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**BALTIMORE DISTRICT
DREDGED MATERIAL MANAGEMENT PLAN
PUBLIC SCOPING MEETING**

Hearing in the above-captioned matter was taken on Tuesday, June 18, 2002, at Baltimore County Community College, 7200 Sollers Point Road, Baltimore, Maryland, commencing at 7:00 p.m. before Carol T. Lucic, Notary Public.

REPORTED BY: Carol T. Lucic

1

PRESENT:

2 Daniel Bierly
3 Steve Kopecky
4 Scott Johnson
5 Michele Bistany
6 Kevin Luedke
7 Mark Mendelsohn
8 Michele Gomez
9 US Army Corps of Engineers
10 Glenn Johnson
11 Judy Hackett
12 Deb Volkmer
13 Weston Solutions, Inc.
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1 MR. BIERLY: Good evening. Thank you for
2 coming out. I am Dan Bierly, as it says there,
3 and against my better judgment I put my phone
4 number up there, too. I hope you all had a
5 chance to look at the displays here and talk to
6 folks. You can tell those of us from the Corps.
7 We've got our little name tags on.

8 Also, as I said before -- I'm not sure all
9 of you were aware -- we do have a court reporter
10 here tonight. Her name is Carol, and she will
11 be collecting any comment cards that you happen
12 to have, and she can also record for the record
13 any comments that you have that you don't want
14 to make here in front of everybody for whatever
15 reason. She can take your comments.

16 When we do get to the end of this
17 presentation, if you have comments to make, we
18 do have this microphone. All I ask is that you
19 speak into the mike so you can be recorded both
20 by the court reporter and we're taping as well,
21 and please state your name up front for the

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1 record. We appreciate that.

2 So why are we here? There are two main
3 purposes here. First, we want to educate you on
4 our process, what we're up to, what we're doing;
5 and, second and really most importantly, we're
6 here to listen to all of you and what comments
7 that you have right now.

8 We are currently working on a scope for
9 our DMMP study. What do I mean by that? The
10 scope of work is a document that we'll produce
11 that's going to state what it is that we intend
12 to do, how are we going to go about it, what do

13 we expect our products to be, where is it going
14 to get us, and this type of thing, and then once
15 that scope is done -- we're shooting for the end
16 of this summer -- we will actually begin our
17 DMP process. That's a two-year process which
18 I'll discuss here tonight.

19 We'll talk about the goals and, as I say,
20 the process. I'm also going to talk a little
21 bit about this tiered environmental impact

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1 statement that we plan on doing. I'm just going
2 to mention it now, but we'll talk more about
3 that later on.

4 First and foremost public comments, why we
5 asked you here tonight and why we thank you for
6 coming. As part of the EIS process and as part
7 of sound planning we need to get out and talk
8 with the public, the interested public, the
9 affected public, and find out what are your
10 concerns, what are your comments, what are your
11 ideas. We are not the only source of ideas on
12 this topic. We want to hear what you folks have
13 to say. We're going to use the information we
14 gather tonight and over the course of the next
15 month or so to do this scope of work that I
16 mentioned.

17 It says up here all comments needed by
18 July 19. Let me clarify. That is all comments

19 dealing with the scope of work, not the study
20 itself. The study itself is a two-year process.
21 It should culminate in September of '04, and

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1 anything you've got to say up until that time we
2 will consider, we will appreciate, and we will
3 note. No matter what idea comes to us, it will
4 be noted and you will find it. If you take our
5 DMP and you go back to the public involvement
6 section, you will see your idea of shipping all
7 the material to the moon printed there. You
8 will find it.

9 So what is the goal of the study? This is
10 the one slide I'm going to read verbatim because
11 I think this is very important. To develop a
12 plan to maintain in an economically and
13 environmentally sound manner channels necessary
14 for navigation in the Port of Baltimore, conduct
15 dredged material disposal in the most
16 environmentally sound manner, and maximize the
17 use of dredged material as a beneficial
18 resource.

19 The Corps has two mission areas that come
20 into play here. First, for the past couple
21 hundred years one of our mission areas has been

1 navigation. Safe and efficient navigation of
2 the navigable waters of the United States of
3 America is within the jurisdiction of the Corps
4 of Engineers. We dredge channels. We maintain
5 channels. It is for the economic viability of
6 our ports and the nation as a whole.

7 But we have another mission area,
8 environmental restoration. It's a newer mission
9 area, but it's no less important, and so we're
10 coming at this process of what to do with all of
11 this material dredged from the navigational
12 channels from two points of view. One is this
13 material needs to be dredged, this material
14 needs to be placed because we need to maintain
15 safe and efficient navigation.

16 The other way we're looking at it is from
17 the stewards of the Chesapeake Bay point of
18 view. If this dredging needs to happen, what is
19 the best thing to do with this material? If
20 this material is really contaminated, maybe the
21 best thing to do is to put it upland, close it

1 off, make sure that it doesn't come into contact
2 with fish and wildlife, as little as possible.
3 Maybe that's the best thing to do. If it's
4 cleaner material and we can do something
5 environmentally beneficial with it, if we can
6 create wetlands, if we can create some other
7 type of habitat with it, maybe that's the best
8 thing to do.

9 So we need to come at this from two
10 different points of view, and I wanted to stress
11 that.

12 Also I call your attention to this
13 document right here. It's out there somewhere.
14 I don't know where exactly. It's up in front.
15 I hope you pick up a copy of this if it wasn't
16 handed out at the door. This is the
17 environmental operating principles of the Corps
18 of Engineers. This is a new document. This
19 came out just a few months ago, but let me
20 stress that this doesn't say anything new.
21 There is nothing new in this document. This is

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1 the way we have been operating for many years
2 now, but General Flowers, who is our chief of
3 engineers, finally put down in one page in a
4 facts sheet exactly what it means to him and

5 what it means to the Corps of Engineers.
6 There are seven principles, and they're
7 bulleted on the right-hand column there. I
8 would like to read two of them. The third
9 bullet down: Seek balance and synergy among
10 human development activities and natural systems
11 by designing economic and environmental
12 solutions that support and reinforce one
13 another. That's what I was talking about
14 before, the two different points of view, the
15 economics of navigation and the environmental
16 point of view as well.
17 The last bullet: Respect the views of
18 individuals and groups interested in Corps
19 activities, listen to them actively, and learn
20 from their perspective in a search to find
21 innovative, win-win solutions to the nation's

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1 problems that also protect and enhance the
2 environment, and that's what we're doing here
3 tonight. We are here tonight to solicit your
4 input and to listen so that we can do the
5 economic right thing and the environmental right
6 thing.
7 So what physically are we talking about?
8 Well, here is a map of Baltimore, Chesapeake Bay
9 all the way down to Cape Henry down here. It's

10 50 foot channels up the bay to the port and 35
11 feet through the C & D Canal down into Baltimore
12 Port.

13 Here is a little close-up of the area.
14 You can see over here the federal channels, the
15 state channels, anchorages, all of these
16 features that need to be dredged. You can also
17 see in more detail the approach channels from
18 the south as well as the channels that go up to
19 the C & D Canal.

20 So what do we do? We're responsible for
21 maintenance of the federal navigation channels

11

1 that serve the Port of Baltimore, as I showed
2 you on the previous slide. This involves 4-1/2
3 million yards annually. This is just
4 maintenance we're talking about here. This is
5 just to maintain the depths of channels as they
6 are currently authorized. The Corps is
7 responsible monetarily for the lion's share of
8 this maintenance work. In fact, dredging within
9 Maryland state waters, the Corps of Engineers
10 pays 100% of that cost of the operation and
11 maintenance of those channels.

12 For example, Poplar Island, which is one
13 of our projects currently, is an environmental
14 restoration project. It is a cost above and
15 beyond operation and maintenance that is cost

16 shared with the State of Maryland, and that's a
17 75/25 cost share, but the dredging and the
18 maintenance itself is 100% federal.

19 The Water Resources Development Act,
20 that's a bill passed by Congress, signed by the
21 President in 1996. It happens every two years

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1 approximately, and this authorizes the cost
2 sharing placement sites. Previously, for
3 example, when Hart-Miller Island was built, it
4 was the nonfederal, the state responsibility to
5 construct these sites. They then got credit for
6 those sites, but it was their responsibility.
7 Now new sites can come on line and actually be
8 cost shared with the state. So that is an
9 important change.

10 So where does 4-1/2 million yards come
11 from? Well, about 500,000 from Virginia. About
12 1.2 million from southern approach channels to
13 the C & D Canal. It says Philadelphia there
14 because the Philadelphia District Corps of
15 Engineers is responsible for that maintenance.
16 We, the Baltimore District, do not do that work.

17 I would also like to call attention to
18 that number right there. That's the material
19 that comes from within the Patapsco River and
20 the Inner Harbor, and this material is legally

21 defined as being contaminated, and, therefore,

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1 it must be handled differently. It must be
2 placed in a contained facility. We are not
3 using this material at Poplar Island, for
4 example, or for other environmental restoration
5 projects at this time.

6 Where does this material go? I apologize
7 for how hard this is to read. It was the only
8 picture I had, and our GIS guy wasn't around to
9 help me out. But anyway here is Baltimore, the
10 Inner Harbor area. That's Hart-Miller Island,
11 which accepts both Inner Harbor and outer harbor
12 material. Pooles Island is right there, which
13 is an overboard placement site taking material
14 from the C & D Canal approach channels. Cox
15 Creek is right there. It will accept Inner
16 Harbor material when it opens officially in
17 about a year and a half or so. So that's a new
18 one coming on line, and Poplar Island down here,
19 which is right now our -- I guess you would call
20 it our primary site for outer harbor material,
21 an environmental restoration site of about 1,100

1 acres, half of which is wetlands when it's
2 completed, half of which will be uplands.

3 So what can you do with dredged material?
4 This is not by any means a complete list. This
5 is what we jotted down. If someone has a
6 revolutionary idea, we would love to hear it,
7 but maybe this will get the ideas flowing.

8 You can restore an eroded island. All our
9 islands in the Chesapeake Bay are eroding. Some
10 are worth saving for whatever reason, and we can
11 use material to do that. We can create habitat
12 or restore habitat. We can place it upland,
13 which is what we typically do for the legally
14 defined contaminated material. You can restore
15 shoreline, you can create say fringe wetlands or
16 what have you, habitat along the shoreline. You
17 can take it all the way to the ocean and put it
18 there. Norfolk District does that and other
19 districts around the country do that. We here
20 in Baltimore currently do not. You can place it
21 in an open water site as we're currently doing

1 at Pooles Island.

2 Wetland thin layering is an interesting
3 concept. What that is is you take the dredged
4 material, you fluidize it, you get a lot of
5 water in it, and then you spray it. We have a
6 picture of it back there actually. You spray it
7 in a very thin layer on top of say a marsh, for
8 example. This doesn't choke out the marsh.
9 Actually the marsh it covers nicely, and it adds
10 just a little bit of elevation into that marsh.

11 The Eastern Shore wetlands, for example,
12 are currently sinking as well as the sea level
13 is rising, so maybe this thin layer spraying can
14 keep the marsh -- keep its head above water, if
15 you will, and keep it healthy.

16 Abandoned mine reclamation. What we're
17 thinking here most is coal mines, for example.
18 It could be other mines. You fill them up with
19 dredged material. This keeps the acid drainage
20 from these -- sulfuric acid from the mines from
21 leaching out and getting into the waterways.

16

1 Agricultural soil augmentation. You can
2 take that soil and you can mix it. Typically
3 most of the dredging we do around here is silty
4 material, fine grain. You can mix it with sand
5 to make topsoil for agriculture or you can mix
6 it with sanitary sewage sludge, which will give

7 it good -- what am I trying to say? -- organic
8 materials. It makes a good topsoil.

9 Lightweight aggregate blocks. This is an
10 idea that has come to us recently where you take
11 the material and you literally cook it, and what
12 you can do is turn it into gravel essentially,
13 something that looks like that, and you can use
14 it. You can make concrete, you can make cinder
15 blocks, or whatever you would like. That is an
16 interesting concept there. You can actually
17 market the stuff.

18 So the process, what have we done so far
19 and what are we going? We started last year by
20 doing a preliminary assessment. In the next
21 slide I'm going to explain what that meant and

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1 what that concluded. PMP September '02, that's
2 where we are right now. PMP is project
3 management plan. That's the scope of work for
4 this DMMP study that we're talking about
5 tonight. We are going to complete that in
6 September. We want your input to that, and
7 that's where we are right now.

8 Then comes the dredged material management
9 study itself, which is what we have been talking
10 about, what to do with this material, what
11 should be done in the future. Then once again
12 this tiered EIS. I'll say a couple of words

13 about that now, but I'm going to talk more about
14 it later.

15 Every federal action, every federal
16 construction project requires us to follow NEPA,
17 the National Environmental Policy Act of 1969,
18 and that results in typically an environmental
19 assessment for a smaller job that's not as
20 complex or an environmental impact statement for
21 larger jobs. We plan as part of this DMMP to do

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1 an EIS. We think this will be a very important
2 thing. An EIS also mandates continued public
3 and agency input to the process. Again, I'll
4 talk a little bit more about that in a bit.

5 From that we will get the actual plan, and
6 we will put this forward as our dredged material
7 management plan for Baltimore Harbor. You can
8 see the date. It's tough to read back there,
9 but it's September of 2004. It's a two-year
10 process that's envisioned right now.

11 From there we will go out and do what we
12 call site specific studies. In other words, if
13 we decide a certain type of project is
14 warranted, a good idea, we'll go ahead and do a
15 feasibility study and we will do another
16 environmental impact statement most likely,
17 which will tie into the last one, and then once

18 a recommendation is implemented the process
19 doesn't stop. It feeds back into the DMMP.
20 What we need here is we always need to have 20
21 years of placement capacity. That's the goal.

19

1 Going back to the preliminary assessment I
2 mentioned in the last slide, this is what we did
3 last year and this is what we came up with.
4 Again, the question was does the Port of
5 Baltimore have adequate dredged material
6 placement for the next 20 years, and the answer
7 was no. We identified the shortfalls, and we
8 concluded that there is capacity for about the
9 next eight to ten years. It takes a long time to
10 get a Corps project on line, approximately nine
11 to 12 years, so we've got a problem. We've got
12 to get moving.

13 The existing sites will not efficiently be
14 managed. Let me talk about this a little bit.
15 We have a poster in the back, the second one in
16 from the left and others around here that talk a
17 little bit about this. Ideally when you place
18 dredged material in a site, you like to put it
19 in in a 3 foot lift. This is what has been
20 determined to be optimum. When you first put
21 the material in there, it's probably about 85%

1 water. A lot of this water immediately flows
2 off the top, but then you've got to wait.
3 You've got to wait for this material to settle
4 out. We do what we call crust management. This
5 means you manipulate the material in order to
6 settle it out, bring the water up to the surface
7 where it can be run off, and over time this 3
8 foot lift will consolidate itself.

9 Now, if you do not have enough square
10 footage, if you will, if you're dredging a
11 million yards, you need enough square footage
12 such that it's only a 3 foot lift. If you don't
13 have enough, you end up with a lift that's
14 higher than 3 feet and you won't get good
15 consolidation. You won't get optimum
16 consolidation. If you find yourself placing at
17 that site too frequently; in other words, you
18 can't let that material sit long enough to
19 consolidate down and you add more, then once
20 again the placement is less than efficient.

21 What we would like to do and our goal is

1 to not only identify adequate capacity for the
2 next 20 or more years, but identify capacities
3 such that we can optimally use all of the sites
4 because no matter who you talk to, I think we
5 all agree that once you have a placement site
6 and we're using it, let's get as much material
7 in there as we can. That's just common sense.

8 The final conclusion of the DMP
9 preliminary assessment was that a DMP study
10 itself is needed because of the shortfalls that
11 were determined.

12 So the DMP study itself. When we say
13 "comprehensive," what we mean is we need to look
14 at the federal channels; that's our
15 responsibility, but that's not the only dredged
16 material coming out of the Port of Baltimore
17 system. We also need to look at state dredging
18 and we need to look at private dredging, which
19 can total up to a decent amount. If you're
20 talking about a terminal that has itself a 45
21 foot access channel, it could be a lot of

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1 material, and we need to consider that.

2 The tiered environmental impact statement,
3 let me talk a little bit more about that now.

4 The tiering concept here is an interesting one.
5 What we plan to do with this dredged material
6 management study is to complete a tiered
7 environmental impact statement, and what we'll
8 do is we'll take the world of placement options.
9 No option is too far out there for us to
10 consider. Legally we've got to consider it. If
11 someone comes to us, like I said before, and you
12 want to put it in the space shuttle, we will
13 consider it. Not for too long, but we'll
14 consider it.

15 Then what you want to do is we will that
16 narrow down, and the concept right now that's
17 still being developed -- and if you have got a
18 comment on it, I want to hear about it -- our
19 concept right now is we categorize the different
20 placement types. Do you want to restore a large
21 island? Do you want to protect a smaller

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1 island? Do you want to put stuff in the
2 shoreline? Do you want innovative uses, which
3 could be the acid mine drainage, the thin layer
4 placement, or any of those concepts or any
5 others that we come up with or anyone else comes
6 up with?

7 Then what you do is you put forth a plan
8 in this EIS, and the plan says that we think
9 this suite of projects specifically or project

10 types -- this is still up in the air -- but this
11 concept will cover us for the next 20-plus
12 years. We put it out there for public comment.
13 We run it past all the agencies. We get
14 everybody to agree that this general plan is a
15 good format. We like this.

16 Then, as I showed on that other slide,
17 with the individual studies what we'll do is we
18 will then go in and study a project, a project
19 type, or whatever, and out of that study will
20 come a project ideally. Just because we study a
21 project doesn't mean it gets constructed, but if

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1 we start with a suite of projects, we can be
2 fairly confident that we're going to come up
3 with something.

4 Once again another environmental impact
5 statement is produced in that report, another
6 round of comments. The public agencies,
7 everyone gets input into that EIS also, but it
8 ties back into the other one.

9 Let me explain the advantage of that.
10 There are two. One advantage is that if we want
11 to study a particular project type and we have
12 an umbrella or tiered EIS that says that project
13 type is a good thing and you should go study it,
14 then we just say, well, that EIS said that

15 project type was a good thing and so we're only
16 going to look at projects of that type.

17 That cuts way down on our work selfishly,
18 but what does it also do on the other side of
19 this? Suppose, for example, there was a
20 shoreline project or a small island project with
21 limited capacity that the public and the

25

1 agencies thought was just a great project and we
2 should do it. Okay. If the tiered EIS says
3 that that type of project is a good thing, then
4 we go in there. We look at similar type
5 projects. We go back to that tiered EIS, and we
6 say that EIS says this is a good thing, this
7 type of project, and we study and we pick the
8 best one.

9 But if we are trying to restore a small
10 island with limited capacity, your cost per
11 cubic yard is going to be relatively high
12 compared to a project with large capacity. So
13 if we didn't have this tiered EIS, we would be
14 trying to build the small island or restore this
15 small island, and we would have to open it up to
16 the world of alternatives. It would be compared
17 to some large island, say something like Poplar
18 Island, and the economics aren't going to shake
19 out on that. I don't see how we can come out at
20 the other end of that study saying that this

1 than the larger island with tremendous capacity.

2 So the tiered EIS allows us to be more
3 streamlined in our process and it also allows us
4 to address the interests and needs of the
5 Chesapeake Bay, and we think that this is a
6 great concept.

7 Once again, we are going to continue to
8 actively seek input of the public and the
9 agencies. This is part of any NEPA, as we call
10 it, process. Again, as I said before, the first
11 task here tonight we are currently working on is
12 to put together this scope of work so that we
13 know how the rest of this dredged material
14 management plan is going to shake out.

15 The study itself is going to follow -- I'm
16 not going to bore you too much with this Corps
17 process stuff. All of our planning studies
18 follow the same general process. There is a
19 six-step planning process. The first few,
20 identify problems and needs, yes, we'll do that.
21 The preliminary assessment did much of that.

1 We'll do more.

2 Existing conditions, by that what do we
3 mean? We mean the existing conditions at the
4 port, the dredging situation, the economic
5 situation. It also means the environmental
6 situation. What are the existing environmental
7 conditions throughout the bay within the Inner
8 Harbor and how will that affect what possible
9 alternatives we can generate?

10 Then we'll actually develop those
11 alternatives, which could be specific options or
12 it could be placement types, like I said. Maybe
13 small island restoration is a good thing,
14 project type. Then we go through and we
15 analyze, evaluate, and we compare, and we come
16 up with a recommended plan, which could be very
17 specific or, as I said before, in this tiered
18 EIS concept it could be fairly broad and
19 general, and that includes any items.
20 Integrated just means typically we put the plan
21 and the EIS in the same document. That's all

1 that means.

2 This slide is 100% redundant, but I just
3 want to underscore that we're here to get your
4 comments tonight on the scope or on the DMMP
5 itself. We're open to those type of comments.
6 The comment period for scoping does close in
7 about a month. We do have to cut bait and write
8 this thing up eventually, but the DMMP itself
9 will go on for two years. Please, at any point
10 in time you're more than welcome to put in your
11 two cents.

12 So that is about all I have prepared to
13 say to you tonight. I understand that we handed
14 out two numbers. Was it two or did we get more
15 eventually? Just two. So who has No. 1? Why
16 don't we start there, and if you would please
17 come to the mike and state your name for the
18 record, I would appreciate it.

19 MR. WELSH: My name is Patrick Welsh. I
20 just have a couple of questions. One, I noticed
21 under the placement options example you have on

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1 here as a potential use open water placement.

2 MR. BIERLY: Yes. I'm glad you reminded
3 me of that. It's something I didn't harp on,
4 and Scott would have my head if I didn't mention
5 it.

6 The Corps of Engineers by guidance, by

7 policy takes a national perspective on any
8 problem we study, so when we come into a
9 situation such as this, we have to open up to
10 the whole world of possibilities. Understanding
11 open water placement is currently ongoing at
12 Pooles Island; however, that site will close in
13 2010, and it's currently against state law,
14 that's correct; however, we can't rule it out
15 yet just because it's against state law, and let
16 me tell you why.

17 To play devil's advocate, the state could
18 say we make everything illegal except taking
19 this material down to Norfolk and dumping it
20 into their channels. Obviously that's
21 ridiculous, but they could legislate us into a

30

1 corner, if you will.

2 Now, having said that, open water
3 placement is in fact against state law, and
4 therefore, it's not going to happen unless the
5 law changes; however, we can put it out there
6 theoretically and say it's a viable option.
7 Norfolk does it. San Francisco does it. We
8 could do that.

9 MR. WELSH: You stated earlier that in
10 dredging the 500,000 cubic yards in the Inner
11 Harbor --

12 MR. BIERLY: Annually.
13 MR. WELSH: -- that by law that must be
14 contained.
15 MR. BIERLY: Correct.
16 MR. WELSH: Are you also looking at the
17 potential open water placement for that?
18 MR. BIERLY: No, absolutely not. Somebody
19 could easily say that line that separates
20 contaminated from clean, that's a state law,
21 too. Yeah, but it's also a convenient line, to

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1 tell you the truth. It's conservative, which
2 makes it a good planning vehicle.
3 Anywhere in the country we the Corps of
4 Engineers or we anybody cannot anywhere in the
5 country place material that is contaminated in
6 an open water site. It goes through what is
7 called the inland testing manual. It must pass
8 an exhaustive list of criteria that has been
9 established by the EPA and the Corps of
10 Engineers. The Inner Harbor material, if you
11 take some hot stuff right by the terminals, it
12 wouldn't pass. So, no; contaminated material
13 would not under any circumstances totally
14 regardless of state law be placed in open water.
15 MR. WELSH: So if you found clean material
16 in the Inner Harbor --
17 MR. BIERLY: Then it goes back to the

18 state law question.

19 MR. WELSH: So your view is that the Corps
20 of Engineers could ignore Maryland state law.

21 MR. BIERLY: Most likely we could not. We

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1 still need to get permitted by the State of
2 Maryland for anything we do, a water quality
3 certificate. I'm looking to Scott to see if he
4 wants to add anything on that. You think that's
5 good? Okay.

6 MR. WELSH: Thank you very much.

7 MR. BIERLY: Thanks for your comments. I
8 hear there is a No. 2.

9 MR. STANCILL: My name is Terry Stancill.
10 My wife and I live in Harford County near the
11 Susquehanna River, and I've got a few questions.

12 You've mentioned the term "economic" a
13 number of times this evening. What does
14 "economic" mean in connection with the whole
15 dredging question?

16 MR. BIERLY: The Corps of Engineers needs
17 to satisfy several criteria, and one of them is
18 always the benefit-cost ratio. If you get more
19 benefits from the project than it costs, then
20 economically speaking it's a good project. In
21 environmental restoration you're not necessarily

1 talking monetary benefits. We still consider it
2 an economic exercise because there are
3 environmental benefits.

4 When you're talking navigation, you're
5 talking economic benefits. If a channel is 42
6 feet deep, what is the anticipated economic
7 impact of that compared to 41, 43, or anything
8 like that? So if we maintain a channel, it
9 needs to be economically appropriate to maintain
10 that channel.

11 Does that answer your question?

12 MR. STANCILL: Yes. So the maintenance of
13 the channel for shipping is the primary economic
14 reason even though there may be economic
15 benefits from environmentally improving an area
16 or enhancing habitat or other less easily
17 quantifiable areas of benefit.

18 MR. BIERLY: Correct.

19 MR. STANCILL: The next question is are
20 there any plans or are there any discussions
21 being considered to dredge above the Conowingo

1 Dam to intercept the silt that's coming down the
2 Susquehanna River in that catch basin?

3 MR. BIERLY: I could give you the long
4 five-hour answer or the quick one. I'll do
5 something in between.

6 Yes, that's a big issue, and we're well
7 aware of it. At the last meeting someone asked
8 the same question, and so what I did was I gave
9 a brief overview of it. I'll try to be a little
10 less verbose than I was the last time.

11 There are four hydroelectric dams on the
12 Susquehanna River, for those of you who don't
13 know, between Harrisburg and the bay, and each
14 one of those has been trapping material that
15 naturally comes down the Susquehanna River. Of
16 course, human development has increased the
17 amount that comes down, but even naturally a lot
18 of it comes down.

19 Approximately half of that material, sand,
20 silts, clays, whatever it is, gets trapped
21 behind these dams before it hits the bay, and so

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1 speaking from the environmental point of view of
2 sediments or the dredging point of view, this
3 has been a good thing that we're not getting all

4 that down here. In about the next 15 or 25
5 years, depending on who you ask and when you ask
6 them, the last dam of Conowingo, the one
7 furthest to the south, will be filled, if you
8 will, reach steady state is what the scientists
9 like to say so that as much material that is
10 coming down the river will go over the dam and
11 come down eventually into the bay.

12 This is of great concern, not just from
13 the dredging aspect, but from the environmental
14 aspect. So the Corps currently has what we call
15 a study authority. Congress has told us to
16 undertake a study. What it is is it's a
17 two-parter actually. One part of it, the part
18 you're asking about, is for us to consider the
19 material behind the dams and decide what to do
20 with it.

21 They are still, going back to the scoping

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1 word, they're still scoping that. The
2 Susquehanna River Basin Commission, the State of
3 Maryland, and some others are interested in
4 partnering with us on this one because it's a
5 very big issue. There is about 200 million
6 cubic yards as I understand it trapped behind
7 these dams.

8 The reason we care about material that's

9 currently trapped as well as material that will
10 be trapped is every time a big storm -- and I
11 don't mean a couple of inches rain; I mean a big
12 storm -- comes through it actually scours some
13 of the material out and more material comes down
14 the bottom than would have naturally. So that's
15 a big issue.

16 But this study when it gets going, which
17 hopefully will be fairly soon -- there was a big
18 meeting in our office today actually -- will
19 look at that issue and try to come to some tough
20 conclusions such as do we dredge some of this
21 material out to maintain some capacity, some

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1 trapping capacity, if you will? Is that the
2 best way to go? Do we go up into the watershed
3 and try to -- you know, you've got a vacuum
4 cleaner, a sandy beach, and you try to hold the
5 sand down there. Is that the best thing to do
6 -- don't take that as an editorial comment --
7 or a combination, which makes sense to me.
8 That's being looked at.

9 How does that refer back to our DMMP? The
10 question at the last meeting was are you
11 considering that material -- are you trying to
12 hang a number on it? In other words, ten years
13 out what is going to be the contribution or
14 extra contribution from those dams into the

15 channels? It is an amazingly difficult thing to
16 determine.

17 For a year and a half I sat on the task
18 force which looked at this issue that's chaired
19 by the Susquehanna River Basin Commission, and
20 you get the smartest people in the world in the
21 room, and the consensus was I don't know. The

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1 other consensus, by the way, was that sediment
2 can't move upstream, but that wasn't real tough
3 to agree upon. We have what we call a turbidity
4 maximum. Where most of the material drops out,
5 it's almost always above the Bay Bridge.

6 I know I'm skirting your question, but
7 we're aware of it. We're trying to quantify it
8 through another study. The best thing we can do
9 right now over the course of the next two years
10 my guess, unless they hit on something good in
11 this other study, is for us to look at dredging
12 from prior years and to see if we can notice a
13 trend because the more full these dams become,
14 the lower their trapping efficiency, and so if
15 we see some patterns there, maybe we can see
16 where we're headed. So we're aware of it.
17 We're going to try to deal with it, but I can't
18 promise that we're going to hang a real number
19 on it.

20 MR. STANCILL: Another related question is
21 in the Corps' deliberations about sediments

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1 upstream from Conowingo has the responsibility
2 of the various utilities been considered, their
3 responsibilities to share in the cost of
4 maintaining those pools such as Conowingo Dam,
5 Safe Harbor, Peach Bottom Atomic Plant, which
6 needs water for cooling, and who else? But
7 anyway those several utilities --

8 MR. BIERLY: Three Mile Island.

9 MR. STANCILL: Three Mile Island. It
10 would seem to me that they should have some
11 responsibility for sharing in finding a solution
12 to and sharing in the cost of that problem
13 because they need those pools to generate
14 electricity or to provide cooling water.

15 MR. BIERLY: Right. The folks from
16 Conowingo, Holtwood, and Safe Harbor were on the
17 task force I alluded to before. The topic of
18 who is responsible honestly didn't come up.
19 What did come up was that there is a whole lot
20 of coal trapped behind these dams, a whole lot
21 of coal. In some places they think maybe 40% of

1 it is coal, and there has been talk about
2 actively mining that material. In fact, either
3 Holtwood or Safe Harbor -- since I'm being
4 recorded, I'm not going to choose one because
5 I'm not sure -- but historically before Agnes
6 did actually dredge and use coal from their
7 pool. The president of one of the dams up
8 there, he wants the mineral rights, but honestly
9 when it comes to responsibility and things like
10 that or whether they will participate
11 economically or financially hasn't come up.

12 MR. STANCILL: There may be something --
13 and I just want to put this in the record --
14 there may be something in the original licensing
15 agreements for those facilities which speaks to
16 the responsibility of maintaining the depth of
17 the pools. I would think especially Peach
18 Bottom Atomic Plant, which is the Nuclear
19 Regulatory Commission, because that's a safety
20 issue, but they have been hopefully making money
21 all of these years off of the water that has

1 been coming down the Susquehanna, and there may
2 be something in some old agreements that speaks
3 to their responsibility to maintain the depth of
4 the pools.

5 MR. BIERLY: That's a good comment. I'm
6 going to pass that on to Amy Guise, who is our
7 study manager on that effort. The one thing you
8 said about -- another comment, I'm not sure I
9 replied to it, but for the function of the
10 hydroelectric dam they don't need to maintain a
11 pool because the turbines are at the bottom of
12 the dam and the scour keeps it clean. This
13 might be tough to visualize, but if this is the
14 dam and the original river went like that, the
15 river now goes like this. The reservoir is
16 filled up with sediment, but right next to the
17 dam it's still deep because turbines are at the
18 bottom and rushing water keeps it clean. So if
19 it fills up, operationally it makes no
20 difference, but I will bring up that point.
21 That's a good one.

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1 MR. STANCILL: How about Aberdeen Proving
2 Ground? There are many thousands of acres. A
3 lot of it not usable for much. I know Scott is
4 aware of it.

5 MR. BIERLY: Yes.

6 MR. STANCILL: There is unexploded
7 ordnance up there, but an awful lot of land that
8 would seem to me would be an ideal location to
9 consider for placement especially in shallow
10 lifts of dredged material.

11 MR. BIERLY: That one is on our list.

12 MR. JOHNSON: I can elaborate a little
13 bit. It is on our list. Right now the
14 discussions we have had with Aberdeen Proving
15 Ground, we're kind of waiting on a national
16 policy on how to deal with unexploded ordnance.
17 Until that can get resolved -- I'm talking at
18 the Department of Defense level -- the liability
19 issues working with that are currently
20 insurmountable.

21 MR. BIERLY: The location is very

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1 attractive, though.

2 MR. STANCILL: Thanks very much.

3 MR. BIERLY: Would anybody else like to
4 say something?

5 MR. MENDELSON: On the economic use how
6 navigation channels were evaluated for
7 economics, but the restoration projects are
8 evaluated differently can you provide a little
9 bit more information. I think that's what you
10 were getting at, wasn't it?

11 MR. STANCILL: Yes.

12 MR. BIERLY: Do you want me to expand on
13 that a little bit?

14 MR. MENDELSON: If you don't mind.
15 Thanks.

16 MR. BIERLY: When we maintain a channel,
17 when we construct a channel, we need to do an
18 economic evaluation of that channel. This
19 includes determination of traffic, determination
20 of the value of the goods, the tonnages, what
21 have you, that go through this channel. We do

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1 it on large navigation projects such as the Port
2 of Baltimore. We do it on small navigation
3 projects such as the scores, if not hundreds we
4 have around the State of Maryland, 6, 7 foot
5 channels that service watermen. How much cash
6 do they bring in? If the channel shoals and
7 they sustain damage to their engines or rudders
8 or something like that, what is the value of
9 that and how much money have we saved if that
10 channel is cleaned?

11 It's the exact same thing on the large
12 projects. If this channel is allowed to shoal
13 in for maintenance or for construction if this
14 channel is not constructed, what do we project
15 will be the future situation economically? What
16 tonnages would be lost? Conversely what

17 tonnages will come?
18 You can pretty accurately hang a value on
19 that monetarily because these goods as they come
20 in -- you can do it one of a few ways. You can
21 either go -- well, you can probably do both.

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1 What is the value of the goods and what is the
2 value of the time? For example, the Baltimore
3 anchorages project is currently under
4 construction. We didn't deepen any channels.
5 We deepened some anchorages, but the fact is we
6 didn't deepen any channels. So it isn't just a
7 matter of what happens when you get to the port;
8 it's wasn't getting to the port.

9 What we did was since you can't assume
10 that we're going to attract deeper ships because
11 we didn't deepen anything, the channels anyway,
12 what could you do? Well, you could save them a
13 whole lot of time. You could make it more
14 efficient, and you can hang a dollar value on
15 that time, the value of their time. For
16 example, when this project is completed, many,
17 many ships that now anchor all the way down by
18 Annapolis are going to be able to anchor right
19 up in the harbor, a stone's throw from the
20 terminal that they're going to call on. So if
21 there is a ship at their berth that they need to

1 get to, they're not going to have to wait
2 anymore for that ship to chug all the way out of
3 the Inner Harbor and all the way down past the
4 Bay Bridge before they start to gear up because
5 they probably can't time the pass.

6 There are a lot of different parts of
7 navigation that cost money. Conversely,
8 generate money. I'm no economist. I've seen
9 the process happen, and it will give you a
10 headache. It's really something. But that's
11 what we'll do. So maintenance will say what if
12 this maintenance isn't done? What if navigation
13 as it now occurs cannot happen? What is that
14 going to cost versus what does it cost to
15 maintain that channel?

16 Now, the basis of that is what is called
17 the base plan. For example, what is the least
18 expensive environmentally -- what is the word --
19 suitable, acceptable -- least costly
20 environmentally acceptable way to dispose of
21 that material or to place that material, and

1 that is the cost of the project.

2 Poplar Island is an extra cost, which is
3 why it's cost shared with the state, but the
4 determination has been made that the
5 environmental benefits that we get, the created
6 habitat that we get from constructing that
7 island is worth that extra expense.

8 Any Corps of Engineers environmental
9 restoration project, and we're doing them all
10 over the place right now, navigation is just one
11 small area. We've got tons of them. They all
12 go through the same process, very similar to the
13 economic process that I vaguely stumbled through
14 earlier, and that is what is the future
15 condition if we don't do anything? Well, Poplar
16 Island would have eroded away and been gone.
17 That's it. There is no question about it. What
18 is the future going to be if we do this project?
19 Well, what the future is going to be is it's
20 going to be some nice uplands, and Scott is our
21 expert and he can tell us, but hundreds of acres

1 of marshland as well, some great habitat. We've
2 already got turtles laying eggs out there. What is

3 the cost of it? Is it worth it? It's a harder
4 question because you can't hang a dollar on it.
5 But it's a very similar process.

6 I feel like I haven't said anything new,
7 but just added more words. Have I clarified
8 that? My phone number is on the first slide if you
9 have insomnia. Anyone else?

10 We thank you very much for coming out. We
11 are around to join in some less formal
12 conversation if you would like. Also once again
13 the court reporter is here. If you would like
14 to make a statement for the record, but you
15 didn't want to say it out loud, you can see
16 Carol about that.

17 Let me say one more thing. Carol is not a
18 Corps employee, which is very important for two
19 reasons. One, if you ask her a question about
20 this, she won't know the answer unless she has
21 picked it up tonight, and the second thing is if

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1 you want to call us a bunch of lizards, she
2 doesn't care.

3 Thank you all very much for coming out.

4 (Whereupon at 7:55 p.m. the meeting was
5 concluded.)

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