
15 bins, and transporting it to an off-site licensed
16 disposal facility for treatment and final
17 disposition. Following the excavation of the
18 material, we'll restore the site by fill placement
19 and compaction and repaving Sherman Road. That
20 will have to be demolished or the pavement will
21 have to be removed to allow us to conduct the
22 excavation.

23 This is just a little demonstration
24 showing all of our sample points, and based on
25 those sample points where we intend to excavate

1 within Sherman Road. We do intend prior to
2 excavation to collect some additional soil samples
3 to further define the eastern and western edges of
4 this excavation.

5 As part of the planning for this
6 excavation effort, we intend to bring our empty
7 bins in advance of the excavation effort so that we
8 could conduct this activity over the course of one
9 weekend to minimize the impact both to the city as
10 well as the workers at NASNI as well as the
11 recreational golfers that take advantage of the
12 golf course nearby.

13 Our plan is to stage our empty bins
14 over in this area near the warehouses along Rogers
15 Road, and we will conduct the excavation in this
16 area. We will stage empty bins from this area,
17 bring them over to the excavation, load them, and
18 then take them to a temporary bin holding area near
19 the small arms firing range.

20 Again, point of reference, the city of
21 Coronado is located about here, and the closest
22 distance to the city is approximately 1800 feet.

23 We understand that the city is very
24 sensitive to the amount and type of truck traffic
25 that may be used to support this activity. Bill

1 Collins, the Navy RPM, has been in communications
2 with the city; and based on these communications,
3 we have established this truck route to bring our
4 materials and take them off the site. The green
5 arrows indicate how we'll bring the materials, and
6 the red arrows indicate how we will take the full
7 bins off the site.

8 Coming onto the base we intend to cross
9 the Coronado Bridge, travel down Third Street to
10 Alameda, turn right, left through the truck gate,
11 and enter the base at Truck Gate 2.

12 Leaving the site after we have
13 characterized the soil and we know where the soil
14 needs to go -- which facility, we'll again exit the
15 main truck gate or the main entrance to North
16 Island, head down Fourth Street, and continue over
17 the bridge, and then taking I-5 or I-15 to the
18 appropriate disposal facility.

19 With this effort, we recognize that the
20 community health and safety is of paramount
21 importance; that we do not take health and safety
22 lightly, so we have taken a number of measures.

23 We will take a number of measures to
24 make sure that the community's health and safety is
25 taken into account and protected as well as our

1 workers' health and safety as well as the occupants
2 of NASNE.

3 As part of this effort before we
4 actually decided to undertake this action, we
5 performed an air dispersion model, and we looked at
6 the effects of the air dispersion on the community
7 of Coronado. And based on this limited assessment,
8 there really isn't going to be any adverse effect
9 to the citizens of Coronado as a result of this
10 activity.

11 A couple of things that we're going to
12 do to even further minimize the potential exposure
13 to the community is that we'll conduct the
14 excavation in the night when we anticipate that the
15 temperatures will be much lower than in the
16 daytime. These are volatile constituents, and it's
17 intuitive that there will be less emissions during
18 the evening hours, and there are less occupants in
19 the area.

20 We'll provide other engineering
21 controls. We'll use some surfactants that we'll
22 spray in the excavation to help minimize the
23 release of fugitive emissions, and we'll place the
24 excavated soils in vapor tight bins. So we'll try
25 to minimize the time that the soils are actually

1 exposed to the atmosphere. We'll try to get those
2 into the bins as soon as possible and have those
3 bins secured.

4 We'll also conduct a perimeter vapor
5 monitoring program. One of our health and safety
6 officers will have a route where he'll go around
7 the base and along the perimeter of the base and
8 the city of Coronado. We'll actually take
9 measurements using hand-held instruments and other
10 instruments to determine if there are any
11 concentrations that are considered potentially
12 hazardous to the community of Coronado.

13 And the last thing we'll do is we'll
14 have a communication plan so if any of the
15 residents have a concern, there will be a Navy
16 point of contact that they can call. Even though
17 this activity is occurring at night, we'll be able
18 to address their concerns and answer their
19 questions at that time.

20 Our tentative schedule: Currently we're
21 looking at starting this activity the third week in
22 September. We still have to receive some approvals
23 from the base, but in just a few days we'll deliver
24 the clean fill soils that we'll need to backfill
25 and restore the excavation.

1 We'll start the excavation in the
2 evening of Friday. We'll shut down Sherman Road.
3 There won't be any access out of that gate between
4 Friday through Monday. We'll try to complete the
5 excavation before sunrise, and if all things go
6 well, we'll have the excavation backfilled by 8:00
7 so that the golfers can return and use that fine
8 facility.

9 And then following the backfill and
10 compaction, we'll repave the road on the following
11 Monday, and then hopefully have that back to normal
12 traffic patterns.

13 The second part of this project after
14 we take care of the soils will be to conduct a
15 full-scale groundwater treatment, and this
16 treatment will consist of -- will be broken up into
17 two treatment areas.

18 The first treatment area will consist
19 of approximately 20,000 square feet and will
20 consist of about 15 injection wells. This is the
21 area where we see the highest concentrations in the
22 groundwater.

23 Again, our objective is to facilitate
24 source removal so that the natural processes can
25 re-establish themselves and continue the

1 degradation naturally.

2 The second area, which is the large
3 area -- and I have an illustration showing you the
4 different areas -- is about 40,000 square feet and
5 will include about 30 injection wells, and these
6 wells will be used to monitor the in-situ chemical
7 oxidation treatment and to determine if we actually
8 are causing the contaminants to migrate away from
9 the source area, thereby giving us a way to treat
10 those contaminants before they move into previously
11 uncontaminated areas.

12 We will also conduct baseline soil and
13 groundwater sampling so we have a way of
14 determining the efficiency of our full-scale
15 treatment. We will conduct a full-scale oxidation
16 treatment. And following some preliminary
17 groundwater sampling conducted during the treatment
18 process, we'll collect a full suite of soil and
19 groundwater samples and determine whether or not we
20 have met our cleanup objective, which is 90 percent
21 contaminant reduction in the source area.

22 Here's the illustration of the two
23 areas that I described just a second ago. Here's
24 the two former hazardous waste pits. This is the
25 pit that we'll be excavating and taking care of the

1 soil situation. The darker perimeter area, that's
2 Treatment Area 1. That's where we'll really treat
3 the soil and groundwater in that area using the
4 in-situ chemical oxidation, and then we'll conduct
5 monitoring in the surrounding area to make sure,
6 again, that we're controlling the reactions and
7 we're not causing the contamination to migrate
8 away.

9 If needed, the second area will be used
10 to treat the groundwater as well.

11 Mark, do you want to --

12 MR. BONSAVAGE: Just some general dates
13 important to the project. In September -- I think
14 it's September 12th the public comment period it's
15 the final day. So if there are any comments, they
16 need to be in before the 12th. After we receive
17 all the comments, what we'll do is if there are
18 any, we'll incorporate them into the plan and then
19 we'll finalize the plan. Once the plan is final,
20 we'll begin field work.

21 Now, we'd like to get out in September.
22 That's our goal. We want to get out there as soon
23 as we can. And even the last week -- the last
24 Friday of September, possibly, to do this
25 excavation or early October, so we can't really pin

1 down a date yet on when this is going to happen
2 until we see what comments come in because if there
3 are more detailed comments, it may take a little
4 longer to address them, but it will be a Friday
5 when we want to do the excavation.

6 Then the full-scale groundwater
7 treatment, this will start soon after the
8 excavation is complete. We expect no longer than a
9 month until all of the soil will be hauled off the
10 site. Again, we don't want to create days with
11 large amounts of truck traffic, so we're staggering
12 it as we haul these things off. And I think we
13 estimated that worse case is there will be like
14 about 50 bins.

15 And then in February we hope to be done
16 with the project. There's a lot more that goes
17 along with it, but if there's any questions?

18 MR. GEILENFELDT: Before we have any
19 questions, I want to point out we also have -- we
20 are pleased to have Fire Chief John Traylor and his
21 assistant here with us this evening. If you have
22 any questions regarding Hazmat and hazardous
23 materials in transit in and out of Coronado, he is
24 here this evening, and I'm sure he'll be glad to
25 answer any questions you all might have regarding

1 transit.

2 CHIEF TRAYLOR: I've got several questions
3 and then I've got a few comments.

4 First of all, how are you bringing the
5 clean soils in? Are you bringing those in by
6 truck?

7 MR. BONSAVAGE: Yes.

8 CHIEF TRAYLOR: Single axle trucks, 20 to 30
9 truckloads?

10 MR. WONG: Yes.

11 CHIEF TRAYLOR: As far as the materials
12 you're excavating, is that sludge? Is that dry
13 soils or a combination of the two?

14 MR. BONSAVAGE: We'll stop at groundwater,
15 so it will be soil. There may be a certain amount
16 of moisture in the soil but --

17 CHIEF TRAYLOR: Damp soil?

18 MR. BONSAVAGE: Yeah, damp soil. But we're
19 not really looking at sludge or anything like that.

20 CHIEF TRAYLOR: Do you have a permit for
21 dust control?

22 MR. WONG: We will use moisture during the
23 excavation primarily to keep the VOC emissions
24 down, but it will also help keep any dust under
25 control during the excavation.

1 The clean stockpile fills that we'll
2 bring onsite, those will be covered until we need
3 them for excavation, so we don't anticipate a lot
4 of dust. Again, during fill placement and
5 compaction, we'll have water available when we need
6 it to compact the soil properly.

7 MR. BONSAVAGE: We didn't get into all the
8 details, but one of the strategies when you're
9 excavating like this is that you open up as little
10 of the pit as possible. So we'll be opening it up
11 and then hauling it out. We really don't want a
12 big like pit open where we're creating a lot of
13 dust. So as we're opening it and hauling it out,
14 we'll be filling it back in.

15 CHIEF TRAYLOR: And, Bob, who have you
16 talked to in the city in reference to the truck
17 route?

18 MR. COLLINS: I talked to --

19 MR. GEILENFELDT: It's Bill Collins who's
20 talked to the city.

21 MR. COLLINS: -- some of the staff members
22 in the meeting that they have normally with North
23 Island.

24 At one time we were going to go down
25 First Street. That was our plan because that's in

1 the city ordinance. That was something the Navy
2 agreed to as a regular truck route, but we were
3 asked at that meeting to avoid First Street and go
4 down Third to bring on the empties.

5 CHIEF TRAYLOR: Well, the city has not
6 approved using Fourth Street to haul materials out,
7 and we're not prepared to do so tonight. I'm not
8 sure that we've fully addressed the implications of
9 that. And there are several implications, probably
10 first and foremost is the truck traffic.

11 But we will be analyzing that. I'll be
12 analyzing -- I've talked to Mark several times on
13 the phone, and I wanted to come to this meeting
14 before I presented my findings to the city and city
15 manager and the city council.

16 Our preferred method of hauling
17 material out is by barge. But, again, we will
18 fully analyze the material that you've presented
19 here, but the city has not really taken a stance or
20 position.

21 MR. COLLINS: We are following the same
22 route that is permitted with the permits that PWC
23 has through California DTSC.

24 The waste that we are generating falls
25 within the realm of the waste that they normally

1 collect and dispose of and is governed by that
2 permit. So in that permit when we put it together,
3 there was an agreement between the city and the
4 Navy on particular truck routes to use to haul
5 waste off the island, and that's what we've stuck
6 by.

7 So the route itself has been approved.

8 CHIEF TRAYLOR: No, I understand that. I'm
9 not sure you need our approval. But we have not
10 taken a formal position on this particular project
11 to approval.

12 MR. COLLINS: Okay.

13 MR. GEILENFELDT: May I make a statement
14 here and then we can go on.

15 On page 18 of the California
16 Environmental Quality Act they state on this page
17 that "if hazardous waste requires transportation
18 and disposal as generated by the project, trucks
19 hauling the waste will be routed along Silver
20 Strand Highway, State Route 75, rather than through
21 the City of Coronado." This is on page 18 of the
22 California Environmental Report.

23 Now, may I address questions? Let's
24 start with you. This is Dick Scharff. He's with
25 the Third and Fourth Street Committee.

1 MR. SCHARFF: I have some real concerns.
2 Regardless of the permitting situation, you're
3 dealing with a very unique, densely populated
4 residential neighborhood.

5 Now, it doesn't even make any
6 difference if it goes down Highway 75. It still
7 has to go through the city of Coronado, and this is
8 a densely populated -- these are not the normal
9 state highways that we're talking about. That's
10 the whole issue we have along the Third and Fourth
11 Street corridor.

12 The precedent has been clearly set for
13 barging materials of this quantity and this kind of
14 material. It's been set by the pier construction.
15 So that's our alternative, and that would be my
16 public comment to Southwest Div about this thing
17 that this is a clear preferred alternative. You
18 could easily barge this to a point close to an
19 interstate highway and move it accordingly.

20 But moving it up and down Fourth
21 Street, that's our whole issue is the amount of
22 trucks, the noise, pollution, the air quality that
23 is measured nine miles away in Chula Vista. I'm
24 sure you haven't modeled the worst case if one of
25 those trucks exceeds the speed limit and something

1 happens, brakes lock up, and it dumps some of these
2 bins off in the street. You know, what takes
3 place?

4 I have some real concerns. I don't
5 even know what the issues are about vinyl chloride,
6 but it doesn't sound like it's a good compound.

7 From the standpoint of the citizens
8 that live along Third and Fourth Street, this is an
9 unacceptable solution, regardless of what your
10 permits say. And these are the same issues we're
11 going to deal with Caltrans and the City as a
12 matter of course.

13 But this is a specific, unique instance
14 that is not in the best interest of the community
15 of Coronado, Chief Traylor, and our group will
16 support whatever position you take, and we will
17 certainly make mention of this to the city council
18 in the appropriate letters, but I don't think this
19 is an appropriate solution.

20 MR. BONSAVAGE: And that's just the comments
21 we're looking for with our removal action work
22 plan.

23 So, yeah. If you can put that in
24 writing, then we will address it.

25 MR. GEILENFELDT: Marilyn and Laura, which

1 one of you wants to go first?

2 MS. HUNTER: I just had a -- like on the
3 traffic issue, I thought -- I'm probably wrong --
4 but I thought that hazardous materials and
5 hazardous wastes were not allowed on the bridge.

6 MR. BONSAVAGE: It's flammable and
7 explosives. There's a difference.

8 MS. HUNTER: I know. But I thought that --
9 so hazardous wastes and hazardous materials that
10 are not flammable and explosive --

11 MR. BONSAVAGE: Not necessarily.

12 MS. HUNTER: -- or radioactive?

13 MR. BONSAVAGE: Not necessarily. You can
14 have a hazardous waste -- it can be a hazardous
15 waste but not be flammable or explosive.

16 MS. HUNTER: And that is allowed over the
17 bridge?

18 MR. BONSAVAGE: Yes.

19 MS. HUNTER: Okay. Because some people told
20 me that that wasn't, but you probably know better
21 than that.

22 MR. BONSAVAGE: We checked both of them out,
23 and we found out it could go over the bridge or
24 down the Silver Strand.

25 MS. HUNTER: And I think if you're going to

1 do that, you need to notify the communities on the
2 other side of the bridge because we called around.
3 We know a lot of people in that community, and
4 they're not on the mailing list. They didn't get
5 the fact sheet, and they're every much the
6 recipient of having this kind of traffic through
7 their community as Coronado, so I think they need
8 to be alerted and consulted.

9 This nighttime issue I'm curious about,
10 and I'm wondering -- it doesn't make intuitive
11 sense to me that the emissions are lower at night.
12 Sometimes the wind blows harder at night.

13 I'm worried -- yeah, the golfers are
14 golfing at night. I hope we're not doing anything
15 that exacerbates health -- you know, risk to
16 workers just to accommodate some golfers who want
17 to golf on the golf course.

18 The other thing about nighttime is more
19 people are in their homes. So if this is only
20 1800 feet from nearby homes, the exposure actually
21 could be greater because everybody's there than if
22 this happened during the workweek, during the
23 workday, and just evacuated workers out of the
24 area.

25 So I haven't seen your risk assessment

1 or the modeling that you did, but I don't think
2 nighttime necessarily does it.

3 And I'm hearing lots of excessive
4 concerns over the golfing community, and I don't
5 think -- I think they could put off their
6 activities for a couple of days until we resolve
7 this.

8 The other thing I wondered about -- I
9 mean, if either one applied, it was one that Bill
10 Moyers did a special on and the guy's bones were
11 melting out of his body. It's a very, very serious
12 nasty chemical that guy was working with
13 indirectly, but it's nothing -- it's a very serious
14 chemical.

15 And I'm wondering about some kind of
16 hedging around the site or something so you
17 really -- you have to have your workers in full
18 gear respirators so at least you'd be containing
19 those emissions at that point. So I don't -- did
20 you look at tenting the materials is one of the
21 questions.

22 And my last question is this is heavily
23 contaminated soil. Is there not in all of our
24 various tests that we've tried or something that
25 we've done that we could try to pilot test that to

1 reduce some of the risk?

2 Again, onsite, one of the things I felt
3 good about when we did the PCB stuff was that we
4 reduced the amount that went to the incinerators,
5 so we kind of reduced risk all around.

6 I'm wondering couldn't we do the same
7 kind of thing here. It seems easier to deal with
8 in a way than PCBs. At least you'd be reducing the
9 volume because I'm worried it's going to go to the
10 approved facility and they may incinerate it. You
11 didn't say what the final treatment is.

12 But I wouldn't, again, want to be
13 poisoning some other community when we could
14 deal -- maybe we run this chemical oxidation, get
15 it out of the ground, put it in a pilot test over
16 near where it's going or something, and you reduce
17 the amount that goes off.

18 If I'm understanding chemical oxidation
19 correctly that there's not a lot of hazardous
20 gaseous emissions off of it.

21 MR. COLLINS: That's correct.

22 MS. HUNTER: Why can't we look at that?

23 MR. BONSAVAGE: Did you want to address any
24 of those, Bill?

25 MR. COLLINS: Well --

1 MR. BONSAVAGE: Well, let's go back in
2 order.

3 The first one was if we are going over
4 the bridge to notify the communities on the other
5 side of the bridge, and I don't have a problem with
6 that.

7 Do you have like a list specific or is
8 there --

9 MS. HUNTER: Well, I called Ralph Inzunza's
10 office. He's the first district you hit. They
11 didn't know about it. So at least you've got to
12 let him know.

13 I would let Ralph Inzunza, whose the
14 District 8 Councilman, the mayor so they know.
15 There are many community groups in Barrio Logan.
16 We can give you some names of contacts, but they
17 should be alerted about this.

18 MR. BONSAVAGE: Yes. That's pretty easy,
19 actually.

20 MR. SCHARFF: I think you could obviate a
21 lot of that by barging it, too.

22 MS. HUNTER: Well, barging it --

23 MR. SCHARFF: I understand. But you could
24 at least get it to a terminal that's used to
25 handling that kind of material, and then notify

1 those along the I-5 or I-15 route that it's coming.

2 MR. GEILENFELDT: May I add a point here of
3 correction? When you sent these notices to the
4 citizens who are affected by the in transit on
5 Third and Fourth, the report I have says that they
6 were sent to residents along the golf course.

7 MR. BONSAVAGE: That's correct.

8 MR. GEILENFELDT: And they really have
9 nothing to do with this. It's the Third and Fourth
10 Street. I was wondering why that occurred.

11 MR. BONSAVAGE: We didn't send it to the
12 Third and Fourth. We sent it to the residents on
13 Coronado because they're the people that own
14 property and that's right next to the base.

15 So the idea of notifying residents
16 because there will be more traffic, no, we didn't
17 do that.

18 MS. FIELD: It's not just that there's going
19 to be more traffic. It's going to be more traffic
20 of a very potentially hazardous kind. As I
21 understand it, this stuff is very, biohazardous.
22 It's highly carcinogenic. Isn't that correct?

23 MR. BONSAVAGE: Yes, it is.

24 MS. FIELD: And so it seems to me that the
25 people who are going to be along the transport

1 routes also have a risk if there should be an
2 accident.

3 I didn't hear you. Maybe you just
4 haven't gotten to it yet, but I had understood that
5 one of your earlier plans called for tenting the
6 area while you were doing the excavation to avoid
7 any escape of vapors or airborne particles, and it
8 looks like now you're not doing that, and I'm
9 wondering if you eventually planned it, why that
10 has been abandoned.

11 MR. BONSAVAGE: Our original plan never did
12 include a tent, but we did look at the tenting.
13 And what we found between the model and looking at
14 the tent is that adding a tent really did not
15 provide any protection because the dispersion
16 happens so quickly that there really was no risk to
17 the residents.

18 And to bring a tent onto the site would
19 actually -- you're actually containing the material
20 and then sticking your workers in there. So you're
21 really adding more complications and risk by
22 bringing the tent on, so that's why we decided to
23 not go with the tent.

24 MS. HUNTER: Well, Mark, if the dispersion
25 happens quickly, why the nighttime operation then?

1 MR. BONSAVAGE: Well, there's a lot of
2 reasons.

3 Number one is we looked -- there was a
4 concern over temperature during the daytime that if
5 you open up a pit, the temperature would actually
6 help volatilize this. And we did a model, and part
7 of the model was it took temperature into
8 consideration.

9 And what we found is that temperature
10 didn't have a lot of effect. It had a little but
11 not a lot.

12 The second one, of course, was the use.
13 What kind of uses are going on around this site?
14 And it wasn't -- the golfers, yes. It wasn't
15 strictly we didn't want to shut down the golf
16 course. But, of course, if we can do something at
17 night and there are people walking around. There's
18 more than just golfers. We've got traffic going on
19 those roads, and the traffic's a lot less at night.

20 MS. HUNTER: But you could close those off
21 and keep people out of there.

22 MR. BONSAVAGE: Yeah, you could. You could
23 close them off. But if you can do it at a time
24 when you don't have to shut down roads that are
25 being used, you'd rather do it at that time.

1 MR. COLLINS: But I think one of the big
2 things is the operation of the airport, too.

3 MR. BONSAVAGE: Yeah. I was going to get to
4 that.

5 MR. COLLINS: The airport has to stay open
6 for the carrier-bound planes. That's what we've
7 been told. They have to be ready to take planes.

8 MR. SCHARFF: I've played golf over there
9 for 30 years, and if you're doing it in the
10 afternoon, there is a uniform onshore breeze every
11 afternoon over there. I've never played golf in
12 the afternoon over there that there's not been a
13 significant onshore breeze that comes, and it's
14 because it makes the back nine harder when you have
15 the breeze, and it's there all the time.

16 So I would imagine that would affect
17 the dispersion issue.

18 MR. WONG: Well, actually faster wind
19 velocity means lower concentrations at the city.

20 MR. SCHARFF: Cool. Do it in the afternoon.

21 MR. WONG: So it's the stale air, the low
22 air movement -- the slower movement that would
23 bring a higher -- if you just think about it, if
24 you put something up in the air and blow hard,
25 smoke goes further away.

1 MS. HUNTER: And it's generally less at
2 night, too, so you're getting less dispersion at
3 night in most cases. But still, like you said, all
4 day the wind picks up, and it's windiest right
5 before the sun goes down.

6 MR. BONSAVAGE: It is a consideration, but
7 all in all, we thought the night would be better.
8 It just works out better. And we think we can --
9 even if there isn't a breeze, we think the way
10 we're going to excavate it and then fill in -- in
11 fact, we're not going to get a big accumulation in
12 a big cloud. We're going to be trenching
13 basically -- pulling this stuff out, putting it in
14 a bin, and then filling it back in.

15 So, yes, it's a concern. But the
16 physics of it is you're not going to get a big air
17 plume off of this thing. That's the reality of the
18 air situation.

19 MS. FIELD: I'm interested in what you say.
20 I don't quite understand it. You said it was a
21 dispersion typically, but it's blowing probably
22 towards the residential homes along there, isn't
23 it? Isn't that the way the wind blows?

24 MR. BONSAVAGE: I don't know which way the
25 prevailing wind is offhand.

1 MR. SCHARFF: It's pretty much onshore.
2 There's always -- the predominant runway is 3-9-0,
3 so they're always headed west.

4 MR. BONSAVAGE: Well, we modeled all
5 different wind speeds and temperatures, and what it
6 came down to is by the time it gets any distance
7 away, it's going to be in very non-detectable
8 quantities.

9 Again, we really don't expect much mass
10 coming off of what we're going to be taking out of
11 there. So, yes, there is an air concern, but
12 overall if you look at how wide our trench is going
13 to be, and I guess the condition it takes to move
14 those chemicals into the air -- I mean, we could do
15 a mass balance of it and actually calculate what's
16 going to come off, but we really don't see much
17 coming off of this pit.

18 And even the Air Board, I believe, has
19 looked at this excavation, and they even said that
20 when you do something like this, there isn't a real
21 significant quantity of volatilization taking
22 place.

23 MS. HUNTER: And conversely, they gave that
24 for the excavation at the Port District at 10th
25 Avenue and workers passed out, and one guy got

1 brain cancer right after that. He attributed it to
2 the massive exposure he got of solvents in a trench
3 that was being excavated at the Port District.

4 So please don't minimize the severity,
5 either for the -- frankly, I'm worried about the
6 workers as anybody. I mean, this is nasty, nasty
7 stuff. It is volatile. It does go off. I bet if
8 you walk near there, there's going to be a smell.
9 I can't imagine that there isn't.

10 MR. BONSAVAGE: I agree. The people working
11 on this are going to be trained, and they are
12 trained to do this type of work.

13 MS. HUNTER: And they're in full dress and
14 all that?

15 MR. BONSAVAGE: We'll have the full gear on
16 the site, and then we'll be monitoring the site as
17 we're going along. And if we get to concentrations
18 where it's known to be a concern, then we go into
19 the gear.

20 MS. FIELD: But you said something about
21 monitoring around the site to be sure there wasn't
22 anything escaping the site, which that's good. But
23 if there are vapors being produced and you detect
24 that it's a problem, what do you do? I mean,
25 you've already got the problem.

1 MR. BONSAVAGE: You fill the hole.

2 MR. COLLINS: Fill the hole.

3 MR. BONSAVAGE: Shut the hole.

4 MS. FIELD: But what about the people who
5 are living 1800 feet away who may already be
6 breathing these vapors?

7 MR. BONSAVAGE: Well, you fill the hole
8 before it gets to the concentration where that
9 problem's going to occur.

10 MS. HUNTER: Where's your perimeter line?
11 How far out are you monitoring?

12 MR. BONSAVAGE: I don't have that exactly
13 planned out right now, but the idea is we'll
14 monitor it so we're protecting people's home.

15 The first indicator isn't where it's
16 going to be. The greatest concentration is the
17 workers that are working on the project, and
18 they're going to protect themselves too. They're
19 not going to expose themselves.

20 MS. HUNTER: But she's right. I mean, once
21 it's released and it hits the perimeter at a
22 problematic level, that's gone. That's out of the
23 box. You can't stop that. So that is going to go
24 into the air.

25 MR. BONSAVAGE: We'll be monitoring it right

1 at the pit is what it comes down to. And you're
2 talking 1800 feet away, so you've got like an
3 1800-foot buffer.

4 MS. FIELD: But you have winds that are
5 blowing towards that.

6 MS. PEACOCK: You monitor the perimeter, and
7 before it reaches a hazardous level -- you're still
8 monitoring it, and you'll know when to fill the
9 hole before it reaches the hazardous concentration.

10 MS. HUNTER: You're monitoring right at the
11 edge.

12 MS. PEACOCK: Right.

13 MR. BONSAVAGE: I guess the scenario you're
14 talking about, what would have to happen is you
15 open it up and then this huge amount of mass being
16 released into the air, and then go straight for the
17 property border.

18 And the way we've looked at it is by
19 the area that we're opening up, you're not going to
20 be able to get that much mass coming off. And the
21 winds -- the idea of the winds -- the wind actually
22 reduces the concentration.

23 So if you're thinking that some large
24 cloud is going to quickly get to the border, we're
25 going to be right there at the edge of the pit

1 monitoring this.

2 MS. FIELD: Well, I'm not concerned about --
3 well, I am concerned, but it's not just the large
4 cloud I'm concerned about. Isn't any of this stuff
5 bad? Nobody wants to expose themselves to any of
6 this stuff.

7 And so I'm concerned about the
8 excavation process and how the surrounding
9 residents can be protected and the rest of the
10 city. And I'm also concerned about the transport
11 problem, and I'm wondering why you have abandoned
12 the plan to barge, if you ever considered it.

13 MR. BONSAVAGE: We didn't consider barging
14 when we put this together. And we knew just by
15 working on the island that barging is preferred,
16 but from the start we've planned with trucks.

17 MS. FIELD: Why didn't you look at barging?

18 MR. BONSAVAGE: It's expensive is what it
19 comes down to.

20 MS. FIELD: Well, when public health and
21 safety is concerned, it's something that ought to
22 be looked at.

23 MR. BONSAVAGE: I agree.

24 MS. FIELD: And I have a question about the
25 process.

1 You plan to start work about one week
2 after the comment period closes, and you have a
3 schedule. That really doesn't allow much time to
4 go through the comments and make any modification
5 to your plan, and I'm just -- I don't understand
6 the process exactly.

7 Does anybody have to approve this?
8 What if the city of Coronado objects to your
9 transport plans? What if San Diego objects to your
10 transport plans? What happens then?

11 MR. BONSAVAGE: As far as does anybody have
12 to approve this --

13 MR. COLLINS: Can I answer that?

14 MR. BONSAVAGE: Go ahead.

15 MR. COLLINS: The answer is yes. What
16 happens is the comments don't come back to the Navy
17 directly. The comments are supposed to go to DTSC.
18 They read the comments. They determine what help
19 they need from the Navy to answer the questions.
20 They consult us, and we come up with the answers
21 cooperatively. Those that they can answer
22 themselves, they will do themselves.

23 Once they have done that and are
24 assured that we have amended our work plan to meet
25 the new standards and the new requirements, things

1 that might not have been considered before in CEQA,
2 and it meets their needs, which supposedly then
3 will meet the community's needs, whatever, then
4 they would then approve it. Now, if that takes 30
5 days, it takes 30 days. We don't start work until
6 we get their blessing.

7 So obviously --

8 MR. GEILENFELDT: This is Dan Cordero and
9 Leticia Hernandez from DTSC.

10 MR. COLLINS: We would like to start soon,
11 but we realize that until they give us permission,
12 we can't do anything.

13 MR. CORDERO: As Mark said, the start dates,
14 those are just estimated dates if the best of all
15 worlds happen. If there's no big public concern,
16 and we've addressed all the concerns of the
17 citizens and of the city and anybody who's -- every
18 comment. Those are the best scenarios.

19 But as he said at the beginning, that
20 doesn't mean those are set in stone. Those are
21 just estimates that we put on the screen to give a
22 presentation. And if we have to take 30 days, if
23 we have to take 60 days, if we have to take 90
24 days, it doesn't really matter. We have to address
25 the comments. If a comment is significant enough

1 that it alters the work plan, then that's what has
2 to happen, and we do those things. So it's not a
3 set in stone date that it's going to be approved
4 by.

5 MS. HUNTER: Could I get an answer to my
6 question about why can't we reduce the volume that
7 we're trying to take off by doing a pilot test?

8 MR. COLLINS: Well, actually if we could get
9 access to the site like we would like, we could
10 flood the whole area, put it below water, and then
11 do chemical oxidation. But I don't think we're
12 going to be allowed to bring up the water table in
13 that area up to road level to do this.

14 MS. HUNTER: No, no, no. You're not
15 understanding what I said.

16 I said excavate this stuff --

17 MR. COLLINS: And haul it somewhere else.

18 MS. HUNTER: -- haul it to where you're
19 storing it anyway, run some kind of pilot
20 reduction -- maybe you do chemical oxidation.
21 You're not in-situ, but you have some kind of bench
22 or pilot or innovative something.

23 MR. BONSAVAGE: We did that in the very
24 beginning.

25 MS. HUNTER: At this place, which is a lot

1 further away from people. We could actually reduce
2 the volume. There's less to haul off. Maybe it's
3 less toxic when you're hauling it off. Maybe
4 there's a less number of trucks.

5 I know that costs money, but I think
6 that might be really worth looking into.

7 MR. COLLINS: We had not looked at
8 treatment in -- well, we tossed ideas around, how
9 could we do it, and looked at treatment in bins,
10 but that was -- we didn't look at it very long
11 because dig and haul in this case, which in many
12 cases is not the best -- it happens to also be the
13 cheapest and the quickest and gets rid of it, and I
14 believe it does get incinerated at the end no
15 matter what.

16 MS. HUNTER: Right. And so that to me is --

17 MR. WONG: It potentially does. If it's
18 above a certain standard, a certain concentration.
19 There's treatment standards.

20 MS. HUNTER: And we know the concentration;
21 right? We know the concentration, so we should
22 know if it's going to be incinerated or not, which
23 I think argues -- you know, yeah. Dig and haul is
24 always cheapest. I can think of lots of bad things
25 that are cheapest and quickest, but that shouldn't

1 be the business we're in.

2 It seems like if there's a way, you'll
3 have a lot of community support to at least reduce
4 the amount -- the toxicity of it and reduce the
5 amount that goes anywhere. I'm sure whoever is
6 getting incinerated on, would be happy to have less
7 incinerated there. I think it's a responsible
8 thing to do.

9 I just can't imagine there's not
10 stabilization technology or something you can do to
11 it once you've got it further away and isolated.

12 MR. COLLINS: It could be diagnosed in the
13 bins. I'm sure that could be done.

14 CHIEF TRAYLOR: Could it then be reused to
15 fill its own hole?

16 MR. COLLINS: Not really.

17 MS. HUNTER: Why?

18 MR. COLLINS: Well, there are other waste
19 disposal regulations about putting the waste back
20 into the hole you got it out of.

21 MS. HUNTER: We did it with PCBs.

22 MR. COLLINS: But that fell through a
23 loophole in that requirement for PCBs at that time.

24 MS. HUNTER: You guys can find a loophole,
25 I'm sure.

1 MR. COLLINS: Actually, DTSC found that one.

2 MS. HUNTER: Well, find them another one.

3 MR. GEILENFELDT: Let me address a question
4 to these gentlemen -- Mark and to Chief Traylor.

5 My experience on hazardous materials
6 from New Mexico has been any transit of this type
7 of material through a high density residential area
8 is usually trucked with DoT approved containers,
9 and they're always treated the same as a wide-load
10 rig. They have clear markings.

11 I understand from reading this
12 California Environmental Report that I have in
13 front of me, there's some attempt to mark these
14 vehicles. Also, they're escorted normally to be
15 sure that if there's a catastrophe of any kind,
16 especially going through Fourth Street and over the
17 bridge, that there would be some immediate response
18 to a situation like this, should there be an
19 accident or whatever.

20 MR. BONSAVAGE: The other thing to keep in
21 mind, you know, is what we're dealing with. This
22 is a chlorinated solvent. This is what they used
23 to use to clean airplane parts. And these are
24 chemicals -- although they weren't good, but they
25 are part of industry, and it's just like there are

1 other chemicals that are very common that we haul
2 around as hazardous materials.

3 So it's not that it's a strange
4 chemical and it's different because it came from a
5 hazardous waste pit. I'm not trying to minimize
6 that there's not a problem, but what I'm trying to
7 tell you is that we haul all types of hazardous
8 materials around on our highways, and the way we
9 protect ourselves is with the equipment on the
10 trucks and we contain them.

11 MS. HUNTER: Well, we're not happy about
12 that either.

13 MR. BONSAVAGE: Yeah. But that's the
14 reality of what this is is we haul hazardous
15 materials around.

16 MS. FIELD: Are you using the VOC containers
17 to transport this?

18 MR. BONSAVAGE: Yes. It's just like
19 anything else. There's requirements to put this
20 stuff on the road.

21 MR. WONG: The answer's yes.

22 CHIEF TRAYLOR: Bob, you're right. Any
23 hauling of hazardous waste of any kind has to be
24 through DoT regulations, and those are very
25 strictly enforced. There's no doubt in my mind

1 that these will be handled in an appropriate, legal
2 way through DoT regulations.

3 I think our concern is the truck
4 traffic through town. I know that transportation
5 of hazardous materials does have its risks. Most
6 of those risks are through the transfer, either
7 loading, unloading or transferring those materials
8 as opposed to problems on the road. Accidents do
9 happen. But I think it's the truck transportation
10 through town that concerns us.

11 I believe that the containers that you
12 described that are sealed are appropriate for the
13 material you're hauling. But, again, I believe our
14 concern is for the truck traffic.

15 MS. PEACOCK: How many trucks a day are you
16 planning?

17 MR. BONSAVAGE: Well, it all depends on
18 where we're going, but we're trying to do like five
19 a day is what we're trying to set up.

20 And, again, it's to blend in with the
21 usual truck traffic so that it's just --

22 MR. GEILENFELDT: Five or more you notify
23 the City of Coronado in advance.

24 MR. BONSAVAGE: Right.

25 MR. GEILENFELDT: Thanks, Chief.

1 MS. FIELD: One more: Is this a time
2 critical removal action?

3 MR. GEILENFELDT: Yes.

4 MS. FIELD: Why is it time critical? Why
5 did you -- you could avoid a lot of scrutiny by
6 doing a time critical action, and yet I think I
7 heard you say that this stuff has been there for 50
8 years and it was pretty much stable and it might go
9 somewhere but it would be measured in decades or
10 hundreds?

11 MR. WONG: Yes.

12 MS. FIELD: How do you call this a time
13 critical action?

14 MR. COLLINS: Time criticality really
15 involves just the planning time that it takes.
16 Normally for that particular type of removal action
17 EPA expects it will take only 180 days from the
18 concept of the idea to the day that you're in the
19 field to do the work. That's 180 days to plan to
20 do it.

21 This one here is taking us a little
22 longer than that. This is taking the time actually
23 involved in a non-time critical removal action
24 where you know that, well, I'm going to dig it up
25 and remove it some day, so there's no limit on that

1 time.

2 And then you know there's the other
3 kind of removal, and that's the emergency -- what
4 we call the screaming emergency where you go out
5 and do something right away. I think you saw that
6 with the mercury and with the ordnance that we
7 found at North Island a few years ago. We didn't
8 waste any time. We were there on the spot and
9 cleaning it up. This one doesn't pose that kind of
10 a problem.

11 If we could have our way on it, we
12 would actually do monitored natural attenuation
13 till the cows came home on this job; but,
14 unfortunately, the rate of decay on this is that
15 that won't happen. We won't get down to zero or
16 down to decent numbers for 500 years.

17 So we thought we ought to do something
18 and get most of it out of here so that we can knock
19 it down to somewhere in the hundred year range.
20 Monitored natural attenuation would be effective
21 then and the concentrations would be very low
22 anyway, so that would work out fine. So we're
23 trying to speed up mother nature here.

24 And it is true that it could possibly
25 get to the bay -- not to the bay -- to that slough

1 and then go to the ocean years from now, but that
2 wouldn't happen for 80 years or so -- quite a while
3 before it happened. And by that time there would
4 be -- we'd have it gridded also and concentrations
5 would be lower.

6 We didn't think we should -- I consider
7 that not to be the biggest reason. I think we just
8 need to get in and reduce the amount of time --
9 it's relatively close to the people who live in the
10 city. So 500 years didn't seem to be quite right.

11 But you know what? If the
12 contamination doesn't come to the surface and there
13 aren't vapors escaping and things like that, we
14 could really just let her go for 500 years if
15 you're willing to put up with it, but we didn't
16 think most people would want to do that.

17 MR. BONSAVAGE: It's all about that we know
18 that there's something there --

19 MR. COLLINS: And we have a chance to do
20 something about it.

21 MR. BONSAVAGE: -- and we had a chance to do
22 something about it.

23 What we're planning to do here, this is
24 really -- we're addressing the source of the higher
25 concentration. We're trying to knock the source

1 out. We're not saying this is going to be the
2 final remedy for this site because we know we can't
3 get to all edges and we're going to have to monitor
4 for a few years.

5 But instead of paying for the next
6 hundred years having someone going out and
7 collecting groundwater, we know the taxpayer's
8 dollar is better spent by addressing this now and
9 doing it for less.

10 MR. SCHARFF: Just one more comment on the
11 trucking issue.

12 You're obviously not going to bring in
13 the fill dirt with five trucks a day. You're going
14 to bring all that in at once; right?

15 MR. COLLINS: We're going to try not to --

16 MR. SCHARFF: Are you going to preposition
17 that earlier or what are you going to do?

18 MR. COLLINS: Yeah, we will. We're not
19 going to create a parade of trucks. That's the one
20 thing we don't want.

21 MR. SCHARFF: Why don't you just slam dunk
22 it on a barge and get it done?

23 MR. BONSAVAGE: We'll look into the barge.

24 MR. SCHARFF: I think that's the obvious
25 question.

1 MR. GEILENFELDT: Any other questions?

2 MS. HERNANDEZ: I just wanted to add a
3 comment.

4 MR. GEILENFELDT: Go ahead.

5 MS. HERNANDEZ: Regarding the comment
6 period, it was published in two newspapers: the
7 "Coronado Journal" and the "San Diego Tribune" on
8 Monday, August 13th.

9 MS. MARRON: I have a question.

10 You said that there will be a
11 monitoring plan in place while you're doing the
12 excavation, but you haven't put that together yet?
13 When you put it together, is it going to be
14 available to the public?

15 MR. COLLINS: You'll be able to review all
16 our documents, yes.

17 MS. MARRON: Okay. But it's not in the RAW.

18 MR. COLLINS: It's not there yet.

19 MR. BONSAVAGE: We can make that available.
20 It's just one of those things that's very detailed,
21 and if someone wants to see it --

22 MR. GEILENFELDT: This is Dorothy Marron.
23 She's our newest RAB applicant.

24 MR. COLLINS: She's a former RAB Co-Chair.
25 So was Laura.

1 We'll make it available, and we'll put
2 it in here in the library. It should be in early
3 next week.

4 MS. MARRON: Okay.

5 MR. BONSAVAGE: Early next week.

6 For these cleanups, there's a certain
7 amount of information you get in there, and you
8 can't get everything in there. So something like
9 that, we can certainly put it together.

10 MR. GEILENFELDT: Thank you all for
11 participating. Our next item is by Jim French.

12 MR. COLLINS: I need to say something about
13 that, too. We have to be out of here at 8:30. The
14 library kicks us out.

15 So I don't think we have enough time to
16 do a good presentation on Site 11 and give him only
17 ten minutes, so we'll include it next time.

18 MR. FRENCH: Well, Bill, I did want to at
19 least say one thing.

20 MR. COLLINS: Go ahead.

21 MR. FRENCH: I'm somewhat relieved, but I
22 did want to tell the group that none of these
23 alternatives for OU-11 involve the excavation of
24 contaminated soil and trucking it through Coronado.

25 I look forward to talking about it

1 later.

2 MR. COLLINS: One thing we can say about
3 Site 11 is that we are preparing a Feasibility
4 Study. We're about at the end of it, and it's
5 going to have a variety of options that we
6 considered for handling the waste problem at Site
7 11, which for those people who don't know, is the
8 Industrial Waste Treatment area.

9 The ground and groundwater has been
10 contaminated from past operations, not the current
11 operations. They're doing a great job at the
12 current operations.

13 So we looked at that and our
14 Feasibility Study considered remedies. We've been
15 working with the state and the Water Board on this,
16 and I think we're coming up with some good answers.

17 So this fall we will put out the
18 Feasibility Study for the general public and all
19 the regulators to review, and everybody will be
20 free to make comments on that. And in November
21 we'll have our show. We'll talk about it some
22 more, and about that time you'll have a chance to
23 read that thick report. But I think you'll like
24 it.

25 Number one, there really is no truck

1 Site 11. And then Site 9, we'll have an update on
2 that.

3 MR. VAN ROOY: I'd like to propose one, and
4 Bill, you and I talked about this a little bit
5 earlier.

6 It's been several years since we have
7 had a history of the funding for cleanup effort and
8 then projected funding for the out years.

9 And the reason I think it's kind of
10 important at this period in time, you know, the
11 last eight years has not been kind to
12 recapitalization of the Navy, and I think efforts
13 like this are going to be competing with buying
14 airplanes and constructing ships. And if that's
15 going to be a problem, the community needs to know
16 so we can work through our elected representatives
17 and perhaps help you out.

18 MR. COLLINS: And along those lines that
19 Art's talking about, I do have bad news in that our
20 budget for North Island has been cut by
21 approximately 11 percent. We have normally gotten
22 about \$8-1/2 million to work with here at North
23 Island to clean up and investigate the sites, and
24 we're losing close to \$900,000 next year. So we're
25 going to have to give up something, and we're going

1 to have to manage these dollars very carefully so
2 that we get the most bang for the buck.

3 We'll have to do things very wise if
4 we're going to keep up with the investigations that
5 we have going on and with the remediations that we
6 have planned.

7 And there are a few other things that
8 we have to do, too. We have to monitor the
9 landfills for the Water Board; otherwise, we'll get
10 an NOV and end up with potential fines for that.
11 So we have to avoid those things, also.

12 Next year is going to be very tight.
13 It's sad to say, but it should go on for a couple
14 of years and then, hopefully, the way Washington,
15 D.C. sees it right now, we'll break out of that and
16 we'll start to get additional funding again for
17 North Island, but we're going to have a couple of
18 what we call poor years out here.

19 I'll have a budget thing to go over.

20 MR. GEILENFELDT: Any other questions?

21 In closing, I want to expound on what
22 Bill said. I have been invited to attend these
23 Bechtel quarterly meetings held downtown at
24 different months, and I can assure you that they do
25 a very professional job. I'm very impressed with

1 their research and what they do, and I'm also very
2 impressed with how they are concerned with spending
3 the dollars. They do their very best to stretch
4 these bucks.

5 Any other questions? Shall we
6 entertain an adjournment?

7 Thank you for coming.

8
9 (Whereupon, at 8:15 p.m. the RAB
10 meeting was adjourned.)

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1 STATE OF CALIFORNIA)

2 : SS

3 COUNTY OF SAN DIEGO)

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5 I, Nancy A. Lee, CSR No. 3870, do hereby
6 certify that I reported in shorthand the above
7 proceedings on Thursday, August 23, 2001, at 640
8 Orange Avenue, Winn Room in the City of Coronado,
9 County of San Diego, State of California; and I do
10 further certify that the above and foregoing pages
11 numbered 1 to 81, inclusive, contain a true and
12 correct transcript of all of said proceedings?

13 Dated: _____, 2001.

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NANCY A. LEE

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