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RESTORATION ADVISORY BOARD MEETING MINUTES 23 FEBRUARY 2012 MCB CAMP
LEJEUNE NC
2/23/2012
CH2M HILL

PUBLIC MEETING

RESTORATION ADVISORY BOARD (RAB)
SITE UXO-23 D-9 SKEET RANGE
ENGINEERING EVALUATION/COST ANALYSIS
MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA

FEBRUARY 23, 2012

COASTAL CAROLINA COMMUNITY COLLEGE
444 WESTERN BOULEVARD
JACKSONVILLE, NORTH CAROLINA 28546

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MEETING MODERATOR - MS. CHARITY M. RYCHAK
DOI CO-CHAIR
MCB CAMP LEJEUNE EMD/EQB
BUILDING 12, McHUGH BOULEVARD
CAMP LEJEUNE, NORTH CAROLINA 28542

PRESENTER - MR. CHRIS BOZZINI, CH2MHILL

COURT REPORTER - AIMEE C. RIGSBY

CAROLINA COURT REPORTERS, INC.
105 Oakmont Professional Plaza
Greenville, North Carolina 27858
TEL: (252) 355-4700 (800) 849-8448
FAX: (252) 355-4707

1 COURT REPORTER NOTE: The public meeting portion
2 of the Restoration Advisory Board (RAB) meeting convened at
3 6:00 P.M., in Room 102 of the Business Technology Building,
4 Coastal Carolina Community College.

5 MS. CHARITY M. RYCHAK: Hi. Good evening.
6 We're excited about the turnout tonight. For those of you
7 who don't know me, I am Charity Rychak, Camp Lejeune.
8 Tonight's our RAB meeting, and we're going to be starting off
9 with a public meeting on the D-9 Skeet Range, the Non-Time-
10 Critical Removal Action. We have a court reporter here
11 today, just so you guys know. She will be recording
12 everything, and that will be going into the administrative
13 record. We'd just like to ask, if anybody has questions,
14 please state your name first, and then go ahead and ask your
15 question. And then, after we finish this presentation, we'll
16 move into the rest of the presentations with the RAB. So,
17 without further ado, Chris Bozzini with CH2MHILL.

18 MR. CHRIS BOZZINI: Okay. I'm here tonight to
19 talk about the skeet range. The Navy is going to do a
20 removal action of the former skeet range. And what we want
21 to talk about is just the site history, some information
22 about the site, the removal action objectives, describe the
23 alternatives we looked at and that we examined during the
24 study, present the recommended alternative the partnering
25 team has come up with, discuss community participation in

1 this meeting, and review the path forward and the schedule.
2 So the former skeet range is 187 acres. It began in the
3 early '50's. Contained 10 firing points, 8 skeet houses, and
4 it was closed back in July of last year. When we talk about
5 the skeet range, we're really kind of talking about two
6 different things. We have got this entire area defined as
7 the skeet range, but, for this project, and what we're kind
8 of concerned about from this environmental standpoint is
9 actually the shot fall zone, which basically represents the
10 maximum distance a shot from a skeet will travel. And, so,
11 you know, much of our sampling was focused here. And we have
12 done more sampling up here, and continue to do more sampling;
13 but, like I said, the -- the focus of this talk, of this
14 project, is all within the shot fall area. One of the
15 reasons we're here and one of the big drivers is this is a
16 big military construction project that's going to be
17 occurring. And so this is kind of our -- our shot fall area.
18 And, obviously, there is going to be a lot of building and a
19 lot of construction going on. We were actually -- a bunch of
20 us were at a meeting today between contractors just trying to
21 stage the equipment and so forth. And so before these guys
22 could start building, we needed to take care of the lead and
23 material that's out there. For the last couple of years, we
24 have been investigating this area. What we have done is just
25 put a grid out there, collect some soil samples, do some

1 field testing and some lab testing. And what we're looking
2 for is the lead from the shot, and then it turns out that the
3 clay pigeons actually have this polycyclic aromatic
4 hydrocarbon, which is a component of tar, and basically holds
5 it together. So those are the two compounds that we're
6 actually looking for when we go out there. And, because of
7 the nature of how it got there, i.e. you shoot a gun, we
8 really focused on the top one foot. We did take deeper
9 samples out there just to make sure there is nothing deeper,
10 but the primary focus was that zero to one foot area. And
11 then we have to take those results and we compare it to the
12 human health and environmental screening numbers that are out
13 there. And you can kind of see -- well, maybe not that well
14 -- but we actually color-coded our grids, and we're working
15 off of -- we're concerned about our numbers 400 and greater.
16 Like I said, you probably can't see it that well, but this is
17 our shooting range, and kind of common sense; everything
18 within, you know, the closer to the range and so forth --
19 that's a little better. So to define this Non-Time-Critical
20 Removal Action, we basically took -- took the results of our
21 grid. It turned out to be 16 acres, and we actually have a
22 little additional part that wasn't connected to the grids
23 that needs to come up as well. And, when you take 16 acres,
24 and you take the top foot off, it turns out to be a little
25 less than 26,000 cubic yards. So, from a removal standpoint,

1 our basic goal is just to mitigate the potential risk of
2 human health and the environment from the lead and these PAH
3 compounds. And it's to reduce, also, the potential migration
4 of this lead shot from the soil into the groundwater and
5 surface water area. So these are our chemicals of concern
6 and our clean-up levels that a future contractor will have to
7 go out and dig up that soil to meet those standards.

8 So with that background, we went out and we did an
9 evaluation of what alternatives are out there that exist to
10 remove this lead contaminated soil. And we came up with five
11 of them. The first one is just no action; we would just
12 leave it in place. The second one is we dig it up and haul
13 it off site. And the third one is where we dig it up, and we
14 try to separate the lead shot out, and recycle that, and
15 place the soil back into the excavation. The fourth one is
16 where we mix in a stabilizing agent like cement or some other
17 com -- chemical or so forth; it basically binds the lead to
18 the soil so it won't leech out, and then we would off site --
19 dispose of that off site. Then, the last alternative, is
20 where we basically are doing the same process, but we leave
21 it in place. So, this first alternative is excavating it and
22 doing the screening to removing the lead. As the material
23 would be excavated, we would take confirmatory sampling
24 afterwards to make sure the clean up levels will hit. The
25 off-site disposal would be the lead would be recycled and the

1 ability of removing the lead shot is somewhat suspect. And,
2 so, the assumption was a lot of this material would go off as
3 hazardous waste. And take new fill, backfill the site, and
4 grade it for site restoration for the future construction.
5 The next alternative we looked at was this particle
6 separation. Basically, getting some large mechanical sieves
7 to keep processing the soil to remove the lead shot and the
8 other material. You know, separating the lead out and,
9 basically, you keep treating the soil until you hit your
10 clean-up levels, and then you put the clean -- the clean soil
11 back into the excavation. The next one is this in situ
12 stabilization, where basically we would take our material,
13 our cement or whatever, and just literally mix it in place.
14 So you would take, like, a rototiller, or something like
15 that, a road grinder, or some kind of mixing equipment and
16 just go along and mix the material in. And then, we could
17 test that and the idea would be this stabilizing agent would
18 prevent the soil from being a hazardous waste. And so we
19 would excavate this treated material and be able to send it
20 to, basically, any landfill because it's not a hazardous
21 waste. Clean fill would be brought on, restored, and the
22 future construction would go forward. And then, this last
23 one is basically the same as before, except we leave it in
24 place. So we treat the material, leave it in place and build
25 on it. There would be sampling to make sure the lead has

1 been stabilized, site restoration, land use controls applied
2 to the site. Does anybody have any questions? Yes, sir.

3 MR. LEONARD McADAMS: I am McAdams. I am just
4 wondering which would be more cost effective.

5 MR. CHRIS BOZZINI: We'll get to that because
6 one of the biggest drivers is how the soil is handled. So,
7 like, if it remains a hazardous waste, the disposal cost is
8 probably, you know, five times -- in the order of five times
9 more. So we -- we really don't want to be handling a
10 hazardous waste. So that's kind of the key logic and the key
11 thinking that we're trying to do here. So, as part of our
12 evaluation, this is -- the regulations require us to look at
13 these various alternatives. And, you know, we just kind of
14 do a relative ranking of what's protective, you know, what
15 complies with the laws, you know, what's going to be
16 protective for the long-term. You know, try to reduce the
17 toxicity, mobility, and the volume of the material. And
18 then, you know, what kind of issues would be faced in the
19 short-term. And so, you know, in general, the excavation is
20 okay. The excavation with the particle separation is kind of
21 similar, although, there are a lot more regulatory
22 requirements to be digging up the material and placing it
23 back after treatment than doing off-site treatment.
24 Alternative four works out pretty well as far as the
25 effectiveness of being able to treat and be protective.

1 Alternative five, you know, we kind of have the basic problem
2 of we could treat this material so it doesn't leech, but all
3 the lead still remains at the site. So that's kind of a big
4 drawback, especially when you are building the whole -- I
5 think it's barracks and other facilities going there. The
6 next set of criteria is what we call implementability. You
7 know, can we do it; you know, how easy is it to permit and
8 make sure all the regulatory boxes are checked; and are there
9 contractors and services available. So, once again, these
10 are all somewhat routine, standard approaches. Once again,
11 you know, there are -- the in situ stabilization has some
12 administrative issues, more of those combined -- compared to
13 the others. And here is the cost numbers, where money always
14 matters. So this first one, you know, the fact that this
15 stuff could be a hazardous waste is just -- it's just really
16 expensive to deal with. You know, we'd have to send it to
17 Alabama or something like that, or Michigan. The two
18 alternatives of, you know, excavating, trying to separate the
19 material out, or stabilizing it, and excavating it, and
20 taking it off site, they're roughly about the same cost,
21 relatively speaking. And then, this last alternative of just
22 treating it in place and leaving it there, is much lower
23 because we don't have to pay for disposal, we don't have to
24 pay for new material to come on, and so forth. So the
25 primary team, upon evaluating report, is recommending to do

1 this in situ stabilization, dig it up and send it off as a
2 solid waste. The basis is it removes the lead and the PAHs
3 from the site, it eliminates any kind of future risk to the
4 future residents and workers at the site. We're treating the
5 material to reduce the toxicity and mobility. It's pretty
6 standard technology. You know, pretty much routine
7 construction work, so it's manageable risks to site workers,
8 and the community, and so forth. You know, minimal
9 regulatory issues because we would treat this material until
10 it was not a hazardous waste, so that makes the ability to
11 dispose of it a lot easier. It's pretty much a proven and
12 reliable technology; pretty standard construction stuff. And
13 it's relatively cost effective. So does anybody have any
14 questions about that?

15 MR. STEVE THOMPSON: Just -- just a statement
16 going back to the last question of what it costs. Obviously,
17 you're working with the base to cite future construction.
18 Given the impending budget reductions and construction costs,
19 what year is that -- is the construction proposed for that
20 site programmed?

21 MR. CHRIS BOZZINI: This year.

22 MR. STEVE THOMPSON: This year?

23 MR. CHRIS BOZZINI: Yeah.

24 MR. STEVE THOMPSON: Okay.

25 MR. CHRIS BOZZINI: So the plan would be the

1 contractors would be mobilizing this spring.

2 MR. STEVE THOMPSON: Okay.

3 MR. CHRIS BOZZINI: So, as part of the community
4 participation, this public meeting is -- is a component of
5 the process. The public comment period began, I guess, about
6 two weeks ago or not quite two weeks ago, and will extend 30
7 days through March 12th. Comments should be postmarked no
8 later than March 12th. Any kind of significant comments will
9 be addressed and presented in the administrative record, and
10 tonight is the public meeting for this. And, you know, I
11 think we have got cds of the report, so, you know, feel free
12 -- question?

13 MR. THOMAS MATTISON: Yes; Tom Mattison. Have
14 we discovered any plant vegetation that could remove any of
15 the contaminants on the site?

16 MR. CHRIS BOZZINI: You know, we -- we really
17 didn't look at what's called phytoremediation because we have
18 got to construct -- well, the -- yeah, the marines have to
19 construct -- do all this construction. And phytoremediation
20 tends to be kind of a long-term, shallow groundwater issue.
21 And so it's really not applicable to meet the construction
22 needs of these guys. I mean, the marines need this property,
23 and they have got to be building. And so we have got to take
24 care of the environmental issues before they can start
25 turning soil and so forth.

1 MR. RANDY McELVEEN: You have to go through
2 several planting seasons before you can get all the lead out
3 of there.

4 MR. CHRIS BOZZINI: So, like I said, we have got
5 the cds up front. It is available online, the report. And I
6 think it just got put in the library today, so it's also in
7 the library. Comments could be submitted to any of these
8 four people; we have got Charity, Bryan with the Navy, Gena
9 with the EPA, and Randy with the State. So the path forward
10 -- so we are in the public comment period. Once the public
11 comment period is over, the final action memo -- the action
12 memo is basically the official documentation of what's the
13 selected remedy. And the planned work is to start this
14 spring; and I would guess it's going to be in the order of
15 six to nine months to complete, and there will be a summary
16 report and so forth. And then, if you kind of go back to
17 that early slide I showed, the areas outside that shot fall
18 area, we're still doing -- continuing to investigate those
19 areas just to evaluate any kind of lead PAHs that may impact
20 ground water, creeks, drainage areas, et cetera. And that
21 will continue this year. That's it. That concludes the
22 meeting. If there is any questions?

23 MR. MATT LOUTH: We also have fact sheets
24 about --

25 MR. CHRIS BOZZINI: Yeah, we have fact sheets.

1 MR. MATT LOUTH: Yeah. About the --

2 MR. CHRIS BOZZINI: That, I think, summarize.

3 MS. CHARITY RYCHAK: Bryan's contact info is
4 actually on that fact sheet, too, so --

5 MR. RANDY McELVEEN: What was the cost on
6 alternative four, again?

7 MR. CHRIS BOZZINI: Yeah. Probably a little
8 under \$5,000,000, maybe. I don't know the number off the top
9 of my head, but -- so, yeah. Here is \$4,000,000, so it's
10 probably about \$5,000,000.

11 MR. RANDY McELVEEN: Okay.

12 MR. STEVE THOMPSON: Just as an education --
13 Steve Thompson -- just as an education for myself, what is a
14 non-time-critical removal action? What's the difference
15 between that -- what are the other categories?

16 MR. CHRIS BOZZINI: What it is -- and the circle
17 process has, like, an investigation feasibility study, record
18 of decision. It's a more extended time period process, where
19 a non-time-critical removal action is basically an off-ramp
20 that allows you to take an action in a quicker manner,
21 compared to the traditional method. I mean, Gena, I don't
22 know, is that a good layman's way or --

23 MS. GENA TOWNSEND: Yeah. Well, I know you guys
24 have been around here for a while. If we had taken this as a
25 normal circle process, we would have to deal with the

1 remedial investigation and a full blown risk assessment.
2 Then we would go into the feasibility study. It would --
3 essentially, it would have taken you about two or three years
4 to get where we are now before we take an action. The non-
5 time-critical removal action says that there is a threat; you
6 can remove it, but you don't have to do it immediately, but
7 you want to be able to get the public input into it. That's
8 why they call it a non-time-critical. Time-critical is
9 something you found now, and you need to get it tomorrow, and
10 we'll tell you about it once we've finished.

11 MR. CHRIS BOZZINI: So -- so an example of the
12 critical -- time-critical removal action was when we found
13 some drums last year at Lot 201 and dug those up. Going
14 once, twice? Okay. I think we're good. Thanks.

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* * * * * THE PUBLIC MEETING CONCLUDED AT 6:19 P.M. * * * * *

