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NCBC GULFPORT
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RESTORATION ADVISORY BOARD MEETING MINUTES TRANSCRIPTION 10 AUGUST 2009 NCBC GULFPORT MS

8/10/2009

NCBC GULFPORT

NCBC GULFPORT MEETING ANNOUNCEMENT PROPOSED

PUBLIC MEETING FOR SITE 10

RESTORATION ADVISORY BOARD (RAB) MEETING

AUGUST 10TH, 2009

AT 6:30 P.M.

AT 4020 8TH STREET

GULFPORT, MISSISSIPPI

1 MR. FISHER: I think we're ready to get
2 started. Okay. My name is Bob Fisher. I am
3 the Regional Project Manager for NAVFAC
4 Southeast Gulfport project. Tonight we're
5 going to do the proposed plan presentation for
6 the public. This presentation will present our
7 preferred alternative for Site 10, which is on
8 NCBC Gulfport. Bill Olson will be giving the
9 presentation tonight. And he will be taking
10 questions at the end if there are any. And so,
11 if you could, hold off until then and we'll go
12 ahead and get this kicked off.
13 Well, I'll take a question before.
14 AUDIENCE MEMBER: I was here last time --
15 MS. ROUSE: We'll pick that up at the RAB
16 meeting.
17 MR. FISHER: Yeah. The RAB, we'll do
18 after the public meeting here tonight. That
19 way we can get this wrapped up first and get
20 our court reporter out early.
21 Okay. Bill.
22 MR. OLSON: I have worked on Site 10 for
23 most of the remedial investigation, so I am
24 fairly familiar with what we found there. It
25 was originally not one of the sites identified

on the base during the initial course of study. It was found later on, in 1996 when the base-wide surface water and sediment investigation was going on. At that time, by chance, all locations were sampled where PCBs were found in the ditch. Source removal was conducted in 1999 to try and remove the identified contamination. We followed that up with post removal evaluations, which led us to conduct the remedial investigation, and presented a proposed plan in 2007. So I will briefly run through again, to kind of remind people what we found at the site and how that's guided our choice of the preferred alternative.

Site 10 is actually a pretty small area. It's located in the ditch between the McDonald's, the clinic and the parade field. We never found any evidence that there were any activities there that would lead to PCB being released. It was just found.

This is a picture of the site (indicating). The lines aren't really there. But you can see it's a shallow ditch. Some pictures you'll see it will have standing water in it and some will be dry like this

(indicating).

When we conducted the remedial investigation, which was after the removal action, we still found that although the materials that was actually on the surface and in the ditch met Mississippi's clean-up goals, at depths down to 15 feet there was still PCB present at concentrations up to 83 parts per million. The Mississippi Department of Environmental Quality's clean-up goal for PCBs in soil for unrestricted use is one part per million. So even though the materials were removed from the ditch and the material at the surface were no longer exceeding that requirement, at a depth of around 15 feet there was still some contamination present.

The concentrations that were found in the deeper soil were much lower than what was originally found in the ditch before the clean-up, by at least ten times. So a significant amount of contamination removed by the clean-up. We found no evidence of PCBs having an effect on ground water at the site. There were wells installed around the area where the soil contamination was found. They

1 were screened through the sample water from the
2 same area where the soil was contaminated. And
3 we had no exceedances.
4 Surface water and sediment after the
5 removal actually were cleaned up. But there is
6 a potential that if no action is taken at the
7 site that material that remains at the site
8 could contaminate surface water sediment. The
9 volume estimate based on the area that has
10 been -- where the soil with the contamination
11 was found and the concentration found was
12 estimated at 450 cubic yards, which is probably
13 45 dump truck loads of soil. And that's
14 actually soil -- the clean soil. And we
15 estimated based on the concentration that there
16 may be as many as 33 pounds of PCBs, which if
17 you convert that to volume is about two and a
18 half gallons.
19 Based on the Human Health and Ecological
20 Risk Evaluations that were part of the remedial
21 investigation, the contaminant that was
22 identified as a potential threat to human
23 health was PCBs in the soil, and also
24 potentially for ecological receptors that may
25 live in the ditch that have contact with the

1 surface water and sediment. The main
2 contaminant concern, then, is the PCBs, 1260.
3 There were also PAHs, which are polycyclic
4 aromatic hydrocarbons -- which is not
5 surprising because the site is right next to a
6 paved area that is paved with asphalt. It's a
7 common component in that -- and then pesticides
8 typical of what is normally applied at the
9 base. So the concentrations of both of those
10 were mostly ecological receptors.
11 This is a cross section (indicating). The
12 ditch would be running this direction
13 (indicating). This diagram would be the actual
14 volume of material that was removed during the
15 removal action. Initially concentrations in
16 the ditch were in the order of 100 to 140 parts
17 per million. Soil was removed from this area,
18 contaminated soil. Eventually, the excavation
19 was almost 10 feet deep and still a
20 contamination was found.
21 AUDIENCE MEMBER: All of that has been
22 removed?
23 MR. OLSON: All of that has been removed.
24 Because human -- risk to human health and
25 the environment was identified the RIFS was

1 conducted to determine what actions would be
2 appropriate for the site. And to do that we
3 picked these remedial action objectives, which
4 deal with the concentrations that humans may be
5 exposed to at the site; and in order to prevent
6 an exposure to concentrations above that one
7 part per million limit. Also to prevent the
8 material that's is the subsurface soil, which
9 is more than 2 feet below the current ground
10 surface from ever being remobilized and
11 transported from the site; and then to meet the
12 legal requirements for the State of Mississippi
13 and the EPA.
14 The alternatives that were screened in the
15 feasibility study were no action, which is
16 basically as it sounds; limited action would
17 included things like fencing to prevent people
18 from being exposed at the site, putting up
19 signs telling people not to dig at the site,
20 and then monitoring to see if contamination
21 remained at the site; containment technologies
22 would leave the materials there, but prevent
23 direct exposure to humans and erosion; then
24 finally as was tried before, dewatering the
25 site, excavating the material and removing the

1 contamination from the site. So these
2 technologies were assembled into four different
3 alternatives. Alternative 1 was no action.
4 Alternative 2 was institutional controls and
5 monitoring. Alternative 3 would include a
6 limited amount of excavation for engineering
7 purposes, to ensure that the surface protection
8 system would not fail. And then since
9 contaminants would be left at the site, there
10 would be a monitoring component to that. And
11 then the fourth alternative was to remove the
12 material.
13 When the alternatives were analyzed in
14 detail, it was apparent that Alternatives 1 and
15 2, which were no action and limited action with
16 the monitoring and institution controls, would
17 not meet the remedial action objectives. They
18 wouldn't prevent exposure and they wouldn't
19 prevent erosion and transport of contaminated
20 material. So the Alternatives 3 and 4, which
21 were surface protection which would prevent
22 direct exposure, prevent erosion and then
23 excavation, would meet all of the remedial
24 action objectives.
25 One of the moderating factors for the

1 alternative selection was implementability, how
2 reasonable is it to do that alternative and
3 have the results that you want. And as we have
4 seen before, we've already done one removal
5 action at Site 10 and it has proved to be
6 problematic.
7 So the Navy's preferred alternative is
8 Alternative 3, which would be a surface
9 protection and surface water control
10 alternative. A liner or a culvert would be
11 placed along the ditch in the area where the
12 subsurface soil is contaminated and monitoring
13 and land controls would be part of the
14 long-term alternative. Alternative 3 does meet
15 all the remedial action objectives. Basically
16 the area of the ditch where contaminated
17 subsurface soil is underneath the ditch would
18 be lined with an impermeable erosion resistant
19 concrete barrier or a culvert, approximately
20 85 feet of the length of the ditch. And then
21 there is an area outside of the ditch where
22 contamination is not directly at the bottom of
23 the ditch and that would be capped with
24 concrete pavement.
25 And this is the area (indicating).

1 McDonald's is over here (indicating). The
2 clinic is here (indicating) and the parade
3 field is here (indicating). This area would be
4 the area of the ditch where material would be
5 removed to ensure the engineering integrity of
6 the chosen cover protection. And this area
7 over here (indicating) would be capped.
8 In addition to the engineering controls,
9 site controls would be required because
10 contaminated material would still be at the
11 site. It would just be -- the concrete
12 barriers would eliminate direct exposure and
13 transport, so it would require site controls
14 and inspection of the cover. And it would also
15 require monitoring to ensure that the material
16 that has supposedly been isolated by this cover
17 is not being transported. And basically that
18 would include signage around this area to
19 indicate that people should not dig in the area
20 or disturb the cap and samplings of water in
21 the stream flow -- and the ditch goes that way
22 (indicating) -- sampling down grade of the
23 surface protection to make sure that material
24 that is supposed to be isolated from the
25 environment is not being transported away.

1 Any questions?
2 AUDIENCE MEMBER: Does that, the preferred
3 alternative with the concrete cover and the
4 culvert, et cetera, if by chance and it may be
5 a very slim chance, if the monitoring does
6 identify that there has been migration of PCBs,
7 is that going to in any way make it difficult
8 or prevent more clean-up if it was needed
9 later, because something has moved? Or would
10 we then just move into doing something similar
11 to this in the new area that they had migrated
12 to?
13 MR. OLSON: That would be something the
14 engineers --
15 AUDIENCE MEMBER: -- will deal with in 50
16 years.
17 MR. OLSON: I wasn't sure if you were
18 asking me if it would be legally difficult or
19 engineering.
20 AUDIENCE MEMBER: No. Engineering. This
21 doesn't prevent -- this type of -- this action
22 doesn't make it more difficult down the road
23 for any other clean-up?
24 MR. OLSON: No.
25 AUDIENCE MEMBER: I believe you said

1 that we -- and correct me if I'm wrong, you
2 defined the limits for horizontally and
3 vertically how deep --
4 MR. OLSON: Yes.
5 AUDIENCE MEMBER: And did you not say that
6 we have already excavated down about ten feet
7 and pulled that out?
8 MR. OLSON: In the area below the ditch.
9 AUDIENCE MEMBER: In the area below the
10 ditch.
11 MR. OLSON: There are some areas where the
12 contamination is not directly underneath the
13 ditch.
14 AUDIENCE MEMBER: Okay. And did I
15 understand you correctly to say that below
16 about the 15-foot level you didn't find
17 anything; is that correct? Or do we know?
18 Approximately 15 feet.
19 MR. OLSON: We did find in most of the
20 areas soil PCB concentrations that were less
21 than --
22 AUDIENCE MEMBER: How do you know the
23 limit -- and that is that 450 yards of material
24 that would have been removed?
25 MR. OLSON: Estimated 450 yards of

1 contaminated material. There may be
2 non-contaminated material above it,
3 particularly where they removed -- where they
4 previously dug and refilled that area.
5 AUDIENCE MEMBER: Can you elaborate a
6 little bit on how PCBs move through the soil
7 with time?
8 MR. OLSON: PCBs are an interesting group
9 of organic chemicals. They are kind of large
10 molecules. They're not soluble in water.
11 They're typically slightly denser to -- denser
12 than water. They have a high affinity for any
13 organic carbon that's in the soil matrix. So
14 the typical way that PCBs will move in the
15 environment is they will be stuck to a soil
16 particle with carbon in it. If that particle
17 gets carried mechanically by surface water
18 flow, then that's how they typically get moved.
19 Usually, the size of the molecule in the
20 particles, they don't typically transports
21 through pore spaces in the soil. So ground
22 water transports usually does not happen
23 because they don't dissolve in the water. They
24 have to be moved with a soil particle.
25 AUDIENCE MEMBER: Can I conclude, then,

1 that it's not likely that they will move beyond
2 where they are currently?
3 MR. OLSON: No. They shouldn't.
4 AUDIENCE MEMBER: How do they settle so
5 deep in the ground?
6 MR. OLSON: That's an interesting
7 question. Part of it would be because of the
8 excavation that allowed mixing soil and they
9 transport that way. And they also can move.
10 The PCB oil itself, before it interacts with an
11 organic carbon, is a non-aqueous liquid. As
12 long as there is enough of that, like when the
13 spill first happens, that can be moved by
14 gravity as a liquid, but it passes through soil
15 particles and soil carbons. That is the most
16 likely --
17 AUDIENCE MEMBER: How do we know -- where
18 did this PCB come from? Do we know what
19 happened? Do we believe it was a transformer?
20 MR. OLSON: Yes. At some point someone
21 had a transformer that they wanted emptied or
22 perhaps during Hurricane Camille some
23 transformer blew into the ditch. There's
24 really no way of telling when the release
25 occurred.

1 AUDIENCE MEMBER: How long does it take
2 for these PCBs to degrade naturally?
3 MR. OLSON: That varies a great deal,
4 depending on the environment that they are in.
5 There are several mechanisms, photo
6 degradation, biodegradation. Most of them are
7 pretty slow and once you get down to the soil
8 column it tends to not occur.
9 AUDIENCE MEMBER: Ever or just a long
10 time?
11 MR. OLSON: A long time. Biodegradation
12 is not something we are expecting.
13 AUDIENCE MEMBER: If they had sunshine on
14 them they might degrade quicker?
15 MR. OLSON: There's been different studies
16 on taking material and treating it, land
17 farming it and trying to break down the PCBs,
18 but it tends to occur only at the surface at a
19 rate that --
20 AUDIENCE MEMBER: With sunshine on them or
21 something.
22 AUDIENCE MEMBER: When you make the
23 comment that Alternative 4 was something that
24 was too difficult to implement, how was it?
25 Explain how Alternative 4 was too difficult.

1 MR. OLSON: When they did the excavation
2 before, which basically would have been
3 Alternative 4, they ran into issues of
4 controlling surface and ground water because
5 the ground water is very close to the bottom of
6 the ditch. So they ran into water control
7 problems and that led to excavating. And
8 excavation, they wound up removing 200 tons of
9 soil and pumping a lot of water out of the
10 area. I couldn't find a picture of it. That
11 parade ground was filled with water tanks where
12 they were pumping water out of the excavation.
13 AUDIENCE MEMBER: One other question,
14 comparing Alternative 3 and Alternative 4, is
15 there a cost analysis of which was most costly?
16 MR. OLSON: That's part of the FS. We try
17 not to basically make the decision totally on
18 cost. But I think the cost for Alternative 4,
19 was, like, ten times more. You would have to
20 ask Bob.
21 MR. FISHER: Actually, over the long-term
22 the cost is very similar between 3 and 4.
23 Alternative 4, the upfront costs were much
24 higher for the excavation. With Alternative 3
25 the costs are initially lower, but the

monitoring that takes place over time gradually catches the cost up to Alternative 4. So they are fairly similar. That really didn't weigh in a lot in the decision. The difference is, I think, about $50,000.

AUDIENCE MEMBER: The observation I would make is that in one case it's gone; the other case you've got to continue to monitor it.

MR. FISHER: And that's the difficulty with excavation processes. At that depth there is no guarantee that you will get it. You will spend all of that money and if there is something -- if that's your goal to -- your stated goal to remove all of these PCBs at depth, if you don't reach it, then you have got to go back and try it again and again. That's where those -- the kinds of assumptions that go into deciding what your preferred alternative is. The risk for that is much higher than Alternative 3.

AUDIENCE MEMBER: You mentioned water tanks, or you mentioned water tanks (indicating), I'm just not sure which one. So you have to treat all of that water as contaminated?

1 MR. OLSON: Yes.
2 AUDIENCE MEMBER: What do you do with it?
3 What do you with it? How do you dispose of the
4 water?
5 MR. FISHER: The water was treated with a
6 deflocculant, which caused the large particles
7 to fall out. Then the water was filtered
8 through carbon canisters to remove the PCBs.
9 And that is disposed of. You have the other
10 disposal costs with the carbon itself.
11 AUDIENCE MEMBER: And then the material
12 from the ditch?
13 MR. FISHER: The material from the ditch
14 was taken to a landfill, where it was treated
15 before it was disposed of.
16 MR. CRANE: Okay. At that time, we were
17 able to take the water and send it to Harrison
18 County for field study out there. That's
19 probably not the case today because we did that
20 prior to them selling their sludge. So it's a
21 much more difficult issue today than it was
22 back then.
23 AUDIENCE MEMBER: You know, I wonder how
24 big a problem this is countrywide? How many
25 sites are there like this that have never been

1 discovered. But since this one is on a Seabee
2 Base, it's important. And, you know, in the
3 big picture, how important is it?
4 MR. FISHER: Because it was in a ditch,
5 it's a pretty big deal. We don't -- as Bill
6 mentioned the PCB is deeper in the ground and
7 immobile. But we had an environment there at
8 Site 10 that those could be moved downstream.
9 And having it so shallow it was something that
10 could create a condition where people would
11 become exposed. How many sites are like this?
12 It's a rhetorical question. There's a lot.
13 AUDIENCE MEMBER: You know, all of the
14 transformers that blew during Camille and other
15 storms. I mean, gosh.
16 MR. FISHER: And this one was found by
17 accident as well. We weren't looking for that.
18 AUDIENCE MEMBER: That's a problem though.
19 You identified it, so you've got to do
20 something about it.
21 MR. OLSON: Exactly.
22 MR. FISHER: That's what the Navy clean --
23 the Navy IR Program is for, is to find these
24 and clean them up.
25 MR. OLSON: If there's no more questions,

thank y'all.

MR. FISHER: I will go ahead and wrap it up. This meeting kicks off the 30-day public commentary, which will be done September 11th. We will accept those comments and respond to those in a response, to the summary in this proposed plan. All of Bill's supporting documents he referred to will be available in the information repository for the public to view. And that's going to be at the Gulfport Library on Maples Drive. And, I think, Gordon, do you have directions to that or where that might be in the record?

MR. CRANE: It will be behind -- just -- the family court system, right over off on Pass Road, behind the school there, where the family court was, that's Maples Drive over there. Just before you get to Courthouse Road, on the right, heading east.

AUDIENCE MEMBER: It's where Juvenile Hall is.

MR. CRANE: Juvenile Hall. Yeah.

AUDIENCE MEMBER: Behind Pass Road going --

AUDIENCE MEMBER: Not that I know anything

about that place.

AUDIENCE MEMBER: That's a little far from Courthouse Road. I would put it almost, like, at Washington Avenue. You take Washington Avenue over Pass -- south of -- over Pass Road and you come to Maples.

MR. FISHER: Okay. So we'll have that available for anybody in the public to look at, as well as copies of the proposed plan.

And that will conclude our meeting, unless there or any other questions. Okay. That's it.

(MEETING WAS CONCLUDED AT 7:00 P.M.)

1 C E R T I F I C A T E

2

3 STATE OF ALABAMA:

4 COUNTY OF MOBILE:

5

6 I do hereby certify that the above and foregoing
7 transcript of proceedings in the matter
8 aforementioned was taken down by me in machine
9 shorthand, and the questions and answers thereto
10 were reduced to writing under my personal
11 supervision, and that the foregoing represents a
12 true and correct transcript of the proceedings given
13 by said witness upon said hearing.

14

15 I further certify that I am neither of counsel nor
16 of kin to the parties to the action, nor am I
17 anywise interested in the result of said cause.

18

19

20 _____

21 Rheannon R. Miller
Court Reporter
22 Certificate Numbers:
ACCR 503

23

24

25

1 R E P O R T E R ' S P A G E
2
3 I, Rheannon R. Miller, in and for the State of Alabama,
4 the officer, before whom this sworn testimony was taken, do
5 hereby state on the record:
6 That due to the interaction in the spontaneous
7 discourse of this proceeding, dashes (--) have been used to
8 indicate pauses, changes in thought, and/or talk overs; that
9 same is the proper method for a court reporter's
10 transcription of proceeding; that the dashes (--) do not
11 indicate that words or phrases have been left out of this
12 transcript; and that any words and/or names which could not
13 be verified through reference material have been denoted
14 with the phrase "(phonetic)."
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19 RHEANNON R. MILLER, ACCR 503
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