THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

convenes the

NINETEENTH MEETING

CAMP LEJEUNE COMMUNITY ASSISTANCE

PANEL (CAP) MEETING

APRIL 5, 2011

The verbatim transcript of the Meeting of the Camp Lejeune Community Assistance Panel held at the ATSDR, Chamblee Building 106, Conference Room A, Atlanta, Georgia, on April 5, 2011.

STEVEN RAY GREEN AND ASSOCIATES
NATIONALLY CERTIFIED COURT REPORTING
404/733-6070

C O N T E N T S

April 5, 2011

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P A R T I C I P A N T S

(alphabetically)

BLAKELY, MARY, CAP MEMBER
BOVE, FRANK, ATSDR
BRIDGES, SANDRA, CAP, CLNC (via telephone)
BYRON, JEFF, COMMUNITY MEMBER
CLAPP, RICHARD, SCD, MPH, PROFESSOR (via telephone)
DAVIS, DEVRA, PROFESSOR, CAP MEMBER
ENSMINGER, JERRY, COMMUNITY MEMBER
FLOHR, BRADLEY, VA
FONTELLA, JIM, COMMUNITY MEMBER
MASLIA, MORRIS, ATSDR
PARTAIN, MIKE, COMMUNITY MEMBER
PORTIER, DR. CHRISTOPHER, DIRECTOR NCEH/ATSDR
RODENBECK, SVEN, REAR ADMIRAL (via telephone)
RUCKART, PERRI, ATSDR
SIMMONS, MARY ANN, NAVY AND MARINE CORPS PUBLIC HEALTH CENTER
STALLARD, CHRISTOPHER, MODERATOR
TOWNSEND, TOM (via telephone)

P R O C E E D I N G S

(9:00 a.m.)

WELCOME, INTRODUCTIONS AND ANNOUNCEMENTS

MR. STALLARD: Good morning, everyone. Welcome to our CAP meeting this morning. There are some new faces we see at the table so what we're going to do is just go around and I'd like you briefly to introduce who you are, what your affiliation is and then we'll go over the operating guidelines that keeps us all focused and on track. And then we'll go into updates from CAP members. But I think, Dr. Portier, before we start, do you have anything right now or do you want to wait till we go around?

DR. PORTIER: I just wanted to welcome everybody to Atlanta. I'm happy to be here. Today you'll see more of me than you saw last time. Last time you recall I was Vik Kapil, and this time I'm myself. Vik is manning the Emergency Operation Center on our main campus because of the Japan crisis. And so I will be here.

MR. STALLARD: Welcome, thank you.

And so when we go around, please be reminded that push your button, so to speak, when the red light comes on, and when you're finished turn it

off.

So let's start with introductions. We'll start over here with Jim and go around.

MR. FONTELLA: Jim Fontella, CAP member.

MR. BYRON: Jeff Byron, CAP member.

DR. DAVIS: Devra Davis, CAP member.

MS. SIMMONS: Mary Ann Simmons, Navy-Marine Corps Public Health Center.

DR. PORTIER: Chris Portier, Director of National Center for Environmental Health and Agency for Toxic Substances and Disease Registry.

DR. BOVE: Frank Bove, Division of Health Studies.

MS. RUCKART: Perri Ruckart, Division of Health Studies.

MR. FLOHR: Brad Flohr, Department of Veterans Affairs.

MS. BLAKELY: Mary Blakely, CAP member.

MR. PARTAIN: Mike Partain, CAP member.

MR. ENSMINGER: Jerry Ensminger, CAP member.

MR. STALLARD: Welcome everyone. And on the phone we have?

(no response)

MR. STALLARD: Anyone on the phone?

(no response)

MS. RUCKART: Sandy, are you on the phone? Tom?

Dick?

MR. STALLARD: I guess not so we'll move on. So what I'd like to do is acknowledge and welcome Mary as our newest addition to the CAP as a member.

As is our custom we generally talk about guiding principles that keep us focused and working together toward a common goal and in harmony. So we start with zero personal attacks, focus on the issue at hand, remember that this is a public meeting, live streaming.

Members of the audience are here, and we're glad that you're here listening. You may be invited to speak at some point, but if not invited we ask you to refrain from your contributions.

Please turn your cell phones off or on silent, say your name before speaking and push the red button so that our reporter can capture. This is taken down. Respect for the speaker meaning, of course, that we can only hear one voice at a time, and again, our principle of openness and transparency in these proceedings as we continue to work toward resolution.

And with that I'm sure that, Jerry, this would be an appropriate time to start the CAP updates.

CAP UPDATES/COMMUNITY CONCERNS

MR. ENSMINGER: Yeah. We discovered a report. It's CERCLA Document Number 428, which is dated May of 1988, and it was a remedial investigation that was done by Environmental Science and Engineering. In that report the contractor warned the Department of the Navy and United States Marine Corps about interim measures that needed to be taken during the remediation process of all the contamination plumes that were at base.

One of those interim protective measures that they were warned about was ambient air quality sampling within the buildings that were located above the contamination plumes, especially in the Hadnot Point industrial area. If you will look at CERCLA 260, it was an internal evaluation of how they were going to execute these interim protective measures, primarily the vapor intrusion, and also the ambient air quality sampling.

The Assistant Chief of Staff of Facilities, Colonel Dalzell, wrote a letter to the Commanding Officer of the Preventive Medicine Unit at the Naval Hospital asking them to do a work-up and point paper about how they would execute this ambient air quality sampling in these buildings. They therefore went and did this entire point paper on how they

were going to execute this if they could.

And the Commanding Officer of the Preventive Medicine Unit came back to the Assistant Chief of Staff of Facilities in writing and told them that with the current personnel that they had on staff and not having the special equipment required to do the sampling, their recommendation was that they contract it out.

Then we find CERCLA 47, Document Number 47 which is the meeting minutes of the TRC Committee, which is the precursor of a RAB that later became Restoration Advisory Board. These are required by law. The TRC meeting, the Assistant Chief of Staff of Facilities, Colonel Dalzell, and the base environmental engineer, Bob Alexander, announced to the public that these interim protective standards and measures were going to be taken.

And then on 5 October in CERCLA 260 again there's a letter from the Colonel Dalzell, Assistant Chief of Staff of Facilities, to LantDiv telling them, providing them with the PMUs, Preventive Medicine Units, evaluation and their recommendation that this stuff be contracted out, and he requested guidance from LantDiv on how they were going to execute this. They needed money, and they needed to

contract. After that, it's crickets until 1999 at which time Building 1101 had to be evacuated.

DR. DAVIS: What's crickets mean?

MR. ENSMINGER: Crickets means nothing. We can't find any document that says that any air quality samples were taken, and I find no documents where there's any analytical results for any air quality samples.

DR. DAVIS: During that time period I was Executive Director of the National Academy of Sciences Board on Environmental Studies and Toxicology. We had a Committee on Toxicology that was completely funded by the Department of Defense. And that Committee would routinely recommend standards and levels for actions to be taken with respect to military housing with the number of contaminants.

Now it's been, as you know, many years, but my recollection is that the Committee on Toxicology of the National Academy of Sciences National Research Council actually did issue recommendations on some of the same pollutants that you're talking about here. Now whether they talked to one another, of course we don't know, but the fact is there was guidance.

And I think it's just relevant to establishing

the fact information here to know that there was such guidance. Whether it was used or not is another question, but it did exist. It is perhaps relevant and it would be worthwhile for this group to obtain that information because the Committee on Toxicology existed for at least 30 years to provide that kind of guidance and advice.

MR. STALLARD: Thank you, Devra.

MR. ENSMINGER: Now Jim Fontella has done an amazing job on researching this stuff and all the requirements and regulations required by the State of North Carolina, EPA. You name it; he's got it.

But my question to ATSDR is this. This report was written in May of '88. This was a identified exposure pathway, and this was written three years before ATSDR showed up at the front gate at Camp Lejeune. Why wasn't this addressed in that '97 Public Health Study? Here we go. This is another, this is another shortfall, and this should have been identified and addressed in that '97 Public Health Assessment.

And we're back to the benzene issue. They wrote that off. They knew about it. It was in the indexes. But if the Public Health Assessment is going to be reissued, which I'm aware that it's

going to be after the water model's completed, this pathway's going to have to be addressed because we have an individual who worked in Building 1101 that we ran into at a meeting in Roanoke, Virginia.

She worked in that building from 1987 through 1990. She's got multiple myeloma and another ailment that is directly linked to benzene exposure. And she was at Camp Lejeune. She came from Camp Pendleton to Lejeune in 1987 and went to work at the FLSC, which is the Fleet Logistic Support Center.

MR. FONTELLA: Jim Fontella. Let me just add something to that, Jerry.

I've got toxicology reports from the ATSDR's own site that says breathing certain -- I don't have it right in front of me. I've got it in my book here. Breathing certain levels per million of benzene causes multiple myeloma. It's in your tox reports.

MR. STALLARD: Can I have your attention, please? The purpose of this session is to update on what you've been doing or new discoveries since our last meeting.

Now clearly there's an issue about this discovery of the 1988 report for which Dr. Davis has some feedback on and others would like to comment on

this vapor intrusion. So what I'd like to suggest is that we go around the table and finish what have I been doing, what's new, that you'd like to share with the group. And it looks like we're going to have a more concentrated discussion on this topic.

Would you agree?

(affirmative responses)

MR. STALLARD: Okay, great.

Do we have anyone on the phone at this point in time?

(no response)

MR. STALLARD: Welcome, Mike.

MR. PARTAIN: This is Mike Partain. Along with Jim and Jerry we're working on the vapor intrusion issue, we created a timeline for that which has since 1948. And also we're up to 79 with breast cancer from Camp Lejeune at this point in time. Had a couple more individuals contact me since the last CAP meeting.

MR. STALLARD: Thank you, Mike.

Mary.

MS. BLAKELY: I don't have anything to say.

MS. RUCKART: Mary, since not everyone is familiar with you, would you want to just say a few words about how you're connected to Camp Lejeune and just

introduce yourself, please?

MS. BLAKELY: Yes. I was a child on the base. My father was in the Marine Corps. He retired after, I believe, 24 years. He went to Viet Nam twice. He was a crypto-analyst at the end of his career, and we were stationed on the base. And we lived at Berkley Manor from 1968 to 1970, and then we were stationed back again in 1976.

And I finished growing up in Jacksonville, and my father currently lives in Jacksonville still. My mother, she was diagnosed with brain cancer in September of 1995, and she was dead by August of '96. The cancer spread throughout her body, and she had no chance to fight it, it was so aggressive.

And currently, I don't know for sure, but we believe my father might have lung cancer. They found a mass on one of his lungs, and he has a problem with his kidney.

The way that I found out about this was watching a report on CNN where Mike and some of the other male breast cancer victims were talking about Camp Lejeune, and it perked my interest because they mentioned Holcomb Boulevard which is near Berkley Manor. And so that's when I found out about everything, and I've spent the last -- I don't know

-- almost two years reading and trying to keep up and understand and learn all I can. I don't know what else to say.

MR. STALLARD: That's great. Thank you, Mary. Welcome.

Good morning. Anything to talk about?

MR. FLOHR: Not at this time.

MR. STALLARD: Welcome again, Jeff.

MR. BYRON: This is Jeff Byron. I don't have anything to report presently. I just want to let you know that I'm here to get the update from ATSDR.

MR. STALLARD: Jim.

MR. FONTELLA: Jim Fontella, and I've been working about a month and a half now on looking through the disks all over again, looking for more information on the timeline of the vapor intrusion from 1987 feasibility study all through up to 2010 which is still a problem.

MR. STALLARD: Is it? And for clarification, Jim, where is this information coming from? Where is --

MR. FONTELLA: Well, most of it's coming from the Navy Portal and the UST, North Carolina UST, Underground Storage Tank Program. And there's not -- I have some CERCLA documents in here, several in my portfolio I brought today, but most of it has

come from the documents from the Navy.

And there's a lot of documentation referred to here but no sampling. So there's more documents out there that we don't have, want to bring that up right now so we can try to get to we need to -- I did have documentation on levels that we don't have, and we know they're there.

MR. STALLARD: Thank you.

MR. ENSMINGER: My question is was any air quality sampling done between '88 and '99? This is something that ATSDR needs to go after.

DR. PORTIER: Chris. Jim, Mike, Jerry, thank you guys for spending so much time and effort to go and look up this information and look for it. I can't give you an answer as to why it wasn't in the '97 document. I can speculate as to why it was not in the '97 document.

It's typical when ATSDR goes into a community -- and whether I agree with this or not, I haven't quite decided because I'm not sure of the magnitude of the issue. But it's typical when ATSDR goes into a community that if they see post on an occupational exposure, that occupational exposure's turned over to NIOSH to look at because it's really, NIOSH handles occupational exposures.

From my perspective if you're looking at a community, and the community has the same exposures in an occupational setting in the community, we probably should be looking at both. So we're looking into when we're going to do this and when we're not. But I speculate that back in '97 they saw this, and they said that's NIOSH's problem.

As to us doing vapor modeling for the assessments we're doing right now, it's problematic, and it's problematic for a number of reasons. But the biggest one Morris put on me yesterday which was quite clear, and that is because there's no samples, because there's very, very few samples available to us, anything we do with vapor modeling, with vapor estimation and vapor intrusion is going to require the completed water modeling.

And so whether we jump aggressively and go looking for samples with our data mining group, that's going to depend upon when they finish all the data mining they're already doing for us for the water modeling because we've got to get that finished first. That's got to be our priority. And then if we have time before we start doing analyses in mortality data, before we start doing analyses of the health study, then we can spend time looking at

the vapor intrusion issue and seeing how big a problem it is or not.

The one thing you point out is very important in these studies. If we have highly exposed individuals who, for example, the worst case would be they're highly exposed in the occupational setting but they're in the low exposure group for water. That could bias the analysis in the wrong direction. It could make an effect look a little less of an effect. And so it is a concern of ours.

There's no doubt we're going to be looking at this very carefully and seeing what we can do. But it requires us to be able to reconstruct occupations. It requires us to be able to reconstruct vapor intrusion, which is -- you think the water modeling's hard? I think vapor intrusion modeling is going to be almost as hard, and so it's going to take time and effort before we can give you a solid answer as to whether we think this is a problem and whether we can do it.

MR. STALLARD: Dr. Davis.

DR. DAVIS: EPA at that same time, 1988 to '93, had a program called the Leaking Underground Storage Tank Program, LUST for short. And it might be some data from the LUST Program could be relevant. I

know of one published study that found a significant increase in leukemia associated with fairly short-term and high-level exposures. The study was published by Edwin Talbot (ph), my colleague at the time at the University of Pittsburgh.

Took, of course, ten years to get it all together, but they were able to show with this modeling that vapor intrusion from leaking underground storage tanks into basements, into homes was significantly associated with an increased risk of leukemia. And I don't think it was just childhood. I don't remember now whether it was childhood or adult, but as you may be aware, leukemia, multiple myeloma, blood dyscrasias, hematological abnormalities, anemias, hemolytic anemia, as a sort of general category of diseases associated with volatile organic compounds, in particular benzene, but others as well.

So it may be that rather than having to go to the incredible expense it would take to reconstruct all this, you might be able to draw upon the data that's been developed in the LUST system just as an example rather than sort of keep going on this sort of data excavation exercise.

MR. ENSMINGER: Well, the only problem is that there

were actually four different areas in the Hadnot Point industrial area where you had different contamination plumes. It just wasn't fuel. You had several plumes of TCE and PCE and vinyl chloride and then you had the big fuel plume, and then we find out there's two of those that merged together, the 1100 and the Hadnot Point fuel farm.

However, this vapor intrusion issue didn't raise its ugly head until after, supposedly, the water contamination ceased. They're not going to cross each other until you take a look back with a model and say, hey, this was a really, very real problem, and it goes back even further.

MR. BYRON: This is Jeff Byron. Would you have even been looking for vapor intrusion in '88? I mean, this studies that we're looking at have been touted from '57 to '87 is when the exposure occurred. Now we're up to '88 to '97.

MR. ENSMINGER: Yeah, well --

MR. BYRON: I don't want to ignore it, but you know, this could stretch out forever, okay? And I want to get back to my life as the rest of the individuals in here, and I have a family to raise, grandchildren I want to take care of. I'm getting a little tired of all the delay, okay? I want to see some real

reports come out of this thing that mean something. Some summaries that are accurate and that Congress can determine what they need to do to help these individuals.

And to be honest with you it just looks like you're opening up another time frame here. I don't see where -- it is relevant, no doubt. All those individuals who were exposed and it should be done. But I don't want to see it hold up the in utero studies, mortality study any longer than it is. It's already projected 2013.

I've been at this for eleven years now. To be honest with you it's starting to wear on my business, my brother's business. They don't appreciate me taking off all this time, and I'm sure there are a few others that have responsibilities here from their boss, too. I know Mike does because I've heard it.

So let's get on with this thing. I'm not saying don't close the door, but those need to be looked at after the other studies are done. Thank you.

MR. FONTELLA: This is Jim Fontella.

MR. STALLARD: Wait, wait, wait. We have Mary Ann waiting to speak.

MS. SIMMONS: I just wanted to add on actually a couple of points. Jeff, you're right. Probably vapor intrusion hasn't been a well-studied or well-thought-out pathway by EPA until like in the last five or six years, so it's a fairly new thing that people are looking at the environmental world.

Second, when ATSDR used to do their public health assessments, 'cause I've been on several of the trips, they do not look at occupational issues. That was, I never heard the NIOSH connection. It's always said that there's programs in place to do this which was OSHA, so NIOSH...

And third, years ago -- and I'm not saying this is right either -- but occupational exposure limits are magnitudes higher than what's acceptable for the environmental world. And so even if you do indoor air quality studies for an occupation, it's likely not going to set off any alarms because the OSHA limits are so much higher than what the environmental limits are.

And so even if there was air samples done -- and I have no idea. We talked about that earlier. But it's likely that there would have been either no exposures or something so low in comparison to occupational regulations that it wouldn't have

tripped off alarms. Again, I'm not saying right or wrong. I'm just saying that's how it was.

MR. FONTELLA: Jim Fontella. We have the limits in these buildings, and it specifically the limit on one were 50,000 parts per million.

MR. ENSMINGER: Million.

MS. SIMMONS: Yeah, that was just one.

MR. FONTELLA: Well, no, no, no. It was between January and March of 2000 there were like 169 hits at 50,000 parts per million in that building and the LEL level was one hundred percent. Now it was 1999, January of 2000 and March of 2000. And then after that we don't have any readings in that building at all until 2000 and I think '08.

But I have documents here that state on a continuing basis that that building was being monitored and had hits. You know, they blamed it on the air sparging, and then they cut the air sparging off, and they were still getting hits on the building. In 2007, they were getting hits on the building at 5,000 parts per million.

Now this is after 1987, and these people were exposed, and what about these people's health? I mean, breathing this. I mean, this is a big deal. I mean, if you don't put it in your public health

assessment this time, these people need to be studied and warned of what's going on because these levels are high. And 50,000 parts per million according to the ATSDR tox report if you breathe 20,000 parts per million, you die.

MS. SIMMONS: This is Mary Ann. No doubt that situation -- I don't remember all the details, but the building I think was vacated during that time period.

MR. FONTELLA: Yeah, it was vacated, but they were still taking samples in there --

MR. STALLARD: Yeah, they were.

MR. FONTELLA: -- as a warehouse so people were still in and out breathing, even if it's for a short period of time. But while the building was occupied they were complaining about vapors for several years before they did any tests in the building. And even when they cordoned off -- I've got FOIA documents here -- even when they cordoned off part of the building with the highest FID levels in the country, they showed high levels, they didn't do anything. There was no action at all.

DR. DAVIS: And this is 50,000 ppm of what?

MR. ENSMINGER: Of benzene.

MR. FONTELLA: And there's another question about,

you know, we talked about benzene --

MR. STALLARD: Question, clarification.

DR. DAVIS: No, no, let's be really sure. You say 50,000 ppm of benzene?

MR. ENSMINGER: Yep.

MR. FONTELLA: Yes, per million in the building.

DR. DAVIS: Wait, wait, but that seal up has been shaken here, and I have to say to you that would be a level that would cause --

MR. FONTELLA: Explosion.

DR. DAVIS: Well, no, it would cause a lot of problems, including you would expect symptoms in people for any length of time, so I see the people around the room shaking their heads no, and Mary Ann is saying no, so this is a fact. We need to --

MR. FONTELLA: I've got the levels here. I've got all the facts.

DR. BOVE: Three people were evacuated because of illnesses actually. So they had acute illnesses.

DR. DAVIS: So, for example, you would expect nose bleeds. You could see --

DR. BOVE: But they had enough symptoms that they had to be evacuated.

MR. FONTELLA: Yeah, they had to evacuate the building. But here's what I've got here, 639

readings between January and March of 2000, between 1,000 parts per million and 50,000 parts per million. Now noted that that's all the machine goes up to is 50,000 parts per million. So it could be 75,000 parts for all we know.

Now, there were also 355 readings of 50,000 parts per million and a hundred percent LEL in that building. And that's not including all of the levels between ten parts per million up to a thousand parts per million which were thousands.

MR. ENSMINGER: Yeah, and, Jim, don't forget the PowerPoint we found from the industrial hygiene people at Camp Lejeune where they stated in there that people had been complaining about fuel vapors for years, fumes in those buildings for years before it was evacuated.

MR. FONTELLA: In November of '99 they checked that building, they were getting complaints of benzene in it, in that building, and they had three meetings with base officials and did nothing. They didn't test any samples. They didn't do nothing. This was ignored for the whole month of November of 1999. And I have the documents right here. They're OHM documents.

I mean, these are things that we're coming

across. We focus on certain issues, and this is why it was passed over in the past, because we had other things that we're focusing on. But when you look at the documents, the documents speak facts.

I mean, this is from their contractors, and these are levels. And here's all the levels I was talking about right here, and I'll be happy to give them to anybody because I've got them on my computer.

I sent --

MS. BLAKELY: Mary Blakely here. I'd like to add to what Jeff said and to Jim. I think that the human factor is being forgotten here regarding the time that this is taking. People are getting sick still. My father is sick. There's a human face to this.

MR. BYRON: This is Jeff Byron again, too. I see you repeating what's been going on for 30 years, okay? He says to me that the levels on cape couldn't even be taken because it was beyond the meter limit. I think this has come up before.

I've even stated this many years ago about being beyond the meter limit. People told me, oh, it's because they were below the instruments read. I never believed that not one lick. Those quality managers at aerospace, something that's beyond the

meter limit that means it's above it, not below it. And I'll get arguments about that.

MR. ENSMINGER: Let me read everybody an excerpt out of the announcement that they made at the TRC Committee meeting where they announced this to the public that they were going to initiate these things.

MR. STALLARD: And when was that?

MR. ENSMINGER: This was August of 1988.

MR. PARTAIN: Eleven years before.

MR. ENSMINGER: And this is the base environmental engineer, Bob Alexander. I'll read verbatim. The reason for the ambient air monitoring as was described in the feasibility study is in these soil and gas hot spots we want to be sure that there are no compounds present inside the work spaces in these buildings that may be near these things which could have a long-term chronic adverse health effect on the occupants of that building, the Marines and the civilian employees that work there.

So we're going to work with our Naval Hospital Command to complete ambient air monitoring inside those areas. These folks are the industrial hygienists and the preventive medicine people who have the technology and the expertise to use these

types of sampling devices that are familiar with the threshold limit values of that and are established for safe exposure over a long term to certain compounds.

Damn it, somebody knew back in '88. I don't want to hear this crap that well nobody was sampling. It's right here. They announced this to the public they were going to do it. I want to see the samples. Where are they?

MR. STALLARD: Okay.

MR. PARTAIN: I would strongly recommend that ATSDR put that request in writing. Make them say there are no samples or they did not do the sampling one way or the other. Mary said a few minutes ago, oh, that was one time. Well, if you only sample one time, you're going to have one value. That's it.

But there is a problem here, and that document was produced in 1988. Building 1101 was evacuated in 1999. So you have eleven years where nothing is done. It's the water contamination all over again.

MR. STALLARD: Can I say something here, folks, because we have to be sensitive that we have a process that's going on to address the needs that we've identified up to the last one. This new information and lack of information and data,

although important, it will be addressed, we don't want to derail the process that we're making --

MR. ENSMINGER: No, I'm not asking that.

MR. STALLARD: I know. I'm just saying so what I suggest is we need to have a strategy for how this group address that issue and make it an agenda item and work with ATSDR.

MR. ENSMINGER: Well, it's my understanding that DHAC already has a vapor intrusion specialty group. Is that right?

DR. CIBULAS: We have one individual who has some good expertise in vapor intrusion. That's correct.

MR. ENSMINGER: And I'm not asking this to overlap Morris's work. I don't want Morris to even be involved in this because he's got his mountain of work cut out for him with the water modeling. But I mean, there's no need to allow this to lapse and wait when you start gathering all this information or sending these letters out saying, hey guys, the amount of this stuff in '88, you're going to initiate it. If the sampling does exist, where are the results?

MR. STALLARD: Yes, Dr. Davis.

DR. DAVIS: Just a point of clarification. Can someone here technical tell me what F-I-D stands

for?

MR. FONTELLA: Flame ionizing detective.

DR. DAVIS: Okay, but it's those are the levels that are 50,000 ppm, but what do we know that is? It's not necessarily just benzene.

MR. FONTELLA: That's another point. That's another point I was trying to make. When they test for the chemicals in the buildings, do they just test for benzene or are they going to test for all VOCs in the building? They've got plumes of TCE in the ground and PCE in the ground. I'm sure there's vapor intrusion somewhere in there.

There's buildings, what, 1100, 1101, 1102, 1103, 1104, 1105, 1108; building 1200,1201, 1202, 1220; 1301; 1068; 505 were all being monitored between the years of 2000 and 2008, and there's no sampling in any of these buildings, but I've got five or six documents in here that says these buildings are being sampled on a regular basis, weekly and monthly. Where are they at?

MR. STALLARD: Where's the data?

MR. FONTELLA: Where's the data? It's out there. They've got it. Fifty years they're supposed to keep that information. We need that information. We want to know why and what. And if somebody's

going to do a study on vapor intrusion like this gentleman says he has somebody, he needs that information, and we need it.

MR. ENSMINGER: Well, this kind of cuts against the grain of what the United States Marine Corps likes to put in their public affairs statements about the health, safety and welfare of our people are one of our top priorities that we see the recommendations, and they even announce that to the public that they're going to execute this stuff and initiated it.

Now which one is it? Did they do the sampling or didn't they? And if they didn't, why not? I mean, it was identified as an exposure pathway by your own people.

MR. PARTAIN: Now a month after the TRC meeting where Bob Alexander made that announcement that they're going to, he also said that they were waiting on the purchase of, approval for purchase one key piece of equipment to do the testing. We know after the meeting, a commander at the Naval Hospital wrote back to Dalzell and says we can't help you. You need to get an independent contractor.

A month after the TRC meeting a letter went out

from Colonel Dalzell to all the TRC members, you know from the Board, and let me read a paragraph from that.

(Reading) Interim measures to deal with any immediate health risks to the Hadnot Point Industrial area have been or are being implemented -- and the vapor intrusion is one of the five that was recommended by the contractor. These measures include continual assessment of active water supply wells, continued groundwater monitoring, cessation of continuing sources of contamination, ambient air monitoring, and underground space monitoring. Specific tasking has been made to the appropriate Marine Corps base agencies, and they are implementing the measures. A full report of the interim measures will be made at our next TRC meeting.

There's no record of any, the next TRC meeting was scheduled for '89, and I believe it was canceled, and I've yet to find any records of any follow-up on this at any of the TRC meetings.

MR. STALLARD: Okay, well, you have brought up this issue. It's clearly evident that there's things to be done in terms of data mining. What I'd like to suggest, do you have -- I'm going to allow one more

before we move on with the people who have allocated time to be here at a certain time.

But, ma'am, you stepped up, and do you have something to contribute? Please say your name.

MS. WILDER: Sure. My name is Lynn Wilder. I'm the Associate Director for Science for DHAC, and I do have industrial hygiene experience. And just to clarify the values that were, that you were speaking about. It's a real-time monitor, flame ionization detector, so the flame burns anything that's organic in the air. So it can also be methane. I'm not familiar with what's in the groundwater, but there are a lot of different things that make up that 50,000 parts per million so it's not specific to any one compound.

MR. FONTELLA: Are you including separating --

MS. WILDER: You have to sample for it, and that means taking a time-weighted sample and sending it to a lab.

MR. FONTELLA: Okay, the question is if you were doing the sampling, would you go in there, wouldn't you go take that information to the lab and say I want it tested for benzene, TCE and PCE and PCE or VC because we know that that's in the media as well, that that's in the groundwater? We know that.

MS. WILDER: I would as an industrial hygienist, yes. What they use is a screening method so when you get a reading that high, yeah, you want to follow up and do some air sampling and send it to a lab.

MR. FONTELLA: Well, that's the point because they're only concentrating on benzene, but personally -- and I'm not a scientist or a chemist, but I believe with the amount of TCE at some of those buildings, 703,000 parts per billion that were in the soil right next to the building, right next to the, I mean, it makes sense to me that there were other things inside that building besides benzene.

And the plumes on the south side of 78, and they co-mingled with the plumes later on on the north side. I mean, the plumes on the south side of TCE were a lot bigger, and why would they test on the north side and not do any testing on the south side? I believe there was testing on the south side. But we don't know that either because where are the figures? Where are the documents?

If you, the people in here, the scientists, I know and I believe, and I've got a strong respect for everybody I've met in this organization. I believe if you were to go to do a test, you would do

it right. We don't know that they did. And if they did do it, we don't have that information, and that's what we're --

MR. STALLARD: What it would help to do is to help focus this effort as we move into the future.

MR. ENSMINGER: Go figure you have high fuel fumes in these buildings especially after you know you've got a fifteen-and-a-half-foot thick bubble of pure gasoline floating around with a shallow aquifer underneath it. They knew that.

MR. STALLARD: Were there any incidents of spontaneous human combustion that we know of?

MR. ENSMINGER: Well, there are reports of numerous fires that ignited in the sewers and blew the lids off the manhole covers, and they extinguished themselves because of lack of air. I mean, you're walking down the street and all of a sudden a manhole cover kills your ass. I mean, boom.

MR. STALLARD: Okay, we're going to slightly re-order the agenda and have Morris do his water update, 'cause I think that we're going to talk about our updates after that.

This is rich discussion, and I think it has to happen.

WATER MODELING UPDATE

MR. MASLIA: Good morning. Good to be here and be able to report on the status and update of the water modeling. What I'm going to present this morning is just where we are in the terms of completing water modeling, what tasks we have completed, and where we are. I'd also like to update you on some of the reports, chapter reports, that we're in the process of working as well.

The report chapters, you notice a list of all the proposed chapters is in the forward section of the Chapter C report that has been published, and we are not necessarily releasing them in alphabetical order, mainly to maintain concordance with the Tarawa Terrace report numbering system. So Chapter A is always the summary of findings and will be the last one out.

But Chapter C, of course, was released in October and provides the installation restoration or CERCLA sites that we worked on. And in Chapter B is the geohydrologic framework. That is the information that is basically needed to form the conceptual model groundwater flow for the various models that we are doing. It has been drafted. It's been sent out for external peer review. The peer reviews have come in. We are addressing them,

nothing extraordinary, more just technical fine turning.

And we should have that submitted through for the ATSDR-NCEH E clearance as an electronic clearance system that tracks the report as everyone reviews it in the chain that needs to review it. So we're looking at mid-April to submitting that for electronic clearance by ATSDR.

MR. ENSMINGER: How long have you been working on that, Morris?

MR. MASLIA: Well, Chapter B really, the data has been worked since like 2007 gathering the data. That is basic data. Chapter B will be just like Chapter C. It's basic data. The Chapter B, the difference is Chapter C and D -- if I might jump ahead -- have no interpretation. It just presents the data and not in order, whereas Chapter B already starts getting into interpretation of different water levels, different geologic pics and stuff like that. And that's why that one will take longer to review because there's interpretation in it.

Chapter D will be the equivalent of Chapter C, and that is a data report that lists above ground and underground storage tanks that have pertinent information for the water modeling, and that is

being currently written. Of course, there's a lot more designated underground than above ground storage tanks that were CERCLA sites, the fuel farming example. That's being drafted, and we intend to submit that for peer review by the end of May.

And then Chapter G is the water level report, and that again will present the measured water levels and the groundwater flow. The groundwater flow is the water level match. You may have remembered that from Tarawa Terrace, it shows that the different aquifers, what an aerial view of the water level looks like or what we think based on the data that has no modeling in that it's based on hydrogeologic. But you'll be able to determine directions of groundwater flow, gradients and stuff like that. But it's again from the data, from the data.

Now, with those, although those are still being drafted in writing, because we have the data we can progress along with the modeling, but those are needed when we put out modeling results. These reports have to be out there for the public to justify the conclusions with the modeling.

So in terms of modeling, the results of the

modeling, that is all the modeling, the three dimensional groundwater flow -- and I'll get to the titles of the models in a minute -- the fate and transport of single species PCE as a source, TCE as a source and benzene will be in that as well as degradation products for TCE and PCE. Those will all be summarized just like in the Tarawa Terrace reports in Chapter A. So you'll have some simulations, example simulations. And then the executive summary again will be a less technical version of Chapter A just again like we did with Tarawa Terrace, you know, 20, 30 pages of that.

Then the other chapters are actually the details that make up Chapter A. And the way we wrote for Tarawa Terrace, the way we're doing here, Chapter A will stand on its own. In other words someone who's doing a peer review will have sufficient information from Chapter A to peer review it and say where did you get this information, where did you get the assumption. But if they're wondering how we assigned each parameter value in the model, they would go to the different other chapter reports.

MR. ENSMINGER: Before I forget this, Morris, can we get a copy of your slide show here?

MR. MASLIA: It's been -- let me check. It's been cleared through my division. I'll have to send it up another chain of clearance to release it publicly because I got it --

MR. ENSMINGER: What, this?

MR. MASLIA: -- I got it cleared for a presentation only. I'm just following the rules.

MR. ENSMINGER: I figured if you're presenting it publicly that --

MR. MASLIA: Well, you check off on the clearance thing that it's for a presentation only so I will put it, resubmit it back in and get it --

DR. PORTIER: Morris, let's just say it's cleared.

M**R. MASLIA:** Okay.

DR. PORTIER: Give them a copy and then put it into the system and we'll make it official.

MR. MASLIA: Thank you. I can provide you, Jerry, with hard copies.

MS. RUCKART: No, ^ already has electronically, but I didn't distribute for the reason he just gave.

MR. MASLIA: Yeah, I'll make you copies.

So basically our goal is that we're still on track as of right now is to have public -- when I say public -- a clear and published Chapter A and Executive Summary by sometime at the end of December

of 2011.

With that let me just quickly again go over, and I just compared for the Tarawa Terrace area, these are approximate values but generally the area that we're working in now at Hadnot Point, Holcomb Boulevard is an order of magnitude more in data, more in complexity. And as an example there's a hundred water supply wells, only actually 96 of them supplied water for drinking purposes. There were two irrigation wells for the golf course, one emergency standby for the Naval Hospital that was not used except in emergency, and one well that they drilled that was never hooked up to the system.

MR. ENSMINGER: And the golf course irrigation wells weren't drilled 'til '87.

MR. MASLIA: Right, but I'm saying in accounting for everything so that's what you have. But again on the contaminant sources these right now are just identified potentially for the modeling. We have to actually go through and see if it's an actual source or it is a hotspot from, it's been carried from the source to by groundwater. What may appear as a source may not be a source and may just be a degradation pathway in the groundwater that's been carrying the source from the original source.

MR. ENSMINGER: Meaning the pool?

MR. MASLIA: Well, yeah, yeah, by pumping by natural groundwater flow.

So let's go into our modeling analyses, and here I've got a map on the next slide so I will show you. So the steady state pumping, that is, we needed that to establish certain parameters which are not necessarily time bearing for things like conductivity of the aquifer, the average long-term infiltration so we developed that, and we did that. We call it a regional for people working in larger areas.

It's not, but it's going to the natural hydrologic boundaries. So that's the big outer boundary. And that represents about 50 times larger than the Tarawa Terrace model. But it includes all the streams, all the paleo channels and, of course, Northeast Creek there. Those are hydrologic boundaries and that's what you need to successfully calibrate the model. It is calibrated to long-term water without pumping, as well as to defend it under peer review.

The transient, because wells were there pumping, it obviously changed the groundwater levels so we need to do a transient model because that's

what drives the flow velocities for the transport of contaminants.

And we will use the big regional model just as a transition model to check the smaller areas. Those are the two areas, the smaller ovals so to speak, the lower one being the industrial area, and the upper one going north-south being the landfill area. And that is because those are in the middle of the hydrologic boundary, and there are no good boundaries.

There's no stream or creek or river that influences that so we have to use a bigger model to tell us what is happening from month to month to month to make sure that we can defend those smaller areas. And outside the smaller areas there are no sources that impacted the drinking water supply wells.

So those are the two areas. The industrial area obviously will have PCE, TCE and a benzene model. And the landfill area will be PCE, TCE fate and transport on that.

And just to show you what happens from the regional standpoint here I've got a little animation here. You can see the water levels moving, and that's basically an animation of 40 or 45 years.

And you can see the holes going in there. That's the wells pumping.

But what you don't see, this is good, is the boundary down here are barely, barely moving. You're not getting this one going all the way up here or this one comes all the way out here. It's moving slightly, and that's what we want to see because that means we've got boundaries where we can expect there will be very little contaminant concentration at those boundaries. You have to make an assumption that at those boundaries we either have zero concentration coming out or zero flux, and that's how this bigger model is --

MR. ENSMINGER: Run that again.

MR. MASLIA: Okay. Again, these are wells right here. That's Well 602 right there.

MR. ENSMINGER: I was watching that the first time you run it. I wanted to look at 651 out there on Piney Green Road.

MR. MASLIA: Six fifty-one is right up there. Now some of them depending on how much they pump and when they pump and all that sort of stuff you may not see nice round circles because of the aqua properties around it. If the aqua properties can supply a lot of water, they're highly transmissive,

you don't get a deep draw down.

MR. BYRON: Run it again, Morris.

MR. MASLIA: So again, the larger model has basically allowed us to establish what the water levels should be over time in the smaller areas, and that's what we use to justify. But what you see out here there's nothing going on out here. And the reason that's critical if we're ever going to finish modeling in a realistic time.

If we tried to do fate and transport over this whole area but there's only sources here, fate and transport takes forever to run. I don't care how big of a PC or how many you have so we're trying to narrow the modeling area to really load it and justify and where the impact is.

Unlike Tarawa Terrace, Tarawa Terrace was basically about the size of, the whole model area was about the size of these areas like that. So that's why in Tarawa Terrace we didn't have the narrow the fate and transport. We just used the entire grid. That's basically where we are with respect to that.

So the contaminant fate and transport, as I said, the way we're working that is ATSDR staff are working on the single species models, the TCE and

the PCE as well as preparing the data and background for Georgia Tech where we're doing the multi-species, multi-phase just like we did with Tarawa Terrace and then also the benzene in the HB 204 area.

And that's just a map showing where the IR and UST sites of the data that we've obtained for these local area models.

MR. FONTELLA: What are those square symbols?

MR. MASLIA: That's the underground, above ground storage tank locations, and the whitish in-descript areas are the IR sites that were in Chapter C. If you see a perfect circle, it looks like a perfect circle, that just means that's the extent of the sample. That doesn't mean that ^ necessarily went out to that, but that's just the extent and they really did not define an actual boundary for the IR site, and that's in Chapter C.

So the last thing is the intermittent water supplies between Hadnot Point and Holcomb Boulevard treatment plants. And, of course, we talked about that. While we do have a calibrated water distribution system model, we are simulating, after much discussion, what we call an event-based scenario.

That is, when we have documentation in the logs, and we have the log that they said they turned on the booster pump or turned on the valve, we will then run that distribution model and look at minimum scenarios, average scenarios and maximum scenarios for that time.

And then we will also do some uncertainty Monte Carlo, uncertainty looking at model parameters. And we'll provide a range of concentrations and be able to tell you with some degree of probability what areas of Holcomb Boulevard contaminated water went to when it was transferred from Hadnot Point. And this is the piping, the water pipelines. This down here is Hadnot Point. And, of course, that's the booster pump right there so we're treating it as just a reservoir for modeling terms.

And when we know the booster pump was turned on, then we run the distribution model and we'll be able to look at different areas and see what percentage or what volume of the water went to what areas and from that extract data concentration or range of concentrations for that particular event for that particular time that the transfer took place.

MR. ENSMINGER: Is that the Naval Hospital between

Brewster and Midway Park?

MR. MASLIA: Up on top, center top, that's the new Naval Hospital as opposed to Hospital Point.

MR. ENSMINGER: Now I'm correct in saying that there were only eight wells on the Holcomb Boulevard system up until 1987.

MR. MASLIA: That sounds right.

MR. ENSMINGER: Now have you guys taken into consideration that the new Naval Hospital opened up in the beginning of 1983?

MR. MASLIA: And with respect to?

MR. ENSMINGER: That would have put one hell of a load on the unexpanded Holcomb Boulevard system beginning in 1983.

MR. MASLIA: Now this distribution system modeling, water distribution system modeling is a little bit different than groundwater modeling. And the reason is, is this type of modeling, particularly the model we use which is EPA-Net II, is a public domain model held by EPA. And it's what's referred to as a node link command model and at each location we happened to use hydrant locations just because there as you say how much water is being drawn out of the system in this case or how much is being delivered to a certain area.

So in fact there are demand nodes up at the Naval Hospital. There's water going from the distribution system to the Naval Hospital. And the reason we know that is, is we calibrated the model based on field data that we collected in 2004. In 2004, the hospital was working, I mean, was operating. So that's one of the things we can do.

Because with the Toms River, New Jersey, is with the distribution model approach to this, is we can take present-day information, which is very good, and, in fact, have how they operated historically, whether they operated the same, at a lower level or what.

MR. ENSMINGER: But what I'm saying is when they opened that new hospital, that was a new demand on an already small system. It was only a two million gallon a day system, which wasn't on that system previously. It was, the old hospital was on Hadnot Point.

MR. MASLIA: Right, but that's why we're assuming, what our assumption is when they turned on the booster pump, the booster pump was going to supply any water that the system needed no matter who's pulling the water out. And that is because the pump will cavitate or you have negative pressures if you

have more demand than the pump could supply. This was a huge pump. This was 700 gallons per minute. When that pump goes on, it supplies whatever water they needed. So, if in fact --

MR. ENSMINGER: At Hadnot Point?

MR. MASLIA: Yeah. No, the hospital. The hospital was demanding water, and they could not supply it with the -- well, that's when they would indicate, for example, you'd see a note that they turned on this booster pump. This booster pump then would supply, the way it worked, that booster pump will supply whatever water the system is demanding.

That's the way the model is worked. It is defined as a demand-based model. So if there's a demand, if there was a demand over here, a high demand here, you turn this booster pump on. It's going to satisfy that demand or it's going to tell you there's negative pressure in the pump, and it cannot operate. And typically, they don't operate pumps under negative pressure because it cavitates the ^.

And so that's why I'm saying it's different than a groundwater model because a groundwater model the groundwater's flowing, and you just pull water out of the system. And if you don't have the right

number of wells, you're not going to pull the right amount of water. A distribution model does not work that way. You've told it what the demands are and where the demands are located and water to supply that will turn that pump on. It's going to supply all that water.

MR. ENSMINGER: Well, I took notice in their log books where there were multiple, a lot of entries after '85 after they said they took all the wells, the contaminated wells, offline. There's a lot of entries in those logbooks without turned on booster pump. What the hell was going on prior to '85? We know that the new hospital opened in early '83. I mean, they just didn't get that big water demand.

MR. MASLIA: Well, typically in this area, when they turned on, from the logbook that they had, it was typically in late spring and early summer. Anyway, that's again –

Was there a question?

MR. BYRON: Yes, I have a question for you. There's two irrigation wells for the base golf courses. Were they capable of providing enough water in the system? Because in the past we said the valves were open to --

MR. MASLIA: Well, the golf course wells are

another, for example --

MR. ENSMINGER: Well, I know what he's saying. Morris, let me answer that.

MR. MASLIA: Okay.

MR. ENSMINGER: What they did was they used water hazard ponds to draw all the irrigation water out of, and then after they irrigated the golf course, they replenished those ponds with those wells. So, yes, to answer your question they had enough water to water the golf courses.

MR. MASLIA: But one of the things we found during I think last year when we were at Lejeune is, of course, we found the maps for the sprinkler systems on the golf courses. And that was important because if not, we would not know what the demand for this model would be. We would have to just assume something like how much the wells pulled which is not exactly a direct. But now we do, and we've coded that into the model. We took the sprinkler system map, backed out -- we had Chris Fletcher as a matter of fact, who used to work in the sprinkler-irrigation business, and so he helped us back out what the capacity of each of the individual sprinklers were. And then we added that into the models. The model does include the golf course

sprinkling using, of course, obviously treated water at that time.

MR. PARTAIN: So, Morris, so in theory once you got all the different points to demand loads that was being placed upon the Holcomb Boulevard system, you'll be able to go back and extrapolate that back to 1972 to determine what kind of demand was being placed on that system. And then in theory, we know how much water was being produced by the eight wells. If that demand exceeds the capability of the production wells, then in theory they're opening-closing valves, the booster pump in the valves.

MR. MASLIA: I'll say --

MR. PARTAIN: Is that correct? Is my reasoning correct?

MR. MASLIA: Let me just... Unlike the groundwater model where we are continuously operating it from 1941 through 1990, through 2005, 2008, this water distribution model, the time scale on it runs 24 hours, usually run a distribution model has a typical 24-hour pattern. So it is calibrated to when we saw an entry in the logbook routinely turned on the booster pump.

We will then run the model for that time period. We may run it for a week, but that's

typically all you run a water distribution system model and see under those conditions what the distribution of contaminants would be. We have a certain amount, we know the volume. The model will tell you how much water was being demanded, how much water was being moved. You can look at the demand and then look at what the wells could supply and also water in the elevated storage tanks and see if it exceeded or not the capacity.

MR. PARTAIN: Well, what about prior to '85 because --

MR. MASLIA: Yeah, we've got it prior to '85. In other words we've got readings in there. I think we've got some readings in the '70s. Again, we don't have continuous readings.

MR. PARTAIN: Well, you mention that you're going back to the logbooks and looking for when they've activated the booster pumps and turned the valves.

MR. MASLIA: That's correct.

MR. PARTAIN: We've got a set of logbooks that are missing for how long a period?

MR. MASLIA: It's from '72 to about '78, yes.

MR. PARTAIN: And there's a period in the '80s that are missing, too, '82-'83 or '83-'84. My question, I noted when I was, in my recollection of the

logbooks though the notations on activating the booster pump between Holcomb Boulevard and Hadnot Point, they weren't really notating that in that, in the check-in log, until after the contamination started to, the contaminated wells started to shut down in '84. And then these people were noting, you know, when people farted and stuff like that. They were notating everything in there. So what about prior to '85?

MR. MASLIA: We've got entries. In fact, I've shown a graph before. I didn't bring it with me, but we have entries before that. We have found entries in that and also just some separate documents that would say that. So we do have, but a point I guess I want to make is we're doing event phases. So we're doing it when we see an entry or we have information that they turned on the booster pump, and we're looking at a period of time around that event.

And then we will look at all these separate events and see is the contamination spreading differently or is there a bigger or smaller percentage in a certain housing area or not. But you just, typically you do not run a water distribution system model continuously like you do

in time like a groundwater model. Because it's a 24-hour based event you may run it for a few days or a week, maybe a month at the most, but that's it. And because we do have very limited and sporadic information, and we're going to an event base with all these separate events.

MR. STALLARD: Let me check in. We're ten minutes into what was going to be our break at 10:15 through no fault of Morris. We started late. So what I ask is, A, we can break now and come back in ten minutes and then have Morris finish up with --

MR. MASLIA: I'm done unless you have questions.

MR. ENSMINGER: I have one question.

MR. MASLIA: Yes.

MR. ENSMINGER: Your documentation of the missing JTC lab reports and this thing with Elizabeth Betz.

MR. MASLIA: Elizabeth Betz I'd like to defer to Sven because that is really being done under the data mining and technical work group between him and Scott Williams. I think they're trying to get all the (inaudible).

With respect to the JTC reports, those are the JTC Environmental Labs, we have, of course, a letter from the Navy to get the exact date on it, showing that they have submitted these numbered reports to

EPA. We have asked both the Navy for everything that they have. We've asked EPA Region IV. EPA Region IV claims total amnesia on the whole thing.

We had a person go down, not that was working for us but that was a colleague that was down at EPA, and he said there's nothing there. There's nothing there even in terms of Camp Lejeune. Where they sent it we don't know. We've asked and we spent weeks and months on that.

I did have, just this past week, one of our temporary contractors go through the Navy letter and listed all the JTC report numbers going through what we published on the, in the Tarawa Terrace reports, and then also going through what the Navy now refers to as the Consolidated Index File, the BAH files that they collected back in 2005 or '07, something like that to see if any of those missing reports showed up there, but they did not.

So at this point I think our approach is this should be really an issue to be handled between EPA and the Navy. I mean, in other words the Navy said they sent them with the letter. They obviously were not attached to the actual cover letter. EPA, as I said, claims amnesia on the whole situation.

Why, I don't know, but I wouldn't know where to

start other than if this agency or somebody needs to get on top of EPA and ask, one, why they have nothing for Camp Lejeune if it's an active NPL and remediation other than their annual reports (indiscernible). Why we have a letter -- and y'all have it, too -- from the Navy listing all these reports that they sent, and they cannot produce a single one of them.

MR. ENSMINGER: Go figure, the ones that showed contamination --

MR. MASLIA: Well, and anyway all I'm saying is, I mean, we have put as much effort and staff on this even with these documents that are Consolidated Index to make sure that we did not miss any reports. One thing we did, our contractor told us, is that on a lot of these reports you'll have a cover page and then have several JTC. Ignore the cover page because many times the cover page misnumbered or misidentified the reports that are --

DR. DAVIS: What's a JTC?

MR. MASLIA: It stands for JTC Environmental Laboratories. I don't know what JTC stands for.

MR. PARTAIN: It's analytical sampling for tap water.

DR. DAVIS: Is it GOCO? Was it a part of the

government?

MR. MASLIA: No, no, no, no, no, no. It's a private contractor, and they did some sampling between '84 and about '86, '87.

DR. DAVIS: So they're legally required to have records?

MR. PARTAIN: They don't exist anymore.

DR. DAVIS: So they've committed, they've violated the law?

MR. ENSMINGER: The EPA's violating their own law.

MR. STALLARD: So have you got the answers that you asked for?

MS. RUCKART: I just want to check in because we've been told there are some technical difficulties and people can't call in, but it sounds like somebody's on the phone.

So if someone's on the phone, can you please just identify yourself and help us verify that the systems are working even if it's the Closed Captioner? Is anyone on?

(no response)

MS. RUCKART: Because we heard some feedback where it sounds like somebody is dialing in and also viewing it over the internet so I just want to check. Please just identify yourself if you're on

the phone so we can help identify our IT problem.
(no response)
MR. STALLARD: Okay. So is this the appropriate time?
MR. MASLIA: Yeah, and one thing, Jerry. I know Sven and Scott are working on their list of things.
MR. ENSMINGER: Well, you guys had a phone call --
MR. MASLIA: Well, I've got that, and we wrote down those notes. And Sven, Bob Faye and I are all in agreement with them. The Navy is not.
MR. ENSMINGER: Why? Do they deny that she spoke?
MR. MASLIA: No, no, no, no, they're in denial in reference to one sampling done.
MR. PARTAIN: Are you talking about CLW and 1406 and the 2,500 parts per million?
MR. MASLIA: Yeah.
MR. PARTAIN: So the Navy is in denial that that is an actual valid --
MR. MASLIA: No, no, well, they're in denial that she said what she said, but four out of five people heard her say it.
MR. STALLARD: She knows what she said.
MR. ENSMINGER: And now she's lawyered up, and you can't get her to cooperate with us in writing?
MR. MASLIA: All I know is Sven and Scott are

working --

MR. ENSMINGER: The one thing, the one thing I wanted to bring out right now here publicly during this meeting --

MR. STALLARD: Listen up, folks.

Go ahead.

MR. ENSMINGER: This is important. Why is this falling on Sven and Scott Williams' shoulders? Your damn Office of Legal Counsel should be involved in this thing. If she's lawyered up, then your Office of Legal Counsel needs to get involved in this and get up with her attorney. That's what you guys have an Office of Legal Counsel for here.

MR. MASLIA: My understanding is -- and it was from the Navy that is requesting the official, legal. We're satisfied with what we wrote down at the meeting and the notes that we took. We have no issues with the notes that we took.

MR. ENSMINGER: So what they're trying to do is make her change her story?

MR. MASLIA: Well, I don't know, but I'm saying I wrote, you know, we were all on the phone. Three of us were in the same room, that we took hand notes. We went over one question, one issue in particular three times to make sure. I wrote that. All the

people at ATSDR saw my notes and were in agreement with that. We have no issues with our notes.

DR. DAVIS: A question of clarification.

MR. MASLIA: Yes.

DR. DAVIS: As you all have been working on this and know much more of the details than I think most, certainly more than I. The issue we're focusing on right now is documenting past exposure and the glaring gaps in information that suggests a cover up. That's what this is, right? That's what we're concerned about, okay? And we have people who have disclosed information, then we have missing information, et cetera. That's a separate set of issues from the thing that brought you all together.

The thing that makes you unique is that in this room there is an extraordinary number of people who have had male breast cancer and whose family members have suffered other diseases. That's what's brought you together. The tasks of epidemiologists of ATSDR is can you show whether or not there's significant damage to people because of these exposures.

But these are two totally separate issues. One is what happened in the paths of exposure, and that's what we're all focusing on in this discussion. But the larger issue is what has this

meant for your health and what will it mean for the future of people who were exposed to those conditions which we can't thoroughly document because of these missing pieces of information.

So my question to you is what is the goal of this meeting? What do you hope to achieve by the end of today? We're here for one day, and what do we want to go forward with? Because we're focusing on this debate about the past, and I think it's important that people ought to be held accountable. And if there is evidence, which it sounds like there may be, of withholding information, you can show that. We live in what is a democracy. We're supposed to have access to information. The right to know is fundamental. So what is the goal here?

It sounds like we could have the entire meeting and talk about who did what and why we don't have information. But what is the ^ here? What are we trying to do today?

DR. BOVE: We need to take a break. Actually, our facilitator had to take a break, but Sven is supposed to call in at 10:30. Now the problem might be we've been having technical difficulties all day, so he may not be able to call in because he won't be able to get in.

I understand that, and he hasn't called in so that tells me that Dick Clapp can't get in, neither can Tom Townsend. We've brought it to the attention of the people who deal with that. We've been told they don't understand why, our IT problems here.

But let me back up and say the purpose of these meetings is the epidemiology. But in order to determine exposure we need to get certain pieces of information and nail down certain contamination levels. So that's why this discussion is useful. You guys want to take it further and that's fine, but for the science purposes we still need the documentation as to what...

But let's take a break and come back as quickly as possible, five or ten minutes. We have proof that there is documentation is what I'm saying though.

(A break was taken at 10:35 a.m. Meeting reconvened at 10:50 a.m.)

MR. STALLARD: Do we have anyone on the phone with us at this point?

(no response)

MR. STALLARD: We're waiting for Rear Admiral Sven Rodenbeck to call in.

DR. DAVIS: While we're waiting could I have some

discussion which -- I want to reflect on a conversation I had with Mary Blakely and some others during break. We were talking about -- and Frank, you and I discussed this before -- I can tell you we can get him on his cell phone and put him on a speaker here.

MR. STALLARD: Who's just joined us, please?

Welcome. Sorry that we had difficulties with the number.

Who's on the phone? Anyone? Dr. Clapp, you on the phone?

DR. CLAPP (by Telephone): Yes.

MR. STALLARD: May I have your attention, please? Rear Admiral Rodenbeck?

REAR ADMIRAL RODENBECK: Yeah, I'm on.

MR. STALLARD: Well, we apologize for the technical glitch here, not to mention we got a little sidetracked in terms of the agenda, but we're on it now, and we're looking forward to your presentation on the Data Mining Workgroup Update.

DATA MINING WORKGROUP UPDATE

So if I could please have everyone's attention in the room, we'd like to welcome Rear Admiral Sven Rodenbeck for his portion of the agenda.

So go ahead, sir. Please take it away.

REAR ADMIRAL RODENBECK (by Telephone): All right, thank you. And as far as the data mining, we've had a conference call back in February 15th. Of course, the summary of that meeting has been posted on the website. We're making slow but steady progress.

You may have noticed that we have added some new sub parts to some of the action items that we originally closed out. We did that instead of just adding new action items. It was a matter of, you know, which way do you want to list this thing. Since it was related to some particular items, we just reactivated them, and what we're doing is just trying to make sure we're hitting everything.

Most of the activity of the data mining is actually trying to find information that's beyond the control of the federal government or not in possession of the federal government whether that be Navy or ATSDR. Therefore, we're getting ready to send letters to former lab contractors and some small consultants to see if they have anything that is not in the Navy repositories and stuff. And that's basically it.

We really are going to try to close out this activity as far as related to the groundwater modeling, water distribution modeling and the health

studies here in the next month or so. And, of course, we have the activity related to vapor intrusion to take up after that, and that's it really.

MR. STALLARD: Let's see if we have any questions here from the CAP members in the room.

MR. FONTELLA: Jim Fontella. Sven, the last time you spoke when you were at the meeting, you said that there was some other documents that you had like maybe a hundred memos and telephone logs and stuff or e-mails. And you asked if we wanted those and nobody answered yes so you would decide. Well, we'd like those documents, please.

And also the testing results, I have documentation that said that buildings, all the 1100-series buildings, 1200-series buildings, one 1300-series building, a couple 1000-series buildings were tested for vapor intrusion between 2000 and 2008, I believe. And we have no records of any of the sampling results although the documents themselves say these buildings were sampled, some of them on a weekly basis, that had a lot of vapor problems, and some of them on a monthly basis who were like once in awhile. We would like you to seek those documents for us as well.

REAR ADMIRAL RODENBECK (by Telephone): April and June we'll be doing the water modeling and health studies and stuff and take that forward. As far as the e-mails and everything your first comment, I'm sorry. I'm not following what that was related to.

MR. FONTELLA: You spoke last time at the last meeting that there were some other documents, and you asked us if we needed those documents. You apparently said they really weren't much. They were just like memos and interoffice things like that, but from what I've looked at in my last investigation in the last month and a half or so, a lot of these documents that are handwritten or interoffice memos speak volumes for some of the things that were going on, and I would like that. If you look at the transcript at the last meeting, I think you'll be able to see what we, what I'm talking about.

REAR ADMIRAL RODENBECK (by Telephone): Okay, I'll look at that again.

MR. FONTELLA: Thank you very much.

MR. STALLARD: And now, Jerry.

MR. ENSMINGER: Sven, this is Jerry Ensminger.

REAR ADMIRAL RODENBECK (by Telephone): Hi, Jerry.

MR. ENSMINGER: What's going on with this thing with

Elizabeth Betz that Morris was telling us about? Somebody wants a written, signed, sworn statement from her now or what?

REAR ADMIRAL RODENBECK (by Telephone): A sworn, we asked her to provide responses in writing to some questions. And for whatever reason she has not responded to frequent e-mail requests over a month's period. I know beginning of the year she had some health issues, and she responded back -- I think it was late January, early February -- that she would get back to us. And then we haven't heard anything. I'm just hoping she hasn't had a relapse.

MR. STALLARD: Thank you.

Any other questions for Rear Admiral Rodenbeck? (no response)

MR. STALLARD: All right sir, well, thank you for -- wait, I guess we do have one more.

MR. PARTAIN: Hey, Sven, I'm sorry. This is Mike Partain. I just remembered something. When you mentioned going back towards --

MR. ENSMINGER: Time out. I was taking care of something else. I got distracted.

It's my understanding Elizabeth Betz is lawyered up. And if that's the situation, she's not going to respond to anybody. That's what you have

an Office of Legal Counsel for here, and I recommend that you go to your Office of Legal Counsel and get them involved and send her a legal letter telling her that you need this stuff and use your lawyers. That's what they're here for.

REAR ADMIRAL RODENBECK (by Telephone): We don't have that type of legal authority, I don't believe, Jerry.

MR. STALLARD: To depose someone?

MR. BYRON: He just said write a letter.

MS. BRIDGES (by Telephone): ^

MR. STALLARD: Hello, Sandra.

MS. BRIDGES (by Telephone): Yes.

MR. STALLARD: Welcome.

MS. BRIDGES (by Telephone): Yes, sir, thank you.

MR. STALLARD: Okay, now, Mike, you have something to say?

MR. PARTAIN: Sven, this is Mike again. When you mentioned about going towards the independent contractors that were doing the testing, are you, is MACTEC of Gainesville, Florida, on your list?

REAR ADMIRAL RODENBECK (by Telephone): I don't recall.

Morris, do you recall?

MR. MASLIA: Say this again.

MR. PARTAIN: MACTEC out of Gainesville, Florida, they're the ones that EOC eventually morphed into MACTEC.

MR. MASLIA: The name sounds familiar, but I --

MR. PARTAIN: Because they were the ones doing the connecting studies, say four and five.

MR. ENSMINGER: And their warehouse --

MR. PARTAIN: And they're the ones the warehouse burned.

REAR ADMIRAL RODENBECK (by Telephone): Now, M-A-C --

MR. MASLIA: M-A-C-T-E-C?

MR. PARTAIN: Yeah, M-A-C-T-E-C. There are several employees that are still working there that have been there since the '80s. And also the W-A-R that did the initial assessment study is based out of Gainesville, Florida, too. And they're actually still in business and have a website. Some of the employees that were actually involved in the report I think are retired but were high up in the company.

REAR ADMIRAL RODENBECK (by Telephone): Okay, we'll cross-reference.

MR. STALLARD: And Morris is writing down notes here.

MR. BYRON: Isn't that what the Mafia would say when

the Department of Justice would say we want to see your records for the union? The warehouse burned down.

MR. STALLARD: Okay, Sven, I think that concludes the time we have allotted to you and the questions that were for you.

REAR ADMIRAL RODENBECK (by Telephone): Okay.

MR. STALLARD: So thank you again for calling in and sorry for the delay.

MR. ENSMINGER: Hey, Chris. Hey, Sven, this is Jerry Ensminger again. Now, the thing about the vapor intrusion, the point we're trying to make with that is we don't want this stuff overlapping each other and delaying Morris' work on water modeling. But there's no sense in any delay on this stuff and they can run parallel to each other, and these requests can go to the Department of the Navy. Why wait?

REAR ADMIRAL RODENBECK (by Telephone): We're trying to close things up so we're not delaying Morris and Frank.

MR. ENSMINGER: Well, I don't want anybody delay -- I mean, but they've got plenty of people over there. They've got more than one person working on this issue. I mean, Scott Williams, he's got all kinds

of little helpers, you know? I don't want to overload his brain, you know, but...

MR. PARTAIN: Well, the other thing, too, Sven, is someone needs to make the request of the original committee; there are records that they were told to test in 1988. They said they were going to do it. There are no analytical results. We need to have in writing from the Navy that they either did or did not do the results. I mean, did or did not do the tests.

REAR ADMIRAL RODENBECK (by Telephone): I understand.

MR. STALLARD: Before I sign off, let me just look around the room one more time.

Are we done with Sven for today?

(no response)

MR. STALLARD: For those of you who are on the phone and not speaking, would you please mute your phone? I think we're hearing Jeopardy or something in the background or some feedback.

MS. BRIDGES (by Telephone): Mine's muted.

MR. STALLARD: Okay, great.

All right, Sven. Thank you very much.

REAR ADMIRAL RODENBECK (by Telephone): All right.

MR. STALLARD: Bye.

REAR ADMIRAL RODENBECK (by Telephone): Bye.

Q&A SESSION WITH THE VA

MR. STALLARD: So now we're more back on schedule with the agenda, and this is the time that we have allotted for question and answer with Mr. Bradley Flohr and Dr. Terry Walters, but she's not here, right? And so, please...

MR. FLOHR: Thank you. I'm pleased as usual to be here and to let you know that the subject of Camp Lejeune and the water contamination is still a very big issue in Washington. And that following our last CAP meeting with about seven or eight staff members from Senator Burr and Senator Hagan and Congressman Miller, and I believe another congressman and their staffs, talked with them about what the VA is doing.

Also after our last CAP meeting I believe I gave you the latest updates, and I think I told you we had reviewed about 195 claims that had previously been denied before we got to where we are now, and reviewed those in our offices in Nashville. And after going back and thinking about what we had done, we decided we needed to take a look at those 195 not just in terms to see who was granted and who was denied but look at the evidence that was used

and see if there was anything that was, could be done better.

So our staff in Nashville did that, and we found about 30 claims that we thought could benefit from additional review, perhaps new medical opinions. We sent those claims to Louisville also. And then we looked at perhaps getting new medical opinions, things like that.

We also determined after meeting with the Senate and House staffs that we should write a separate training letter on Camp Lejeune. As you know in April of 2010 we issued a training letter on environmental exposures. Those were mostly deployment related exposures from the current deployments. We did have a separate item about Camp Lejeune and also Camp Atsugi in Japan, which is another environmental exposure, but we decided we needed to do a complete training letter just for Camp Lejeune. We drafted one.

We have shared it with ATSDR. We shared it with our DOD/VA Deployment Health working group members, which includes, of course, Navy, Marines and other services that are part of the Deployment Health work group that we have. We got meaningful comments back from both DOD and ATSDR. We've

incorporated those into and accepted pretty much all of the comments we received in this training letter.

It's currently in our Undersecretary's office for final concurrence. I hope to get that done within the next week or so and provide that nationwide, but to Louisville, of course, but to all our offices so they're more aware of the situation.

Louisville is processing claims and they have contacted me frequently with questions. They sent about six cases to my staff for us to look at and provide them with our opinion as to what the proper action is in that particular case, and also that they will have a means then to look at similar cases and take similar actions.

They are granting and denying claims. They've done so far about 42 and have granted about 28 percent of those which is significantly higher than the 195 that had previously been done. But the state of knowledge is much higher now than it was back then as well.

So we continue the work list. We've received letters from Senator Hagan that we have responded to. As I said, we're in frequent contact with her staff and Senator Burr's staff. And so that's about all I have for now. Well, Perri and Frank came up

in February, I believe, met with our Deployment Health work group, which again is a joint VA/DOD initiative, to look at the current deployments, but Camp Lejeune has been dominating the working group for the last four months. I think that's been the number one issue.

We have met with the Navy, with the Undersecretary of the Navy on a couple of occasions, with Deputy Secretary Gould of the VA, and to see what they could do to help the VA. Actually, our main charge to them was keep supporting ATSDR, keep funding them because that's really what the VA needs, is the best scientific information that we can get to make the decisions.

So Terry Walters was not able to be here today. She was going to dial in, but with some of the problems we've had perhaps she couldn't do that. That's about all I have, but I'll certainly entertain any questions.

MR. FONTELLA: Brad, on the training letter, like a couple weeks if I was to e-mail you, would there be a chance to get that training letter, a copy of that training letter?

MR. FLOHR: As soon as it's signed off on I will send it down to Perri, and she can send it to you.

MR. PARTAIN: And, Brad, out of curiosity is there any way that we could find out how many male breast cancer cases are in the VA system that are Marines, and of those how many had any connection to Camp Lejeune?

MR. FLOHR: I'll see what we can find out.

MR. PARTAIN: I'd like that.

MR. FLOHR: We have about, right now we have about 600 claims in Louisville, so we did have to like go in and -- I think our systems captures that. I'll see what I can find.

MR. PARTAIN: Because I'm curious to see how many --

MR. ENSMINGER: No, they've already done the study.

MR. PARTAIN: But they didn't do it by service.

MR. ENSMINGER: I know.

MR. PARTAIN: If you had the study that was done a couple years ago, we identified over 600 cases of male breast cancer in the VA system. I'd be curious to know of those how many were Marines, and of those how many had any connection to Camp Lejeune if you could try to find out.

MR. FLOHR: I'll see what I can do.

DR. DAVIS: A clarification of that question.

MR. STALLARD: Brad, did you have a response to that?

MR. FLOHR: No, just that I will see what I can do.
DR. DAVIS: I just want a clarification to that question. Do you have a case definition that you're working with now for Camp Lejeune-related claims? In other words categories of different diseases that you're expecting. Is that something that you're expecting the ATSDR to give you or you have a working definition now?

For example, some of the VOCs that have been reported and confirmed to have been in the water are associated with kidney cancer, non-Hodgkin's lymphoma as well as testicular cancer as well as the concerns about male breast cancer. So do you have a case definition there?

MR. FLOHR: No, we're not waiting for anything from ATSDR, not if it's already common knowledge of what the chemicals in the water can cause. We provide that information as part of our training letter.
DR. DAVIS: So my question is so these -- to follow up on Mike's question, you could break this down by service, Marine and others? And when you say you have 600 claims in Louisville, are those all claims from Camp Lejeune?
MR. FLOHR: Yes.
DR. DAVIS: They are. Do you have any idea what

number of them may or may not involve children?

MR. FLOHR: No. VA doesn't compensate children.

DR. DAVIS: So is there ever an example in the VA, for example, the dioxin issue, the Agent Orange issue which with I have some familiarity, where children of military dependents have been compensated through the VA?

MR. FLOHR: Not that I'm aware of. Spina bifida for Agent Orange is something that Congress enacted in law. There's been no such mandate for Camp Lejeune. The only way that we would compensate a dependent, and actually could be a dependent, but if someone under the age of 18 became permanently and totally disabled prior to age 18, the veteran parent can receive additional benefits if they're in receipt of compensation for that child. Where there is no parent living, the child can --

DR. DAVIS: But it's a total disability?

MR. FLOHR: Absolutely, by age 18.

MR. BYRON: My question for you there. You said if the parent was currently getting disability? So the child's disability would be predicated based on whether the parent, a veteran, had filed with the VA?

MR. FLOHR: Only veterans that were receiving

compensation at the rate of 30 percent or more are eligible for additional compensation for a child. Whether it's an under age 18 child --

MR. BYRON: So if your child was harmed by this, but you haven't come down with any symptoms, then you have no avenue for help?

MR. ENSMINGER: These congressional bills that are moving forward, Senator Burr's bill and Congressman Miller's bill, will, if they get passed, will address these, both of those things.

MR. FLOHR: It'll provide healthcare for dependents. I don't know about monetary compensation.

MR. BYRON: The healthcare is extremely important, right now that's what it's really about for my family; it's not money.

MR. ENSMINGER: Right.

MR. FLOHR: I also had an opportunity recently to review the Science Review Board, EPA Science Review Board, report on TCE. It's a 300-and-some page report ^ TCE at the level of a known human carcinogen. The Science Review Board was completely in tune with that, and they had a lot of comments that you'd be interested in I think down the road on TCE, potential exposures there and then what they might cause.

DR. BOVE: The last we heard was sometime maybe in August, but it's unofficial.

MR. FLOHR: Any other questions?

MR. ENSMINGER: Yeah, the last we heard Halogenated Solvents Industry Alliance was asking for a meeting with the Director of Research and Development Branch at EPA Headquarters up in Washington. I thought all that behind the closed doors crap was cut out by President Obama's, what was that thing he put out?

MR. PARTAIN: Integrity of science.

MR. ENSMINGER: Integrity of science, but that evidently is still going on. So I called my buddies over there at Halogenated Solvents Industry Alliance. The tentacles still reach in.

DR. DAVIS: I'd like to volunteer when we know that a meeting is planned. I could offer to attend it as a representative of the CAP. That way we could try to promote more a concept of open and free.

MR. ENSMINGER: Well, they requested a meeting and they got -- with the head of the R and D, and they got referred down to the lowest level. And they have to work their way up to get this meeting approved now. So that's a good thing.

MR. STALLARD: But thank you for your willingness to serve.

Are there any more questions for our, for Brad?

MR. ENSMINGER: No, but I do have one comment, and it's a good one. And there's some of the things that I'm seeing coming out of -- and I told Brad this, Mr. Flohr this, down at the cafeteria during the break that a lot of the things that I'm seeing coming out of the Louisville move are good and positive. And, you know, I know that the VA is a lot of people's whipping boys. I mean, everybody's got something bad to say to them, but very rarely do they ever hear anything good, so there's your goodie.

MR. STALLARD: Hold on just a minute, Tom. I'll get to you.

MR. PARTAIN: Credit where credit's due here. This is Mike, and I don't know. This is more of a curiosity question. Jim and I were talking this morning about occupational health exposures and stuff and that he would show me some documents from the DOD where someone is exposed to benzene occupationally that while in service they monitor these people for yearly checkups and stuff like that. If someone separates from service, say you've got a bulk fuel handler who's been pumping gas in and out of fuel tankers and everything. He's

monitored. He's fine. And then he separates, goes on with his life. Does the VA continue monitoring him once he's done occupationally or is that something that ceases once --

MR. FONTELLA: Actually, I can understand that. I can answer that question because it's until termination, whether they're fired, they quit or retire, they examine them on a yearly basis, all this medical exam, and after that it's over with. That's what it says in the documents that I read. It's a DOD document as well.

MR. FLOHR: The VA wouldn't be aware of those individuals unless they came to the VA on a claim, sought medical treatment at which time they're eligible.

MR. FONTELLA: I believe that is also for civilian workers. I think it's for civilian workers. I don't think it's for military. That's what I believe. I have some documents with me that will tell you exactly how often they're treated, but I don't have the PDF that'll come into the subject matter that tells you if they're civilian or military. I don't remember that, but I believe that they're civilian personnel.

It's like a workmen's comp thing that they

examine them every so often to see if anything has come up for as long as they work there. Some chemicals are on a yearly basis, some are on two. There's different for whatever chemical it is to see if there's any reaction or illness involved.

MR. STALLARD: Tom, sorry we missed you this morning, but welcome. Do you have a question?

MR. TOWNSEND (by Telephone): Yeah, I've been on since six o'clock this morning. The wrong number was given. Has Mr. Flohr spoken already?

MR. STALLARD: No, in fact, this is his time allocated, and we're glad you could join us.

MR. TOWNSEND (by Telephone): My claim with the Veterans Administration from about three years ago has gone to the Board of Veterans' Appeals and is back on the State. The VA examiners are not getting out because I went for a compensation exam at the Spokane Veterans Center. The examiner didn't even know about the letter from the VA about Camp Lejeune.

MR. STALLARD: Tom, you might not have heard but there's a training letter that's in the final clearance at the Undersecretary's level that Mr. Flohr was talking about. So hopefully that awareness issue will be clarified.

Tom, when you speak, can you make sure you're really close to the telephone so that we get the clarity of your voice, please.

MR. TOWNSEND (by Telephone): Is it better now?

MR. STALLARD: Yes, that's better, thank you.

MR. TOWNSEND (by Telephone): Okay. Well I had the notice in my hand and I asked the examiner, I said have you read this about the Camp Lejeune exposed people, that the Board has accepted the fact that we've been exposed. And she just carried on like she didn't even care or know about it.

MR. FLOHR: That shouldn't be the case because even in our April 2010 training letter, we prepared an addendum for examiners on Camp Lejeune that's going to be sent or is to be sent with a request for an examination to whoever's doing it to make them aware of the issue.

MR. TOWNSEND (by Telephone): I had a copy of that, Mr. Flohr, in my hand, and she had not read it. So my exam, I don't know what the hell is going on with my exam. Fortunately, I was given a consult with a civilian neurologist that confirmed that my neuropathy does exist. So it just goes on for years at a time trying to get the VA to get the damned things squared away.

MR. FLOHR: I'll take that back and discuss it with Dr. Walters in VHA and make sure that they're aware of it. They take whatever action they need to take to ensure that all the examiners are aware.

MR. TOWNSEND (by Telephone): Well, the document that I have still has the National Academy of Sciences on it.

MR. FLOHR: Probably that would be true, I think. I think our current training letter will have different language. And as I said I think the last time I was at a CAP meeting, the fact that ATSDR and the NRC are at loggerheads on this subject doesn't mean that the NRC report did identify 14 diseases with limited suggested evidence in association.

And that's a good thing for veterans that points out to any examiners there is some association between TCE and PCE particularly and those 14 conditions. That's not a bad thing.

MR. TOWNSEND (by Telephone): Well, it's just dragging on in my case, a resolution for my situation. I'm waiting for the remand to go to the Board of Veterans Appeals.

MR. FLOHR: Well, I wish you good luck with that, sir.

MR. STALLARD: Will his case come back through

Louisville?

MR. ENSMINGER: Yeah, his stuff is being transferred.

MR. FLOHR: There's a claims remand by the Board. It should go back to Louisville.

MR. STALLARD: Okay.

MR. TOWNSEND (by Telephone): I don't want to go to Louisville unless I have to.

MR. FLOHR: You don't have to.

MR. TOWNSEND (by Telephone): I don't have to?

MR. FLOHR: No.

MR. TOWNSEND (by Telephone): I've been in the system for three years.

MR. FLOHR: Only the claim would go back to Louisville. You wouldn't have to go along with the claim.

MR. FONTELLA: Yeah, Brad, Jim Fontella. With the DRO hearing and stuff like that, that would be a video situation in your area to Louisville? Would that be the situation for a face-to-face hearing or a traveling judge?

MR. FLOHR: It could be, yeah, one of those. The VA, DVA, if someone requests a tele-Board hearing they're really getting more into doing video hearings now. So that's certainly a possibility.

MR. STALLARD: Well, yes?

DR. DAVIS: Mr. Flohr, I'm very impressed with what you had to say, and I wonder if under the circumstances here that our caller on the phone that the examiner was not well informed. Now is there something that you can do, that ATSDR can do at this point so that people don't feel like ping-pong balls in a system that's not responsive rather than simply putting them back out there again?

I know because others have contacted me who I've given advice to about filing an IC that there's a cultural shift, which I think is a good thing, but is there something that could be done officially so that people don't feel like they're just back in the system. It's going to take eight-ten years? He's been floating around for three years also?

MR. FONTELLA: Two-and-a-half years.

DR. DAVIS: Right. And is there something that could be done here that would just facilitate the system being more responsive since there is a general willingness to see that done?

MR. FLOHR: I don't know. All I can do is take it back to our Veterans' Health Administration. There are people there who are responsible for doing examinations and bring the issue to their attention

so they can make sure all the people that do examinations are aware.

DR. DAVIS: Is there something the CAP could do to help you? In other words say a sense of the CAP that we would hope that the VA would continue on its positive direction here and make additional efforts so that -- in this case it sounds like you had an examiner who was not well informed -- that the burden does not lie on the person making the claim, but in fact, the presumption, rebuttable presumption if you will, is in favor of the claimant?

MR. FLOHR: If we had such a recommendation --

DR. DAVIS: Well, I don't want to -- could we as a CAP make that recommendation? Is that agreeable? That we would like to facilitate the processing of claims recognizing the awareness on the part of ATSDR that there is a legitimate case for these claims, for this 14 different disorders that have been identified?

MR. FLOHR: That was just the NRC report --

DR. DAVIS: I understand. Sir, I don't want to get into the numbers. Just simply a sense of the CAP so that the presumption would shift here.

MR. FLOHR: There are no presumptions.

DR. DAVIS: Well in this case the presumption was

since the examiner didn't know, there was no claim processed, and so that's what I'm referring to.

MR. FLOHR: No, but the claim was processed.

DR. DAVIS: Well, yes, continuing rather than being awarded, however. So I'm just, I'd like to do it in a constructive manner so that just if the CAP --

MR. FLOHR: We may have to speak about that offline.

DR. DAVIS: Yes, I understand. Having been in the government I know. That's why I'm asking what we could do that would be constructive and not just finger pointing.

MR. FONTELLA: Jim Fontella. My claim was denied last September I believe it was, and bringing something up to my service officer I brought the first initial training letter to him because they said that benzene was presumptive in the water. And obviously, the training letter said that benzene, TCE, PCE, all of the above was in there.

And I asked him, and what he told me was that, you know, some of these ROs don't even look at the training letters. Could there be something that issued from your office or the Headquarters Veterans Administration to have a little meeting between them and have everybody discuss that this is a training letter.

This is viable information that needs to be discussed in your own regional office so they know it's there. So if some of that paperwork, I mean, I see people. They pick up papers, and they put it off to the side and never do look at it or read it. So I mean, they would have it. There'd be no excuse then.

MR. FLOHR: To try and overcome problems like that, that's why we consolidated the health claims process.

MR. FONTELLA: Into the one, right. You're right.

MR. FLOHR: It shouldn't be a problem.

MR. FONTELLA: No, you're right. I didn't think about that. But that's what happened. I'm just saying on a personal basis that's what happened with mine, and I know that's happened to a lot of others as well. And I feel good about the process in Louisville as well so I'm just...

MR. FLOHR: And I'm not making any excuses but like I said, we have about 600 claims pending in Louisville, and we're going to get, the VA's going to get like four-and-a-half million claims this year. So it's a very small number, and it's easy for people not to know sometimes everything that's going on. And that's why bringing it all to

Louisville should alleviate that problem.

MR. BYRON: May I make a suggestion?

MR. FLOHR: Sure.

MR. BYRON: This is Jeff. I know there's a VA facility in my area. Now that we're here, you know, we've had a lot of problems in the past, I'm going to go down there and find out what they know about Camp Lejeune. And if they don't know anything, then I suggest that we direct them to Louisville so that they find out. Tell them there is a training letter in the works. Once it's okey-dokey it'll get out there.

MR. FLOHR: We expect that all of our training letters get read, distributed and shared by our regional offices. I can't put every regional office in the nation ^. And we review, do a quality review and make sure that they ^.

MR. BYRON: Because I know that there are individuals in my area that went to the VA, and I think it's in Virginia, and they saw notices about Camp Lejeune there. So that is happening, maybe not widespread enough.

MR. STALLARD: Okay, so there's concern. There's definitely positive effort moving forward to get the word out in the training letters. The question for

the CAP is to what extent can you be sure that they're read and used and applied.

Yes, Tom.

MR. TOWNSEND (by Telephone): The training letters going to the Veterans Administration, I don't know if they go to the medical centers.

MR. BYRON: This is Jeff. And right now I suggest that you get one to them if it's concerning your claim because if they don't know about it, they can't help you. And if they haven't gotten the avenue to get that, take the initiative. You're a Marine.

MR. TOWNSEND (by Telephone): Well the medical center --

MR. STALLARD: Brad.

MR. FLOHR: Not necessarily for the medical center although a lot of the information in it is for doing examinations providing ^. We'll be sure and share that with Veterans' Health Administration when it's been signed off on.

MR. STALLARD: Great, well thank you. We have a few minutes now. We're a little bit ahead of schedule.

DR. DAVIS: Just to clarify that. There are training materials that have been developed for the examiners. And the issue here is that they haven't

been widely disseminated yet or there've been some glitches in the system.

Given that we are all in the internet age wouldn't it be easy to just simply post these on an accessible website so that all claimants would have access to it? And then rather than having the burden of taking it along, they could simply link and refer it to the examiner on the spot. That might be a simple thing the VA could do.

MR. FLOHR: It's possible.

DR. DAVIS: Yeah, since it's already established, proved, et cetera, simply upload, put a link on both the websites as an example of something that would then reduce the burden here. Because it is, I don't think it's even though, yeah, the Marines, they can do everything.

But, frankly, I don't think the burden should be on the claimants at this stage given what they're dealing with so why not at least make them available just as, for example, for social security and disability. It's all out there now. You ought to just post it out on the website. It's already been approved, and then perhaps many of these problems would be obviated.

MR. BYRON: And I wanted to thank the VA for

reviewing the other 195 cases because last time we spoke I wasn't sure that was going to happen. I don't know that you were sure that it would.

MR. FLOHR: I wasn't sure, but it --

MR. BYRON: All I can say is that you had to come to these meetings in the past year and see that the VA's in the room, makes a...

MR. STALLARD: That's a positive turn of events.

Mike, did you have something?

MR. PARTAIN: Yeah, I wanted to change gears, just kind of step back to the last CAP meeting, and you know, Dr. Portier concerning the Marine Corps Handbook and the response back, a couple questions. Number one, in the letter you recommended or talked about having the Marine Corps revise their book. To date I haven't seen any action taken on that on their part.

Granted I know you don't have the authority to tell them what to do, but the question I'm having -- I'm sorry. The feedback's distracting me here. In your letter, in the response back you indicated that ATSDR was going to rely on what's being planned and done, and there was no indication that there was going to be, that y'all were going to send a letter out to the community.

And I go back to my original point at the January CAP meeting where, not January but the generalized CAP meeting, the damage has already been done by the Marine Corps in the form of their communications, you know, minimizing, the book very clearly states that any future studies are pointless. To me that is an incredible de-motivator for anyone who participated in any study.

I still stand on the position we have got to communicate what you guys are saying to the community. Because right now all the communication that is being done in the community is one-sided, and it is in the form of the Marine Corps. Nothing's changed. They still control the information. They still control what's being said.

And I fear that when it comes time for studies that people are not going to be participating as much as they should be because they've already been told, you know, so what, it didn't hurt you, nothing's going to happen, we're not going to ^. Further studies are pointless because it's not going to be able to answer your questions.

What are your thoughts on it, Dr. Portier?

DR. PORTIER: Well, I have the same concerns. There's no doubt that our hands are somewhat tied in

terms of the communication strategy. When you do a study like this, there are certain requirements that the Institutional Review Board has in terms of how you communicate with the subjects so that you don't bias the stuff you're studying. You don't cause tremendous response problems with the study.

That said, after I got your letter and after we were unsuccessful in getting a firm response from the Marine Corps about the correction or change to be used in that booklet, we changed the cover letter for the study. The cover letter that is going out has much stronger language than it had before about why we're doing this study, and why we think it's very important.

In addition, we're looking into -- we haven't decided on anything yet -- communication strategies that the study is going on. We want people to look at our website. If you were at Camp Lejeune or Camp Pendleton, could you take a look and see what we're doing and why it's important. So we're looking into doing those things.

We will not do direct mailing to everybody involved saying that we disagree with the National, with what the Marine Corps is saying, saying that we disagree with what the National Academy says. That

we will not be doing because that would bias clearly the type of study we're trying to do.

MR. PARTAIN: Dr. Portier, wouldn't conversely the same argument be made by the actions that have been done by the Marine Corps harm the Navy? Their conduct and their direct communication to the population study has significantly biased, negatively biased, the study. And they're still free to do this again.

DR. PORTIER: If they sign the communication agreement that we just sent back to them, they are not free to do that again. We would be aware of it beforehand, and we've got a commitment from them that they would not do this because we made it very clear that such a communication would be violating the IRB rules, and it would undoubtedly upset the quality of the overall study that they are paying for. And hopefully, that will not happen.

You can be assured if it does happen once we start this study, I am going to be livid and the Marine Corps will definitely be hearing from me in no uncertain terms that this type of behavior was unacceptable. And they can be assured that your close watchers in Congress would also get this message from me that we were livid.

MR. ENSMINGER: They sent a letter, a dear registrant letter, to every person that was either already registered with them and every new registrant that has signed up with them since. This letter states that the NRC assessed PCE, TCE, benzene and vinyl chloride. That is a damn lie. They said they assessed the exposure to all four of those chemicals and the health outcomes for them.

They did not assess benzene and vinyl chloride. It wasn't even in the damn law when this study came up. The law stated that they would assess the exposure and health outcomes to TCE and PCE. That was all that was in the law. You look at the NRC's health outcome charts. It says right there in small lettering, for TCE and PCE only unless otherwise indicated.

DR. DAVIS: Let me respond to that. As I said before the break there are two separate issues this group is looking at. One is exposure, and that's what your comments are on right here. And the other is the health consequences that may or may not be related to that exposure.

In fact, I'm going to take another tack now. I think we could beat this horse to death about exposure, the limitations, the cover up, the missing

data. That is all record. Nobody's debating that at this point. I'd like to suggest rethinking what the health issues should be here.

MR. ENSMINGER: You're missing the point here. The point is they sent a letter to everybody who is going to be part of this study telling them that they, that these exposures and the health outcomes to those exposures were assessed in this study.

DR. DAVIS: Yes.

MR. ENSMINGER: That's bullshit. They weren't. Excuse my mouth, but I'm pissed.

DR. DAVIS: I understand, and I understand why, but let me --

MR. ENSMINGER: But you're going off track here. I want them to correct that letter. I want everybody that received that letter to get another letter from them saying those two chemicals were not assessed. I mean, it's right in the damn report.

MR. BYRON: That's only fair. We're doing what the Marine Corps's done so far.

MR. PARTAIN: I mean, what we're doing with this -- and I'm going back to my point -- is blaming the manipulation because what the end result is, the studies and everything, the studies are ongoing and will go on.

DR. PORTIER: Back in the Communication Room, could you cut the speakers in here, please?

MR. PARTAIN: And here's a quote right out of the Marine Corps Handbook on Camp Lejeune. A central issue in toxicology at Camp Lejeune is whether doses were sufficient to produce specific adverse effects. The lowest dose -- I'm sorry. Lowest dose at which adverse health effects have been seen in animal or clinical studies are many times higher than the worst case highest assumed exposures -- keyword assumed -- assumed exposures at Camp Lejeune.

I mean, that's the argument they're making. They're basically saying in layman's terms so what you were exposed. It didn't hurt you. And that was coming out of the NRC report. And we're battling this.

I mean, if we just sit there and say, well, we did look at the studies. We've looked at the epidemiology, but when you have a scientific bias skewed, and then they're going around telling people, well, you were assessed for chemicals that weren't looked at. I see a disaster coming with the studies.

MR. ENSMINGER: When my senators went and approached the Marine Corps representative about this letter

and whether it addressed or assessed benzene and vinyl chloride in the NRC report, do you know what Scott Williams told them? Oh, benzene's mentioned in the report 87 times. Who gives a damn how many times it was mentioned?

It wasn't assessed. And now that damn letter that's signed by General Ruark and formally by General Payne says that those two chemicals were assessed and health effects for those exposures were included in that chart in the NRC report. And if these people, I'm telling you, if integrity and credibility were money, these damn people would be bankrupt, and they're general officers in the Marine Corps. That is a damn lie. It's right there in black and white.

MR. BYRON: And this is Jeff Byron. As I remember the CAP was asking for follow-up letters to encourage participation, not an initial letter to destroy that participation. And that's what we've got, and I'd like to know if we're going to get more of it. Is that how they're going to encourage it? Is this the Commandant's signature on the letter that asked people to participate in the health survey?

DR. PORTIER: When was this letter going out?

MR. BYRON: Well, it has been mailed out.

MR. PARTAIN: Are you talking about the registrants' letter? It was originally mailed out in June of 2009, and it's sent out to anyone who, that letter is sent out along with -- they may have changed it since then, but my understanding is that letter, along with an executive copy of the NRC report, is sent out to everybody that calls in or e-mails or what have you to the Camp Lejeune registry.

MR. FONTELLA: Yeah, even today.

MS. RUCKART: It is recently because I forward names that we get where people try to register. I forward them along to the Marine Corps, and I get an automatic reply, and it's what they're saying.

MR. PARTAIN: And that's what they send. So they continue to send --

MR. ENSMINGER: When General Payne just left and General Ruark took over his duties, General Ruark, they re-did that letter for General Ruark's signature. It's got the same damn lies in it.

MS. BLAKELY: And this is Mary Blakely with the CAP. Unfortunately, the people that you're sending these studies to will trust the Marine Corps over anybody else.

MR. ENSMINGER: Not all, but a lot of them.

DR. PORTIER: So thank you for telling me this. This violates our communication agreement with the Marine Corps even though they have not signed it because we have not approved that letter for going out. We haven't even reviewed it. We have no idea. I will check on this, and we will stop this if we can possibly stop it.

MR. BYRON: It's violating humanity.

MR. PARTAIN: If we have computer access before -- I can't bring it up right now -- I'll show you exactly where it's at on the internet. It's sitting there. And one thing before we break. When we're talking to ATSDR, I'd like to see the possibility of getting a webpage set up for ATSDR that contain the letters you have, the information you have. Because people are still looking for information. They're confused, what have you. But we need to have the letters, like the January letter that you sent to the Marine Corps, have these people set up on y'all's site, too, so people can see it. It may be now, but I haven't seen it.

DR. DAVIS: I'm working with the Israeli government on a related project that might be relevant here which is to provide information on known and suspected carcinogens for people. ATSDR has done an

excellent job with that with your tox profiles. And you simply could link your existing -- because you've got some really good information there, your tox profiles -- and link it to Camp Lejeune.

MS. RUCKART: We have.

DR. DAVIS: You have that --

MS. RUCKART: It's on our website.

DR. DAVIS: I didn't see that because that actually refutes what the letter from the Commandant said. And we need to get this auto-reply and simply say for information look here, and try to drive it. You know how search engine optimization works. Try to drive information to there, and, frankly, make sure that the Marine Corps's well aware of this.

DR. BOVE: We actually have a lot of information on the website. A literature search that we did for a feasibility assessment, but we also have listed diseases people we think are associated.

DR. DAVIS: Which is what Mr. Flohr was talking about, right?

DR. BOVE: Well, actually we have quite a lot more because we do have our disagreements with the NRC report and it's including (inaudible). First of all, the limited suggested category they have we think needs to be bumped up with those diseases.

But there are diseases that were in a lower category, some of those also need to be bumped up at least one or two. So we didn't put together a chart like the NRC did. Instead we have a list of the diseases with references on our website as well as ^.

MS. RUCKART: Plus links to the tox profiles.

MR. STALLARD: We're going to use this opportunity to break right now because we've run over all morning.

MS. BLAKELY: Just may I say one --

MR. STALLARD: No, you may not. You can come back right after lunch and bring it up.

But listen, what I wanted to say, this is important because what you have brought up into awareness is the degree to which we have, are trying to work with our colleagues and the information that they're putting out that could bias the efforts of the research. And this is important for you to know, and so thank you for bringing that up.

And then you have more time with Dr. Portier because he has agreed and extended an invitation to spend time at lunch. So be back at 1:30, and we will resume. For those on the phone we will resume at 1:30.

(Whereupon, a lunch break was taken from 11:55 a.m. to 1:30 p.m.)

MR. STALLARD: Frank and Perri you're here. So the question is knowing that you're in control of your time, Perri, do you want to do the update that we didn't get to this morning, do a brief update.

Who do we have on the line?

DR. CLAPP (by Telephone): Dick Clapp is here.

MR. STALLARD: Welcome back, Dick.

MS. BRIDGES (by Telephone): Sandy Bridges.

MR. STALLARD: All right, Sandy.

And that's it. Okay, thank you.

RECAP OF PREVIOUS CAP MEETING

MS. RUCKART: First I'll briefly remind us about summary and action of our last meeting, then we'll get into talking about some updates on our health studies. So we kind of touched on some of these anyway so -- plus I handed it all out to you to read it.

Last time you all were interested in seeing a copy of Dr. Portier's letter to the DOD/USMC discussing the NRC report, and we provided that to you and also ^ VA that letter.

We already talked about the letter concerning the NRC report to everyone on the USMC registry. I

think we're pretty well covered on that. You can read more details here about ^ history.

Again, last time the issue of media requests for CAP meetings was brought up, and we discussed that we handled it on a case-by-case basis. We did not get any media requests for this meeting.

Brad also touched on the fact that we met in February, a couple months ago, to discuss ways to continue to facilitate dialogue between our two agencies and answer any questions the VA had. I think we all felt it was a very productive meeting. We had ^ discussion, a lot of time for Q and A on our work, and we discussed that we would have some regular meetings, face-to-face meetings that Brad and I just talked about today. We possibly could couple that with the VA's coming here the day before and stay for our CAP meeting so we'd have a lot more ^.

And we also said we would supply the VA with the IRB-approved materials both for our current studies and the analysis plans for those studies.

And the CAP asked Mary Ann to follow up on what groups received information and notification from the USMC. I saw that Mary Ann sent everybody an e-mail.

MR. ENSMINGER: Hey, Perri, can you hold on a second?

Sandra? Sandy?

MS. BRIDGES (by Telephone): Yes, yes.

MR. ENSMINGER: You need to mute your phone. I hear you carrying on a conversation back there somewhere.

MS. BRIDGES (by Telephone): No, I'm not. Nobody's here but me.

MR. ENSMINGER: Well, somebody doesn't have their phone muted.

MS. BRIDGES (by Telephone): It's not me.

MR. STALLARD: Okay, you're forgiven.

MS. RUCKART: So Mary Ann is distributing the document. She also emailed it out in response to the question at the last CAP meeting about updates on the USMC notification efforts.

We already heard from Morris again today, but just to briefly discuss what he said before. At the last meeting he provided copies of the Chapter C report. He discussed Chapter D last time. He provided more updates on that today.

He discussed his conversation with Elizabeth Betz, and you know what's going on with that. He, again, brought that up today. And last time Sven provided an update on what had happened between the

CAP meetings. He again did that. I believe he said today he was going to follow up on some item that he mentioned last time that you all wanted clarification on, like, I think you asked about that.

MR. ENSMINGER: I'm sorry?

MS. RUCKART: You asked Sven to go back and review the transcript, Jerry, from the last meeting because there's something he mentioned last time that you're now interested in --

MR. ENSMINGER: That was Jim.

MS. RUCKART: Jim, okay.

And Brad as usual gave updates from the VBA. As you know all the claims are consolidated in Louisville. He went there in December to meet with them and I think everyone feels pretty good about how that's progressing.

And, again, we're still committed to completing the birth defects and childhood cancer study. Again, we're waiting on the water modeling to complete that.

We provided an update on the mortality study, which I can get into here in a minute. We have some good news to report. We were able to whittle down the number of unknown vital status. That's, I

think, very helpful. And we provided an update on the health survey. Again, I'll discuss that in a minute. We don't have to talk about where we were the last time. We'll get into where we are now. That's the most important.

We also mentioned that we're going to have the expert panel meeting for the health survey in January. There were some bad weather issues for Atlanta, so we actually held that meeting in March.

At the last meeting we had a brief discussion about the ATSDR Camp Lejeune website. Since that point the water modeling pages have been revised a little bit with the hopes of making that information more prominent so you don't have to go all the way down. They put a little side box where you can click on to get what is perceived to be the most valuable information to people. So let us know your feedback on that.

We presented some possible options for evaluating male breast cancer. We're going to again talk about that here in a little bit.

And there was a request from the CAP that we calculate how many cancers and other diseases will be expected in the survey if there's a hundred percent participation so you can compare that with

what you're seeing reported on your website. I think Frank will have something to recap here later.

And we're going to be talking about this at the end. There was a request to have a CAP meeting and public forum in North Carolina, and we've been working on that, and we'll talk about that at the end, our planning the next steps for that.

So just to jump right in to updates on the study -- Well, first of all, any questions about that?

MR. PARTAIN: Yeah, real quick, on the notification summary for the activities of the Marine Corps and everything, thanks for sharing that with us. You also may want to add to your distribution list -- On your notification and advertising, I'm not sure if you're aware of this, but feel free to advertise in Leatherneck and everything. April 21st, the premiere of the Camp Lejeune documentary, "Semper Fi, Always Faithful," will be held at the Tribeca Film Festival.

MS. SIMMONS: What? I'm sorry.

MR. PARTAIN: The premiere of "Semper Fi, Always Faithful" will be held at the Tribeca Film Festival on April 21st. It would be nice to see y'all advertise that in the Leatherneck magazine and the

different outlets that you do. Feel free to post it on the Marine Corps's website, too. Also, ^, the ^ Headquarters, but it'd be nice. We're going to have a question and answer session after the first showing of the film on April 21st. Jerry and I will be there, and it'd be nice to have General Ruark or somebody from Headquarters Marine Corps come down and participate.

MR. STALLARD: Where will that be again?

MR. PARTAIN: This will be at the Tribeca Film Festival, April 21st, this year, roughly two-and-a-half weeks from now.

MS. SIMMONS: I'll pass it along.

MR. PARTAIN: I'll expect to see y'all there.

MORTALITY STUDY

MS. RUCKART: So on the mortality study, things are progressing on schedule so this is very good news. So far we've identified 43,000 deaths for the period 1979 to 2008. Two thousand nine deaths are not yet available but should they become available for the study we'll include them.

DR. DAVIS: I'm sorry, what's the total number of deaths?

MS. RUCKART: About 43,000 and that's in the Camp Lejeune and Camp Pendleton cohort of deaths

occurring from 1979 to 2008. Death among the Marines --

MR. PARTAIN: Forty thousand out of how many?

MS. RUCKART: Forty-three thousand.

MR. PARTAIN: Forty-three thousand out of what's your baseline?

DR. BOVE: Close to 500,000, about ten percent.

MS. RUCKART: Of the Marines who were stationed at Camp Lejeune --

DR. DAVIS: Is it Marines only or is it their families?

MS. RUCKART: It's just the Marine Corps and the civilian workers.

DR. DAVIS: So it's not any family members?

MS. RUCKART: These are people who were identified from the DMDC data ^ our data center. The Marines who were at the base between '75 and about --

MR. ENSMINGER: 'Seventy-five and '85.

MS. RUCKART: 'Seventy-five to '87, and the deaths occurring from '79 to 2008 because the NDI, National Death Index, wasn't in operation until '79, but the Marines had to start their service in '75 anyway, so...

DR. BOVE: What we have is this. We were focused on those, we have data from the DMDC for active duty

from ’75 to ’87, middle of ’87. We wanted to focus primarily on those who started their service in ’75 because we don’t have information on how long they served before that, but we do know it started in ’75. However, since we have data on people who started before ’75, we’ll look at their mortality, too.

So the figures are near 43,000. It includes people who started before ’75 but were on base at Camp Lejeune anytime between ’75 and ’87, similarly for Pendleton. And the civilian workers, we have data since December ’72.

Again, we wanted to focus on those who started work after that because we don’t know how long people in the database in ’72, how long they had worked before that. But since we have data for all those people we’re looking at that as well. So we focus more on a smaller group of it but not much smaller.

But we have data on all. We’ll look at the data for all. So how many do we have? We have something like 215,000 active duty Marines from 1975 to ’85 plus an additional for ’86 and ’87, which is probably 120,000.

MR. ENSMINGER: Use the terminology Marines and

sailors, okay?

DR. BOVE: Marines and sailors, okay. We have something like close to 250,000 Marines and sailors from both Pendleton and Lejeune.

DR. PORTIER: I'll be back in a bit; I have another meeting I have to attend to.

DR. BOVE: If you add the civilian workers to both it's about 250,000 each. So we have about 500,000 people in the mortality study. So it's a huge study. Even though it's a young cohort, it's a huge study, and we have quite a bit of statistical power for that study.

The drawback is that cancers that don't lead to death, you can't pick up. Cancers that are extremely rare like male breast cancer you can't pick up. But you can pick up kidney cancer, non-Hodgkin's lymphoma, leukemia, bladder cancer, liver cancer, all the key cancers that have been related to TCE and PCE and benzene and vinyl chloride. So you do have that ability in this mortality study.

So there are pros and cons and plusses and minuses. And one of the problems, as I was saying before, we were talking about vapor intrusion and how that might bias the study. The way that biases the study is that people we think aren't exposed may

have been exposed to vapor intrusion. So we're calling them unexposed, but they actually had some exposure. It makes it harder to see an effect, drives your risk estimates down towards no effect.

So that's one source of what we call exposure misclassification bias. That's the technical term for what I'm talking about. But there are other sources in this study. They're probably worse than that, and that includes, what we have in the mortality study is just the unit that they were with.

And we're using that unit code to tell us whether they were at Lejeune or Pendleton. But the unit may be stationed at Camp Lejeune but the person may be deployed overseas, taking training at another part of the base. So that to me is the bigger source of a problem with the mortality study because all we have is computerized data from the DMDC, and we have their unit code, and we have their occupation code. But we don't know if the person actually physically was at the base. That's a major problem.

The second major problem with the mortality study is that we may think people are unexposed because they are either barracked, they're not

barracked at main side, or they may live in family housing that wasn't ^ contaminated drinking water for some parts of Holcomb Boulevard, for example.

On the other hand they may be out in the field and getting drinking water from a water buffalo filled with Hadnot Point water. So vapor intrusion is like that. It's like that kind of a problem.

And the only way -- this happens in all epi studies. This is not unusual for Lejeune. Lejeune is difficult but other studies are just as difficult. And the way around that is to have a large number of people so that even though your risk estimate is lower than it should be, you still have confidence in that risk number. And you realize you're probably underestimating the effect, but yet you're still seeing an effect.

That's why I think I'm pretty optimistic about the mortality study is because so many, so large a sample, that even though the risk estimate may be pushed down towards one, will still give us enough of a signal to tell us if there's something happening. So that's how that works.

MR. FONTELLA: Jim Fontella. So you have ten percent that you know of of the deaths within that certain --

MS. RUCKART: Well, let me say something. All of these people's records were searched for. The first step was to take all 500,000 or so people and determine if they were dead or alive. Out of those 500,000 people, we've identified about 43,000 are dead, and there's a group of unknowns I'll tell you about in a minute. But all of the other people are presumed to be alive, so we know that they're not dead.

MR. FONTELLA: But the question is that number, 43,000, in your opinion already do you see anything abnormal about that? Is that a normal --

MS. RUCKART: We don't know anything about the deaths. The contractor has just identified. What they did is they used the vital status databases to determine who was alive or dead. And they're going to send those that they have good reason to believe are deceased plus those group of unknowns, that's people whose vital status they couldn't find out if they were dead or alive so there's no records to tell them.

They first started out with about 60,000 people whose vital status was unknown. That's a lot. That's a lot more than they thought. So they ended up going to a locator firm and trying to see if

there was any information, any records to show the people were alive or recently dead. And they were able to whittle that number down to 6,000. That's great.

That means that they assume the other 54,000 -- well, out of those 50,000, about 3,000 they realized were deceased. The other 50-some thousand or 40-some thousand, they realized were alive or good reason to believe they're alive. Six thousand are still in this unknown area. That's great. That's not that many to have to search in the NDI, the National Death Index.

So they're going to take the 43,000 who they know are dead. They don't know the reason why they're dead. They just know they're dead, and they're going to look for the 6,000 who they don't know if they're alive or dead. Send all those names and see what we get back. For the 43,000 that are dead we're expecting to get back their cause of death, and that's what we're going to be analyzing. For the 6,000 who we don't know we'll either get back no information or we'll get back their cause of death.

MR. PARTAIN: Perri and Frank, with the 43,000 dead and the 6,000 unknown you're going to get back

information, their death certificates. As you well know, death certificates are notoriously, they don't completely show everything. For example, somebody who has breast cancer, they survive the breast cancer and end up dying from complications --

MS. RUCKART: We're not actually getting death certificates. We're getting the information from the National Death Index so we're going to be getting the secondary causes, underlying causes. We're not just going to get like what you're saying, cause of death. If somebody has lung cancer, and they die of heart disease, underlying causes of death.

DR. BOVE: The approximate cause of death.

MR. PARTAIN: The approximate cause of death and then a secondary. Okay, because that's going --

DR. BOVE: -- cause of death information. We're getting that from NDI.

MR. PARTAIN: And you'll be able to discern that with the information that you get from NDI.

DR. DAVIS: And it also has most frequent occupation. The National Death Index does have occupational information in it. I helped to set it up a long time ago and at least it was supposed to.

DR. BOVE: I'm not convinced that it does, but we

have occupation codes from the DMDC database. That's the information we'll be using to determine their occupation at the base.

DR. DAVIS: Well, the occupation at the base may not be that relevant to what they were doing for 20 years later on.

DR. BOVE: Well, no, but not -- that's also true of any information on the death certificate, the deceased's occupation. But my understanding from the DMDC, or what we're asking for, is cause of death.

DR. DAVIS: And you're not asking for anything about occupation at all?

DR. BOVE: I'm not aware that they have information about occupation.

MR. STALLARD: They might have an MOS.

DR. DAVIS: Well, for the military they'll have an MOS, but I'm talking about -

Dick Clapp, are you on the line?

MR. STALLARD: Well, wait a minute. This is a point of clarification because I've turned off the thing because of the feedback, so they can hear us, but they can't respond right now. So we're going to try to work that out so that we don't have that distraction here. Let me turn it on and then --

DR. DAVIS: Well, the specific question on the National Death Index, which I have not looked at, frankly, in some time, but it was supposed to have occupation. And so I'm asking Dick Clapp, if you're on the line, if you can tell us whether or not the National Death Index currently has most usual occupation on it.

DR. CLAPP (by Telephone): No, I don't think it does, Devra. I think it's something that NIOSH does separately or individual states do separately, but they don't keep it on the NDI. It would have been a good idea or it was a good idea.

DR. DAVIS: Yeah, thanks.

MR. FONTELLA: Jim Fontella. Now, when I had my breast cancer, okay, I was on chemo. I developed an infection in my chest when I was on chemo. That nearly killed me. After that, about a year later, when they were installing a port, they put it in my arm instead of my chest, that developed a blood clot and my whole arm swelled up like the size of my leg below and then my chest and my neck had swelled up, and I was on like Heparin for seven straight days and I was on Coumadin for about year, maybe even two years. I can't even remember. But that could have also killed me. Now, if somebody dies of blood

clots, when you talk about secondary information, would know in your --

DR. BOVE: No, it's just causes of death. And so --

MR. FONTELLA: That's an issue there, too.

DR. BOVE: Yeah, that's the limitation. I just said there are pros and cons to a mortality study. The pros are the data's available, that you can do these studies rather easily. The cons are that you really want to get an incidence. You want to get at the fact that you had a breast cancer even though it didn't kill you.

To get to incidence what we, there are several approaches. One is, of course, through the health survey. The second approach is something we've been talking about and will try to pursue. Once the health survey, the survey part is over, and we convince the military to fund us, and that is something that hasn't been done before in this country.

We do not have a national cancer registry, but to use all 50 states, or most of them, to do a data linkage cancer study. There have been attempts to use subsets of like say 20 states. The Gulf War Cancer Incident Study used something like 20 states roughly, plus or minus.

And there have been other studies, occupational cancer, occupational studies, that have used three, four, five, six cancer registries surrounding the area of the industry. But no one has used all 50 states or even close to that in a cancer incidence study except for, I think there was one study that looked at elderly cancers for some kind of health service activity. I think, but they did get identifiers.

And we're trying to figure out a way to do this, mostly without getting personal identifiers to make it easier for that to happen. But as I said, it's never been done before. It's going to require a lot of work, money and so on. But we want to -- I've been bringing this up over and over again at CAP meetings and in my agency as well.

But I think the feeling is we have to finish, let's get the survey, at least a portion of it done. We still have to verify the diseases we get reported from each survey. But I think I can make a stronger case for us to start moving in this other direction to look at cancer incidence once the survey's done so I'm going to be pushing that. I hope to get your support on that, too, but I think that that's going to be the best way in the end because I have my

doubts about the survey.

I have doubts about surveys in general because of possible participation. It's not so much participation. I'm going to discuss this with the expert panel, but there's something called selection bias or non-response bias, which is not just lack of or a problem with participation, but participation amongst particular types of people. Those people who are exposed and have a disease of interest or those people who don't participate that don't have a disease or unexposed or some combination of that, that bias is discussed. Participation rate by itself is not a bias for this kind of study. It is a bias for Gallup and...

MR. PARTAIN: Frank, I want to interrupt here a second because I want to make sure because I'm confused here. When you have somebody showing a death certificate saying blood clots but they had a cancer but when you get the results back it says blood clots, which we're, you know, that's not what you're looking for, are you then going to take an individual's cause of death with one of the 43,000 and try to determine whether there were any underlying health conditions that may have contributed?

DR. BOVE: Not in the mortality study. The mortality study just uses the information on the death certificate. So if he had a breast cancer but died because he was run over by a truck and maybe had heart disease on top of that, that might have, but --

MR. PARTAIN: ^ the truck but died of heart disease.

DR. BOVE: Whatever. It has to be related to the death itself. In particular, if you had a cancer and you're in remission or you've been cured, the only way you get at those is through a cancer incidence study.

MR. PARTAIN: Which you're not doing.

DR. BOVE: As I said, one way we're trying to do this, because we are mandated to do a survey. We thought we'd turn the survey into a study. Why do a survey; it has no scientific validity. So we thought we'd try to make a study out of it, and so that's what we're doing.

But again, as I said, all these studies have limitations. The one about the mortality study's limitation is doesn't get an incidence. You have to die from it. And then there are problems, as you well know, with the death certificate. Sometimes the information is not very good. We all have that

problem in any mortality study.

MR. PARTAIN: But is there any way you guys can go and try to clarify it? Like if you've got an ambiguous, if you had an ambiguous death certificate just to go try to find out?

MS. RUCKART: We're not getting death certificates though. We're just getting a file back from the NDI that's going to be what they pull from the death certificate. We're not actually going to see death certificates. So we're just getting a file with causes of death listed in our file.

DR. BOVE: This is how all mortality studies are done. This is the limitation.

MR. STALLARD: Before we go forward, Dr. Clapp and Sandy?

MS. BRIDGES (by Telephone): Yes.

MR. STALLARD: You're still on the line, right?

MS. BRIDGES (by Telephone): Yes, I am.

MR. STALLARD: Is there anybody else on the phone?

DR. CLAPP (by Telephone): I am, too.

MR. STALLARD: Is there anyone else on the phone?

(no response)

MR. STALLARD: I'm going to put you all in silent mode because we're having some unexplained voices from outer space or something. I don't know. But

it's a distraction here so we'll bring you back on the line if you have any questions that you wish to pose, okay?

DR. CLAPP (by Telephone): All right.

MR. STALLARD: Thank you.

We're going to take a pause and I'm going to get back and like ten minutes from now I'll bring them back.

MS. RUCKART: So I think we pretty much covered the mortality study. Are there any additional questions about that?

MR. BYRON: Yes, sorry, I might have missed something. What are the years for that study?

MS. RUCKART: The deaths are going to be occurring from 1979 to 2008. And the Marines and the sailors who were on base -- the civilian workers. Well, the Marines and sailors from '75 to '87, the civilians from '72 to '87.

DR. DAVIS: You completed '87?

MS. RUCKART: Well, we're going to focus mainly on '85, but we're collecting it through '87. We may do additional analyses.

MR. BYRON: The average age would be my age. I graduated high school in '75. The younger they are, the more it will tell. That's what I was getting

at. How old is this group of individuals? They could be older than me, probably not younger than me.

DR. DAVIS: Do you have an SMR?

DR. BOVE: SMR?

DR. DAVIS: Do you know what the expected death rate is in this population and what the rate is that you observed?

MS. RUCKART: Well, we're going to wait for the cause of death. I don't believe we've calculated an overall cause. So don't know what the causes are. We just know about 43,000 plus 6,000 unknown, that's just based on the vital status search. We have to wait to get back the causes of death. And I believe that is going to, that search process is going on now and will be completed in the --

DR. DAVIS: Maybe I didn't make myself clear. If you have all cause mortality, I mean, you know what the, in a population of size X, you would understand that you would expect Y number of deaths over Z time. And I'm asking you can you answer, do you know what the answer to that is now?

DR. BOVE: No. No, we don't, no. Ten percent is probably in line actually, but we're going to wait and find out first of all who's from Pendleton and

who's from Lejeune and then beyond that we're going to do the study. And we'll do SMRs based on the drinking water contamination, based on where they were stationed, and then we'll do direct comparisons to solve.

We have a whole analysis planned, but we want to wait until we have the exposure information, which we will have roughly by the same time we can get the cause of death information. So it dovetails nicely.

DR. DAVIS: Do you know if you have complete, how complete your ascertainment is? In other words, if a population was a total of a million, you have one percent of that.

DR. BOVE: It's as good as the NDI is.

MR. STALLARD: And what is SMR?

DR. BOVE: Standardized Mortality Ratio. But the, what we have for everyone is their social security number and date of birth. With those two pieces of information you can get good information from the NDI. It's better than most situations.

And you also can get good vital statistics information from the Social Security Administration who we will miss, however, because NDI doesn't cover outside the country, deaths outside the country.

And we'll also miss, the Social Security Administration will probably miss people, actually it has information on some people outside the country but it will be spotty, might have a problem there.

The other problem will be -- and this happens with any mortality study. There will be people we will not be able to determine whether they're alive or dead because they're outside the system. They're homeless. I think the prison population gets picked up, but the homeless may not get picked up. So those are some of the issues that, again, we face in any study. This is not unusual for any.

MS. RUCKART: But for the unknowns we have whittled it down to about 6,000 and that's, you know, a very manageable number and some of those will come back probably as deceased, so the total unknowns is going to be less than 6,000 out of 500,000.

DR. BOVE: Our main concern goes back to that issue I mentioned earlier, is exposure misclassification bias, which means we say people are exposed when they're not or we say they're exposed, unexposed when they are. Or we screw up in terms of how high they're exposure was. And that, again, is a problem. It does bias the study towards finding

nothing, and that's a problem with any of these kinds of studies.

It's just there's noise in these studies. There's nothing we can do about it. We try to eliminate it as much as possible. And by doing the extensive water modeling we're doing, we're trying to minimize some of that noise.

If we followed, for example with the NRC set, which is just use exposed versus unexposed, we're grouping together people with widely different exposures into one group. That is an enormous exposure misclassification bias, and that's why they -- well, I guess I'll stop there. That's why I suggested it, recommended it, but that's why we're doing the water modeling.

But I want to wait. And I know the case control study's been sitting there for awhile. I know you're frustrated by that. But I want to wait until we get the water modeling results because we absolutely need that to make the case if there's a connection.

DR. DAVIS: I have another, a couple suggestions, one of which is that you should absolutely look at the average age of diagnosis as, for example, if you had a group of ten multiple myelomas that were

diagnosed under age 45, you'd have something really interesting. If you look at age of diagnosis for the kinds of causes of death that might be just a little bit unusual and that may give you yet another indication as well.

MR. PARTAIN: Because in another bias your problem with mortality studies is that when you look at cancers, cancer today is a lot more survivable than it was five, ten, 15, 20 years ago. Is that correct a reason?

DR. BOVE: Oh, yeah.

MR. STALLARD: I'm going to check in with Dr. Clapp.

DR. BOVE: Actually, we did something like that in the first version of this small for gestational age study where we found affected mothers who were older than 35 who were exposed to PCE for example. So we do something similar in all these studies. We'll look for those kinds of age exposure interactions.

MR. BYRON: This is Jeff. That 43,000, did you say that was roughly out of half a million?

DR. BOVE: Yeah, it's about ten percent.

MR. STALLARD: Dr. Clapp, we have you again on speaker. Is there anything you'd like to contribute or question?

DR. CLAPP (by Telephone): Well, no, I agree with

what Frank has been saying about the great limitations of the mortality study and the problems of exposure misclassification. Those are common problems. I've done these kinds of studies myself, and we still have found some things factually in Viet Nam veterans. So it's not like a hopeless exercise. I think it's a very worthwhile study to be doing.

As far as the, Mike asked a question about the survivability of cancer these days. I mean it depends on the cancer. Some types of cancer are not particularly more survivable now than they were ten, 15, 20 years ago. Like lung cancer is not, probably non-Hodgkin's lymphoma and kidney cancer are not that different these days. And breast cancer in women at least is more survivable now than it was. So there's no simple answer to Mike's question. I think overall survival has improved somewhat, but it depends quite a bit on which type of cancer you're talking about.

MR. STALLARD: Thank you.

MR. PARTAIN: On that note, Frank, will we be able to delineate what type of cancers, the NDI's going to give you what type cancers they had, right?

MS. RUCKART: Yes.

MR. PARTAIN: So in our group if we have a spike in kidney cancer deaths, that would be something of interest?

DR. BOVE: Oh, yeah.

HEALTH SURVEY

MS. RUCKART: I think everyone feels comfortable on the mortality study. We'll move on to the health survey. So it was mentioned before that our letters are revised now to more specifically mention the drinking water contamination in Camp Lejeune.

Because of that we had to go back to OMB. So we did have approval for our older materials that came in November, but since we revised them in January, we had to get back to OMB, and we have not gotten approval for the revised materials. So we cannot start sending out the survey until we get OMB approval.

So now it's the beginning of April. Our current plan is that we would start the mailings in May, again, contingent on OMB approval. Should we get that very soon, the plan is to start the mailings in May.

I think I may have mentioned this before. It's going to be a wave process. The contractor cannot send out, you know, 300,000-plus surveys at once and

manage the responses. So there are six waves, and it's a six-month process.

So if we start in May, the last surveys will go out in September. Each wave though takes about ten weeks. So because, you know, we have the initial contact, and we have repeated attempts to get participation. And the waves will be three weeks apart.

So meaning the first wave that goes out May 1st, then the people in the second wave toward the end of May, they will get their first letter, maybe overlapping in that sense, but some people's waves will be finishing up as some other people's are starting.

And we've built in a little extra time at the end for catch up. You know, like if they get some new addresses for people or some stragglers and things like that. But the data collection would end in about October.

So we had our health survey expert panel meeting on March 8th. Unfortunately, we couldn't have it in January. But the meeting was very, very successful. We have, we're preparing some summary notes from the meeting. They have been reviewed by us, and we sent them back out for the panel members'

concurrence, and we gave them about a month to review it.

So by the end of the month we'll have that finalized. Or we've given them till the end of the month to give us any comments they have on the summary notes, and then we'll be finalizing it. It shouldn't take that long for us to finalize it here at the agency and then we can share it and post it on the web, but just to let you know the overall sense is there was a lot of support for the health survey. A lot of support for continuing on to the next phase, the medical records confirmation not contingent upon any magic number for participation rates. You know, the overall feeling was that there really is no number that you could say it has to be this or we can't go on.

So the general feeling was they're supportive of moving forward regardless of the rate. We're putting a lot of time and resources into this health survey. Let's take it to completion and do the medical records.

One thing that came out of the panel is the panelists are wondering if there's anything further we could do to promote the survey. So everyone's going to be receiving their individual study

invitation letter and the follow-up material. But is there something more that we could do to really express the urgency here and the importance of this.

So this is kind of a fine line because you can't do any other initial recruitment. That would have to go back, anything that's seen as recruitment material would have to go back and get OMB and IRB approval, and you see how long it's taking to get the re-approval of our one change to the letter here.

So what we are doing is we are engaging with BAH, ^, I think you're all familiar with them, and they're going to help us develop a marketing strategy. This will be something general so it won't be construed as recruiting material. It's something to spread the word: Hey, these surveys are going to be coming out. When you receive yours, please don't throw it away as junk mail. Please open this. This is important. Also, the materials would really stress the importance of Camp Pendleton because our materials are just sort of general. We're talking about ^.

These materials will let Camp Pendleton know it's very important that you participate. You're the comparison. We know you weren't affected, but

we still need your help. You're an important piece here.

So we will also want to talk with you. We know that you have your website and you have your channel. We want to again just engage with you and make sure -- I know you're going to do this -- put it on your website. Encourage people to fill out the ^ quickly. I know we talked about this before.

MR. BYRON: Why not put it on a billboard on 75?

MS. RUCKART: So, you know, we want to talk to you a little bit more and see if you have any other ideas. We haven't gotten back from BAH exactly what they want to put out in press releases, but they're going to be developing some materials for us.

So as I said, it's going to be sort of a general plea, but we might have just targeted areas like specific publications that Marines or retired Marines read or areas where they reside. So targeted in that sense but general in the sense that it can't be viewed as really recruiting individual people.

MS. BLAKELY: I have one. Mary Blakely from the CAP. What about public health systems? Is there any way you could post notices in those places?

MS. RUCKART: What do you mean?

MS. BLAKELY: Like where people go when they can't afford healthcare.

MR. ENSMINGER: Well, VA hospitals is a prime example.

MR. BYRON: How about just a public health notice in a commercial form?

MS. RUCKART: Okay, that brings up something. Our branch chief has requested that we put something out in the MMWR, that's the Morbidity and Mortality Weekly Report. That's a publication that is not intended for the public. Mainly it's going to providers and nurses and things like this, so all those people would see it. And then also this publication sometimes gets picked up by the press. So it gives us like two avenues to really reach out. I think that's getting at what you're saying.

MR. ENSMINGER: Brad, Brad, what would it take to get the VA to put a posting to advertise this in VA hospitals?

MR. FLOHR: I don't know. I can't really answer that question. I'd have to talk with the people in Veterans' Health Administration and see what they're, if there's any provisions or, like I said.

MR. PARTAIN: Can we make a formal request that ATSDR send a letter to the VA asking that this

information be posted at the VA clinics?

MR. ENSMINGER: It would require making up a very tactful neat poster that they can put up. You know, not something with magic marker or cardboard.

MS. RUCKART: Well also, as part of this strategy it does have to ^ the ^ and the Marines and have their help in promoting as well. I guess we could have another ^ from the VA, you know, from the VA to military family and ask them for their ideas on...

MR. ENSMINGER: Well, Perri, I've got another idea and we could have a placard attached and made up for the end, at the end of documentary about the health survey, that people are going to be receiving these, and they need to fill them out and return them.

MS. RUCKART: I mean, anything that you all can do -- -

MR. ENSMINGER: Because this thing's going to end up on HBO or A&E or something.

MR. BYRON: This is Jeff. We'll do whatever we can do, but I want to make sure you guys are doing whatever you can do. Like I said, CDC puts out public health notices all the time. I see commercials on TV.

DR. BOVE: Yeah, but we're working with the --

MR. BYRON: Well, I mean, will you ask to see if

there'll be a commercial on TV to say to U.S. Marines that served at Camp Lejeune and Camp Pendleton participate in this study? Because you do ask people to get vaccinations and stuff, I know that, and flu shots.

MS. RUCKART: BAH is going to send us their draft plan this week, not any material but just their general approach. So we'll see what they get back, and we're going to have a call with them Friday, and we can bring these things up. Nothing has really been decided. We just had kind of like a kick-off meeting last week.

MR. PARTAIN: This, I think, is a golden opportunity for the Marine Corps to show their concern for the health, safety and welfare of the Marines and their family members by engaging and promoting this through, you know, they've had ^ on the interstate. When I drive I see billboards for the Marines, join the Marine Corps, what have you.

They certainly should be able to fund some billboards, some public service announcements on the TV and not just advertise in newspapers. You know, get something like a billboard that's permanent where people can see it and put it in Florida where a lot of people live and get it on TV. Make a

public health service announcement. You've been saying this for quite some time. Live up to what you're saying now.

MR. BYRON: This is Jeff again. I'll be honest with you. I don't want the Marine Corps putting it out. I want the Marine Corps to pay for it for you. I want the CDC to put it out because I've just been back stabbed too many times, okay?

MS. RUCKART: But I want to say one thing. You know, this is a new idea for us. It was just put forth by the panel a month ago. We're exploring it, but there isn't a budget for this. We did not request a budget so we're somewhat limited. For some reason we're able to work with BAH, our communications office had a contract with them, but I'm not really sure what kind of funds are available for like TV newscasts and things like that.

MR. BYRON: If we'll get you a billboard for a month, will you put up the income?

DR. DAVIS: The Marine Corps, as you know, advertises all over for recruiting. They have a huge advertising budget, and it would not --

MR. PARTAIN: That's for recruiting.

DR. DAVIS: I understand, but this is recruiting. This is just recruiting for a study. And I also

know that in terms of the new social marketing you could certainly get Rachel to probably do a You Tube trailer for you. And you can certainly put it at the very end of the documentary. But you can give it to CDC to post on their website. Right? The trailer which simply says we're looking for --

DR. BOVE: I don't know if we can do that or not, but send it to us anyway.

MS. RUCKART: Yeah, I mean, they are, BAH is aware that social media is a good way to reach people, and I'm sure that's part of their plan, right?

MR. STALLARD: Okay, so how is this moving forward with recruiting? Is it working with BAH?

MS. RUCKART: Yes, Booz Allen Hamilton. And funny enough, some of the people who are assigned to this are also people that have worked on the registry.

DR. BOVE: Really.

MR. BYRON: Booz Allen Hamilton has made so much money in this. Maybe they should contribute the funds to get this done.

MR. STALLARD: So are they going to have a communication plan, a strategy that can be shared with the CAP?

MS. RUCKART: Well, they're sharing with us this week, and we're, I mean, they're supposed to send it

to us tomorrow. And we're going to have a call on it Friday, and I don't know what they're going to send but it's going to be quickly because they want to time this, whatever materials are produced, with the mailings of the health surveys. So if the health survey does in fact go out in May, then any of these ways to publicize will be happening in May. We're on a really short turnaround here.

MR. FLOHR: Hey, Jeff, how about the direct approach? These surveys are going to Marines, right?

MR. BYRON: Yes.

MR. FLOHR: As I understand Marines are taught to do as their told, right?

MR. BYRON: Yes.

MR. FLOHR: So why don't you just start the survey bold letters, Marine, fill this out and send it in?

MR. BYRON: I agree. And the thing should be that you're still providing service. You want to tout this that the veteran is still serving his country. I feel I'm serving my country right now. I feel just as much a patriot today as the day I joined the Marine Corps. Because the only way to effect real change in a country is be involved as all these guys are.

MS. RUCKART: That's one thing when we had our initial meeting with BAH, and we're talking about messages. The message is help your Marine Corps family. You know, like once a Marine always a Marine. You're not active, but you're helping your -- especially for Pendleton. You weren't affected if you weren't at Lejeune, but you're helping your Marine Corps family.

MR. BYRON: I'm sorry. We need that terminology just for a simple fact that we've kind of had the fox in the hen house when they sent out their letters to registrants about the NRC findings as far as the levels that were experienced at Camp Lejeune aren't high enough to even kill rats. Well, it's killed plenty of people. But because of that misinformation I think you're right. It has to be touted the right way. You have to play on their sensibility as far as patriotism to their fellow Marines and countrymen.

DR. DAVIS: Are you using focus groups to come up with the best way to reach people? Because that would make the most sense, you know?

MS. RUCKART: Well, I think when you do that you're kind of walking that fine line with the OMB and you can't interview more than so many people or your

materials have to be vetted as you know.

DR. DAVIS: Even a focus group with nine, that's the rule.

DR. BOVE: We were told, we were actually during the expert panel meeting they said why weren't you doing the focus groups, and we didn't plan for that. At one point we were talking about doing a pilot and then that, we got negative feedback from Congress on the pilot for good and bad reasons. And so we're not doing focus groups. We're not doing a pilot. We're launching right into the survey using the standard methodology for survey research.

So it's not like we need to pilot that. But we can't do a focus group at this point or a pilot even or anything else without going through OMB. And we haven't gotten OMB approval yet for the change we made recently so we've been pushing and pushing to get approval from them. That's holding things up so that's the situation.

CANCER INCIDENCE OPTIONS

One other thing that we were talking about that came up at the last CAP meeting was you want to have some idea of how many cancers or whatever we might see if there's a hundred percent participation in the survey. I think that was the request because

you want to have some sense of how many, something to compare with what you get here and from your website.

And the problem with doing any of this is that we don't know where the denominator is. We don't know what the size of the population is. I once said it was half a million to a million people possibly exposed doing a back-of-the-envelope kind of calculation. The Marine Corps actually did a more formal calculation and came up with roughly the same thing which means that we really don't know is the bottom line, so anywhere between a half million and a million.

But we don't know the ages. You can make guesses as to what the age distribution is of all these people. So given with all that in mind I'm going to hand out a couple of things here, and I don't know if we'll have time to go through with everything. And we can ask questions later. Another time we can go over this again at another CAP meeting. We're running out of time.

But the first thing I'm handing out, the first two things I'm handing out are the materials we handed out to -- there's two things here -- we handed out to our expert panel to give them a sense

of what the statistical power of this survey looks like with different participation rates.

This is also something the Marine Corps wanted to see. They wanted to see the power calculations for both the mortality and the health survey last year or a year and a half ago I guess, and so we did this for them as well, but we primarily wanted to give this to the expert panel so they have some handle on the situation.

There's a one-pager. On one side it said method of calculation on it. Can you all see that? Because I don't have, I have a different copy in front of me. It's on the back of the first page or the front of the first page.

Now this is just how we did it. We used incidence rates from almost all 50 state cancer registries that are in CDC's database. And based on these national rates we made assumptions as to how old the people were when they started at Camp Lejeune and how they progressed over time into different age groups.

And as they moved from one age group to the next, they changed their risk of cancer, in this case kidney cancer so you just see an example. And there you see a number of cases of kidney cancer in

each age group it could be estimated by this approach and you get a bottom line of, say, 58 cases. And then to get the risk you just put the 58 over the total number in this cohort here.

This cohort was 28,000 Marines and so you get a risk of 2.1 per thousand. So that's the approach I've been using, but I'm trying to figure out how many male breast cancers to expect or how many kidney cancers to expect in the survey. And even in the mortality study I've done a similar approach.

MS. SIMMONS: Probably an ignorant question.

DR. BOVE: Go ahead.

MS. SIMMONS: Is what you're saying is between the ages of 30 and ages of 52, the way you calculated it would be, you would expect 2.1 cases? Is that right?

DR. BOVE: 2.1 per thousand.

DR. DAVIS: For all the ages.

DR. BOVE: So just simply added up the number you see in the last column. All those cases are added up. That equals 58, and there are 28,000, and that's a simple risk. So that's just a simple...

And in the front page, actually I did this the second thing. The first thing I did was the longer thing I sent to you were comparisons between

Pendleton and Lejeune with different participation rates, and you can look through it. I start off with 25 percent participation rate because that was the World Trade Center survey that was published.

They published it with a 25 percent participation rate which I was kind of shocked that they would even publish a study with that low a participation rate. Actually, it was worse than that. The comparison was 12 percent, but they published it.

So I said all right, let's see. If we get that poor a participation rate, what other relevant risks we could detect with any statistical power. And you see that it's not bad even with that low participation rate. Well, we're hoping for higher so I went to 30, 40 and 50 percent. Fifty percent, if we get that high, we're doing real well.

As I said to you, I don't know if all of you heard this, but the U.S. Census last year, the mailed portion of it, had a 63 percent participation rate. We're required to fill that out. Now they got higher participation rates once they went door-to-door, but the initial mailed survey which is similar to what we're doing, 63 percent.

So I think if we get up to 50 that's a huge

success. If we got anything above 50, it's terrific. So that was the state of comparison between Pendleton and Lejeune.

I thought that a better approach might be to split Lejeune into three parts, people parts: the high exposure group, one third of them; a medium exposure group and a low no exposure group just to figure this out. And see what would happen if you compare the high group with the low group at different participation rates. So that's that one-pager.

Turn it over. You see different participation rates. And this is the one that the expert panel focused on because this is really the main analysis we would be doing. So we want Pendleton in the study, and we also want to be able to directly compare among the Lejeune people, the Lejeune sailors and Marines and civilian workers who were supposedly at different levels.

As you can see, at the 20 percent participation rate it gets harder to, you have to get pretty high differences but beyond that you start doing pretty good. And so the expert panel saw this. I think they felt that there wasn't really a, most of them felt there wasn't any one participation rate that

would be a bar from proceeding to the second part of the study.

One panel member saw the 20 percent and sort of latched onto that figure and said, well, why don't you try to at least get 20 percent. But I think that's because I had ten percent in the exhibit. So that's what we handed out to them.

And the last thing I'm going to hand out to you -- this is the more problematic thing, but I'm going to give it to you anyway. Do what you want with it. Just trying to give you some sense of how many I expect, how many cases I expect, and I'm doing this in a couple of different ways. This is complicated, confusing, it's confusing to me actually but let me see if I can work it out.

The first thing you see the cancers along the side. That's similar to the previous thing I gave you. The first column is how I did risk. So those numbers are the same as the previous.

DR. DAVIS: Right. This is a truncated age group, 30 to 59.

DR. BOVE: Hold off a second. Yeah, yeah. It's truncated because what I'm doing, I'm using a ten -- I forgot to mention this -- there's a ten-year lag. So you start Camp Lejeune at 19 let's say. And I

don't count the first ten years. You know, it takes a certain amount of time for the cancer to get initiated and start. So there's a ten-year lag in all this.

Let me go quickly through this, okay? So the first column is what I did earlier. That's my risk estimate. The second column is the SEER prevalence rate for all ages for this cancer. SEER has, in this case it's nine registries: San Francisco, Connecticut, Detroit, Hawaii, Idaho, New Mexico, Seattle, Utah and Atlanta, plus two initial areas: LA and San Jose/Monterey. So that's what they are using.

I use almost all 50 state cancer registries in my risk estimate. Their problem was estimates just based on just those registries so it's going to be different. It's all ages besides including kids all the way up to people who are 90 years old. So it's an adjusted all age prevalence.

The next column has expected prevalence. And this, I didn't know what to do here because all ages didn't make any sense. So I picked the prevalence for the 50-to-60 year age range in the SEER prevalence just, I could have picked 60-to-70, but I thought 50-60 is roughly the age group we're talking

about.

The way SEER does this, and why my number -- like for example, kidney cancer. I think there's a 2.1 per thousand, and their expected prevalence is 1.5, so it's lower. It's pretty much lower across the board. With their prevalence they just count one cancer. If you had two cancers, they only count the first one you had. I don't do that. If you had two cancers, you had two cancers. So that's the first difference right off the bat between what I do and what they do.

Second, I think mine's more defensible in that these are the published rates so there you go. So I included them. So given that there are 250,000 in the Lejeune survey cohort roughly, roughly, so 250,000 just to make it easy. I think it's more like 242, 243 thousand, but I use round numbers.

If you use the SEER prevalence for the 50-to-60 year olds, you'd expect 275 kidney cancers. And if you use my best guess then you get 440 for everyone in the survey. So there's a difference. Mine are higher. I think mine's better, but you see why.

And then finally, I use 800,000 as my best guess at how many people might have been exposed at Lejeune, that's between 100,000 and a million. And

for this, this is based on all the SEER rates. So it's based on the SEER prevalence all age rates which, I think, are too low. So if you want to go down to male breast cancer, for example, based on the SEER prevalence and 800,000 --

Well actually, I didn't do 800,000. For that I assumed that there are 700,000 males and 100,000 females in this cohort roughly. You get 56 male breast cancers. If you use my figures, you get slightly higher. Or, no, actually, no, you get lower. You get lower. You get roughly around the same because the difference isn't that big and it doesn't include in situ cases which would add a little more to that.

So do with it what you want. These figures -- I have draft written on them. It's an exercise. I don't think it's that helpful, but if you find it helpful, that's fine. The more important stuff was the statistical power calculations which I handed out earlier which showed that the study does have good power even at low participation rates and so I think it's possible to find something in these studies if there's not too much bias, which none of these calculations take into account because you can't in these kind of calculations.

The same is true for the mortality study so I think because you have such large numbers that we have a chance to find something. Now we talked about the limitations of the mortality study. The limitations of the health survey are this bias issue which will always come up because people always think that the people who were sick and were exposed will participate more than anybody else and then bias the results. So we're going to hear those charges against, you know...

We do have to verify the outcomes. That's difficult. It's time consuming. We may, as in the birth defects study, we may find that we can't verify some of the cases because there's no medical records that are available no matter what we do to confirm them. That will probably happen here, too. There'll probably be underreporting of people who are, for example, from Pendleton, that not only low participation, but since they don't have any exposure, they may not remember all the diseases and report them. This is a problem with other surveys. It's not just this survey.

So for all the plusses and minuses, which I say there are also plusses and minuses for the health survey. So just so you're aware of this.

MR. STALLARD: Any questions?

MR. ENSMINGER: I don't like this idea of using this health survey as a cancer incidence rate study. It's going to take too damn long. By the time you get all the data back, and then it's a self-reporting survey, and then you've got to verify all that stuff. I mean, you're talking five years.

DR. BOVE: No, no, not that bad.

MR. ENSMINGER: Well excuse me, damn it. I mean, how long have you been at Camp Lejeune now?

DR. BOVE: A lot of the time consuming part was the water model. So let me go over the timeline. This is changing a little bit, but we hope to finish the collection of the survey by November. Then we have to move to the second phase. Because of our contract, which we're trying to work with our contracts people to work out a better arrangement, we can't start --

MS. RUCKART: The first phase, began in September 2010, is 18 months. That ends in March. However, if they need to take longer than March, that's fine. We'll get a no-cost extension. What that means is the second phase cannot start before March. It may start later if the health survey ^ are delayed, if we can't start in May or we can't start in June. If

we can't start in time to have them finish everything up by March, you know, because after the survey data collection ends, there's some tasks they need to do. They need to clean up the data and get it in the format that's usable to us. So they have till March. If they do not do that by March --

DR. BOVE: Jerry, just to finish. We're planning to be finished with the entire study including verifying all the outcomes by the end of 2013. It'll probably be a little bit, sometime in 2013, middle-to-end. So it's not five years, but it is, does take a long time.

To do a cancer data linkage effort, so it's not easy either. One study that looked at 20 cancer registries, we're going to try to look at twice that many. They looked at 20. They spent 400 hours just to try to work out arrangements of all the cancer registries and two or three of them they never worked out an arrangement.

And now we're more than doubling the number of cancer registries. So that study's not going to be easy to do or quick to do because there's no national registry. That's just the reality. That doesn't mean we shouldn't pursue it, but it will take time, too.

MR. ENSMINGER: I mean, if our government and our president actually got up and said that his goal was to defeat cancer within his lifetime, well, by damn, if you're serious about that, then why not create a national cancer registry where researchers, who have a right and the need to know, can go and collect this data and do these damn studies without having to go through these individual state registries, which are, this is a crock of crap.

I'm serious. I mean, this is idiotic. Why doesn't somebody in the federal government require these states to report to one national cancer registry?

DR. BOVE: Well, they do report in that they report figures to CDC.

MR. ENSMINGER: No, I'm talking about everything.

DR. BOVE: But if you want to do a study --

MR. ENSMINGER: Like a tumor board.

DR. BOVE: If you want to do a study, you have to work with each cancer registry.

DR. PORTIER: Well, it just so happens we have something called the Environmental Public Health Tracking Network that we're putting together here at NCEH. And what that network is going to do, it's not just for cancer but for a broad spectrum of

diseases. Have the states report back to us from which we're building one huge database.

It's not a classic cancer registry in the sense that it does time trends as well. But nonetheless, it's an attempt to go in the right direction, and if we can get that network to become national -- we're now in about 28 or so states. If we get that network to go national and do all 50 states, then it will be the closest thing we've got to a national cancer registry.

MR. ENSMINGER: Yeah, and you'll have people out there saying oh, this is socialism and, you know, idiots. My point about the cohort that you've got with the mortality study, which is the information that's coming out of the DMDC, the damn Defense Manpower Data Center, I think that that same cohort you should do a cancer incidence rate study on that cohort.

This stuff about using the damn health survey, I mean -- I went through this before you walked in, Dr. Portier -- that's a self-reporting survey which is going to throw up red flags for people. Number two, once you collect the data then you've got to go back and verify all of it through medical records. This 1975-to-1987 group you could do a down and

dirty, quick cancer incidence rate of those people that were there at Lejeune during that period of time.

DR. BOVE: That's exactly what we're thinking of doing. Since we have social security number, social security number and date of birth on all of them. Name, we have some civilian workers', some periods of time where the name wasn't there or a full name wasn't there, and there are short periods of time when that was true for the Marines and sailors. But date of birth and social security number, that's sufficient to link with a cancer registry.

Even with the tracking you still have to work all 50 states individually to get this information. The one option that the VA used in their Gulf War study was to provide the information to the registries and then get back information that was without personal identifiers, but enough information so you could do an analysis.

And so that would be a possible way to go because some cancer registries by law in their state cannot release data on anybody unless there's a consent form along with it or a medical release form somehow get sent. That's true of a couple of states we've been told that. So that's not true of all the

states. Other states have other reasons why they don't want to participate, like New Jersey for some reason didn't participate in the Gulf War study, didn't participate in this Pittsburgh research study that was done. They've had a change of administration apparently and maybe they're more cooperative, but New Jersey is just one example. There are other states that will cooperate or not depending on who's there.

So again, the only way around this is to try this approach that the VA did. Before we do anything we do want to finish at least the survey portion of the health survey because this would require asking the Navy and Marine Corps for additional funds. You have to make a case --

MR. ENSMINGER: That's my next question. Is how much more above and beyond would this cost?

DR. BOVE: We'd have to price that out. It has not been done before to this extent. The Gulf War used 20 states. We're talking much more than that so I don't know the answer. We've had some people look into it and go on. But I still think that we need to make a case, I think that internally we're not focused on this, and I want to hear feedback. That's why I bring it up because we need to get some

feedback from you. It sounds like you do want us to pursue this.

MR. ENSMINGER: Yes, I do. I think it's the quickest and most reliable way to get an idea of how many cancers and whether you have an elevated cancer rate.

DR. BOVE: It's not necessarily the quickest but --

MR. PARTAIN: And you also have another group, too - I'll bring it up. I've said it before -- the in utero population. You've got 16,000 identified there that were most at risk.

DR. BOVE: That's more difficult because we don't have social security number on most of them. We do have date of birth and we have the name. The name may have changed, but we do have date of birth and a name.

MR. PARTAIN: But you still have the information from the contactor did the original survey in 2001? They called somebody.

MS. RUCKART: Yeah, we have that information, but that's ten or so years old. But the current contractor is searching for those people as far as the current health survey. They are included. So the health survey does include a small sample of dependents that we did have information on.

MR. PARTAIN: But once again, we have a group that's identified that is the most at risk, that is the least studied throughout the health --

DR. BOVE: And they're part of the survey.

MR. PARTAIN: They need to be studied. They need to be looked at.

DR. BOVE: They're part of the survey.

MR. PARTAIN: But the cancer incidence I'm convinced is going to show something, at least from what I'm hearing out there with people contacting us through the website. I mean, the kids who were born there, they're seeing it and somebody needs to look into it, and it's just not happening right now.

MR. BYRON: And it's not just the cancers either.

MR. PARTAIN: We had a conversation about that.

MR. BYRON: It's not just the cancers either.

DR. BOVE: Well, the survey, the survey deals with the cancer incidence, cancer registries it would have to be focused on.

MR. BYRON: I want to bring up one thing before I forget it, and it may be a little off track, but it definitely applies here, too. I've seen commercials on TV that says that the autism rate in the civilian community is one in 110 children. And I'm also seeing that it's one in 87 in the military

community. You have not seen that? I'd like to propose to you --

DR. BOVE: Can you get --

MR. BYRON: -- to look into this --

DR. BOVE: Can you provide that? Where did you hear that?

MR. BYRON: We've seen it in commercials and seen people on TV speaking about autism.

DR. BOVE: No, the one in 87?

MR. BYRON: One in 87 with the military. I'll try to find that information and get it to you. But you also hear it's one in 110 outside the military. I don't know what's causing it, but I'd like you to pursue that also if you could, Brad, or if there's any information.

MR. FLOHR: I cannot.

MR. BYRON: There's nothing you can do there?

MR. FLOHR: No.

DR. DAVIS: Where do the 16,000 kids come from?

DR. BOVE: We were talking about this at lunch. We did this survey that determined, that identified birth defects. We contacted 12,500 parents so there's 12,500 children and 12,500 parents.

MR. PARTAIN: Sixteen thousand I thought was the total number. Twelve thousand five hundred was the

participation rate.

MS. RUCKART: We don't know the total number because there's no information on the number of births that occurred after the parent transferred from the base. So we estimate that the total number of births during 1968, when the birth certificates began to be computerized, until 1985, when the main portion of the contamination ended, is about 16- to 17,000. We don't have the exact number for ^ data.

DR. DAVIS: But that's only going to give you the number of babies for which that information is. It's not any follow-up to adults or to people like Mike, for example.

MS. RUCKART: Right, that's why we're saying we are trying to locate all the children and families that were included in our previous survey and study so that we can include them in the health survey. We're trying to trace them and locate them so that's the ability --

DR. BOVE: Again, we thought there may be 16,000 to 17,000 births, but we don't really know. But we did contact 12,500 roughly. And so we're including all those people, the parents and the child, in the survey if we can get their current address just like the DMDC people, same procedure.

The problem is that with the DMDC we have, again, social security number, date of birth for everybody. With the survey we have date of birth for everybody. We've got social security number only for the person who responded to the survey which is half time was the mother, half the time was the father. We don't have it for the child.

MR. PARTAIN: You can use that to track down the child. I mean, usually my mother knew where I'm at.

DR. BOVE: Believe me, we use the best locating firm to get current address for all the people in the survey not just dependents but all of them.

MR. PARTAIN: Real quick. On this chart, Frank, the 800,000 is for one year's --

DR. BOVE: I'm sorry. Which chart?

MR. PARTAIN: On the one where you have the current, the incidence rates, the last one you gave us. Is that four years when you're estimating that population for the '50s through '85?

DR. DAVIS: Do you mean what age groups?

MR. PARTAIN: No, you said that equals 800,000. It's the far right column.

DR. BOVE: Eight hundred thousand is what we estimated between '55 and '85.

MR. PARTAIN: Okay, so that's between year '55 and

'85?

DR. BOVE: Yeah. Again, I did a back-of-the-envelope calculation years ago between half a million and a million people exposed during those peak years simply by looking at how many people were there from '75 to '85 and roughly multiplying by three with the idea that during the Viet Nam War period, there'd be much more. So that's how I came up with mine.

Scott Williams then went back and with whatever information he had tried to cobble together an estimate because he thought mine was off the wall. His estimate was the same thing. So with a little bit better information than I had we came up with the same range. Which means to me that neither of us have good information as to how many people were there. That's what it tells me.

MR. PARTAIN: But as far as this chart goes you're looking between '55 and '85 roughly 800,000. And I realize this is not in stone or any scientific thing. If I'm reading this right, between those years the 800,000 exposed, you're expecting about 536 kidney cancer cases.

DR. BOVE: Yeah, using the SEER age-adjusted, looking at all ages age-adjusted prevalence.

DR. DAVIS: For SEER in what year?

DR. BOVE: The SEER rate is in 2010. But with an entrance to NEXUS, so they look at one year and they look at how many people have the cancer who are still alive in that year. It takes some account of people who might have died before that and if they got the cancer all the way back to the start of the cancer registry for seven or eight or nine cancer registries; I can't remember which.

MR. FONTELLA: Jim Fontella. Don't the incidence rates change through the years? Like from what I saw in one chart from the incidence rates it showed like 0.8 breast cancer in 1963, and it went up to like 1.3 in 1996.

DR. BOVE: Yeah, the incidence rates change by --

MR. FONTELLA: Was it an average you took is what I'm saying with that year that you took?

DR. BOVE: The way I calculated risk, you saw how I did it. I looked at the incidence rates. I used the incidence rate age-specific incidence rates for each cancer from the 1999-2005 data for all 50 state cancer registries. That's where I got my risk estimate.

Where SEER gets its prevalence estimate was it cast a number of people with that cancer in seven

registries in two other areas, nine areas, who were alive in 2007. Different age groups so that I picked a 50-to-60 age group. I could have picked the 60-to-69. It would have been a little higher, but I picked 50-to-59 is sort of where those people are right now. So that's why I picked that one.

As I said my risk estimates are higher for a couple of reasons. One is first of all it's based on more cancer registries so I think it's better. But, secondly, if you had more than one cancer, they only count the first cancer in the SEER rate. I don't. My estimates are based on cancer rates for that cancer. If you have other cancers, you're included in that incidence rate.

So there are differences, but I didn't want you to put too much weight on this thing. You asked me to do this last time, and I thought I would do it even though I know we don't have a real firm denominator. We don't know the age distribution of the population so I did a whole bunch of guesses. But you wanted something so this is the best I could do, and I don't know if it's helpful. What I think is helpful is the other stuff I handed out which gave you the power calculated, the minimum relative risk we can detect with decent power, and I think

that that shows you these studies have the power to detect them.

MR. STALLARD: One important document that we'll see in retrospect once the study is completed.

DR. BOVE: Yeah, right, right.

MR. PARTAIN: Well, even with this chart here, I mean, you've got 56 males with breast cancer between '55 and '85. We've got 70 that we know of.

DR. BOVE: Yeah, this doesn't include in situ so add about 15 more.

MR. PARTAIN: Okay.

DR. BOVE: But again, you haven't identified all the --

MR. PARTAIN: Yeah, I'm not saying --

DR. BOVE: -- these numbers are based on a lot of assumptions so between the two, take it for what it's worth. I mean, I'm just giving you some ballpark feeling for this. That's the best we can do.

MR. PARTAIN: I was going to say, if we're seeing this then what's the next step? What do you, like just using the male breast cancer as an example because we know we've got this.

DR. BOVE: I don't want to use this for anything really. For male breast cancer -

If we have a few minutes.

MR. STALLARD: We do.

DR. BOVE: I'll just go quickly over --

MS. RUCKART: We can talk about it at the next meeting. People are getting ready to go.

DR. BOVE: I did go over some of the ways we could deal with male breast cancer at the last meeting I think.

PLANNING NEXT MEETING AND FORUM IN NC

MS. RUCKART: So Jim Masone just joined us. He is primarily setting up our meeting.

So if you'll approach the table and you can talk about it. You could share any updates you have and then we can talk about your input in planning the forum.

MR. FLOHR: Folks, I need to get to the airport. I'll look forward to seeing you in Wilmington. Thanks for the opportunity to be here again and I'm sure we'll be talking to you about future meetings and get-togethers. And thanks again. I'll see you soon.

MR. STALLARD: Please, go ahead.

MR. PARTAIN: Brad, one quick question. At the Wilmington meeting, assuming we get this planned and it happens and stuff, is it possible that the VA,

there may be because it is near Camp Lejeune and a significant veteran population in the area, there is a good possibility that we may get a lot of people that want to talk or ask questions of the VA. Is there any way you guys can have staff up or perhaps have a presence there to be able to answer those questions if it happens?

MR. FLOHR: It's certainly a possibility. We do forums. We can try to get someone from, of course, the regional office in Winston-Salem to send some people up to specifically answer questions.

MR. PARTAIN: Can we go ahead and make that a request on behalf of the CAP? Do you think we can do that?

MR. FLOHR: Sure.

MR. PARTAIN: Because I know, you know, I hate to see you get swarmed by a thousand people with questions. You'll probably end up looking like me. If you could make that a formal request, I'd appreciate it.

MR. FLOHR: Okay.

MR. STALLARD: Thank you. We can add that to the meeting planning agenda.

Thank you for joining us. We're delighted that we were able to see you in person.

DR. DAVIS: Thank you.

MR. STALLARD: Okay. Can we have our attention now focused on the speaker? Let's talk about the planning for the Wilmington meeting.

MR. MASONE: Good afternoon. My name is Jim Masone. I work in the office of the Director ATSDR, and I'm here to brief you and answer any questions about the ^ forum, the next CAP meeting. I think in terms of the schedule right now is to have -- and this is fairly current -- we have negotiated dates with the University of North Carolina in Wilmington, and we'll be meeting in the Burney Center on campus there. It's the newest, as far as I can tell it's the newest meeting facility that they have on campus.

We have the Burney Center, we have July 20th, we are planning to have the CAP meeting same schedule as we typically have from nine in the morning until three in the afternoon. Then we'll have a couple hours break and then in the evening we're planning on having a forum from five o'clock until approximately eight o'clock in the evening. Then that will also be in the Burney Center probably in a different room in the same center. For you folks who will be traveling and may not have a lot of

transportation, there are food venues adjacent to the Burney Center so you won't go without dinner or lunch that day. But we do have the space scheduled and we're planning on having it July 20th.

MR. ENSMINGER: How many seats are available in this place where they're talking about holding the public meeting?

MR. MASONE: Good question, sir. We've reserved 100 spaces for the CAP meeting, and we scheduled -- and we can increase that if you think that that's going to be necessary.

MR. ENSMINGER: Yeah, I do.

MS. RUCKART: That's just the CAP meeting.

MR. PARTAIN: How many for the forum?

MR. MASONE: For the annual forum I think we have 500.

MR. ENSMINGER: Only 500 spaces, seats?

MR. MASONE: Yes, sir. That's what we're talking about right now.

MR. ENSMINGER: I think you're way low-balling it for the CAP meeting.

DR. DAVIS: Yeah, if it's there I would agree that you're likely to get a lot more people particularly if you're going to be publicizing it. You might want to think about having a larger space.

MR. MASONE: I think we can arrange that. So the way we're planning is to set up something, we'll have approximately 25 people at the table. Is that reasonable?

MS. RUCKART: Twenty.

MR. MASONE: Okay, well, we're planning on being set up in a U-shape like this and with chairs set up auditorium style, probably something along these lines behind the actual CAP meeting space. That's for the CAP. And then for the forum, we're planning on having a dais in the front of the auditorium set up where everyone else would be sitting theater style for the forum. As far as I can tell it's not going to be in the auditorium. I think y'all had it last time --

MR. ENSMINGER: It was in Keenan Auditorium.

MR. MASONE: Yeah, thank you.

They said that they felt like that was probably not the best venue. So they recommended the Burney Center.

MR. PARTAIN: Burney?

MR. MASONE: Burney Center, B-U-R-N-E-Y.

MR. ENSMINGER: Now what's your name again?

MR. MASONE: My name is Masone, M-A-S-O-N-E. My first name is Jim.

MR. ENSMINGER: And what's your e-mail address, Jim? What's your e-mail address?

MR. MASONE: My e-mail address is J-M-A-S-O-N-E-at-C-D-C-dot-G-O-V.

MR. PARTAIN: Now if for some reason we get feedback, because we'll start talking about this in our community, if for some reason we get feedback that there's going to be a lot more people showing up than we're thinking here --

MR. ENSMINGER: That's why I wanted his contact information.

MR. PARTAIN: -- do we have any potential plan to revisit -- there's a lot that's going to be happening in the press and everything.

MR. MASONE: That would be wonderful. If you could let us know as soon as possible. They're making space for us. Apparently, there are some competing parties there at the university, and we, as an outside group, don't. We're unfortunately at the lowest priority of the scheduling space, but I think they're making particular allowances for us.

That being said I'd like for us to be sure and be respectful of that. So if you can give me an idea as soon as possible that would be helpful for us.

DR. BOVE: Let me ask the CAP members. Does five to eight make sense for a public forum or six to nine or do you have any --

MR. ENSMINGER: Five's a little too early. You know, people that are working, and they want to come home and have dinner. They want to get ready and then travel to the venue.

DR. BOVE: I forget when we --

MR. ENSMINGER: It was like seven to nine.

DR. BOVE: It was that late. I know we had got there just in time to plan --

MR. STALLARD: For the CAP meeting itself?

MS. RUCKART: No, for the forum.

DR. BOVE: I think it probably was seven to nine.

MR. ENSMINGER: Yep.

DR. BOVE: It took every bit of those two hours, too, because there were a whole lot of questions we had to answer the next day we couldn't just at the forum. So I think it has to be later than five.

MR. MASONE: That's fine.

DR. BOVE: Is six too early still?

MR. ENSMINGER: That's still too early. I mean, seven to nine.

MR. PARTAIN: Six-thirty, seven to nine.

MS. RUCKART: Six-thirty, then why not 6:30?

MR. PARTAIN: Six-thirty is okay.

DR. BOVE: I do think we're going to need more than two hours possibly.

MR. ENSMINGER: Well, I have a recommendation as well.

DR. BOVE: Go ahead.

MR. ENSMINGER: When people come to this thing, when they're coming in, we need people at the doors handing out a question sheet. If they have questions, they can sit down, and they can write their questions out and turn them in at the end of the thing. If their question cannot be addressed during the meeting, then they can be responded to later.

MR. MASONE: What we have arranged, Frank, is we have it set, there will be microphones in the house. People can step up to the microphones and make their presentation because we do plan to have it streamed. We want to make sure we catch it all, catch all the audio. So that's the way we have it set up right now. But to your point if there are questions we can't answer, I should say they can't answer in the course of the forum --

MR. STALLARD: Not everybody wants to step up to a public microphone. And so to honor that

introspection, let's say, I think we have to have a vehicle where if they want to fill out questions that we can capture.

DR. BOVE: That went pretty well at the last forum. We may need your help in collecting those. I don't know how much staff from ATSDR is going up to this forum.

MR. ENSMINGER: Just put a box.

DR. BOVE: Put a box to collect them, okay, just to put a box, but we do need to --

MR. ENSMINGER: And announce it.

MS. RUCKART: Are you thinking of like community ambassadors to help us?

MR. BYRON: We can contract that out.

MR. PARTAIN: What about with this getting an idea of how many people are going to participate? I'm envisioning more. Maybe I'm optimistic, but we had an informational meeting down in Tampa that Jerry and I conducted with a little bit of press notification beforehand, and we put 250 people in a room with not much effort. And that's in Tampa, Florida, and we're going to right next to Camp Lejeune.

What about you guys setting up something on the web or e-mail address to where people who want to

attend this can send their contact information saying I want to be there so we can start generating some counts to get an idea of how many people are going to show up? The last thing I want to see is have a bunch of people show up and nowhere to put them and be turned away. Get an e-mail address or get people saying if you want to go to this, e-mail us here so that way you guys can see because somebody's got to do the count because otherwise it gets all messed up.

MR. STALLARD: Mary Ann.

MS. SIMMONS: I wasn't at it last time, this forum, so can you describe what this was?

MR. ENSMINGER: It was put on by the Wilmington Star newspaper. They had representatives from ATSDR. They had a toxicologist from North Carolina State. What's his name? Jerry LeBlanc (ph). And I was there, and they gave, every person spoke and gave a, Morris went over the water modeling. Frank was going over the studies and whatnot. And the Marine Corps refused to participate. They had an observer there.

MR. STALLARD: So that's the forum part. So this is the first time that we're doing the CAP in conjunction with that, right?

MR. PARTAIN: Yeah, and to make it official, we would also as a CAP --

MR. ENSMINGER: Well, I mean, the last one was put on by the Wilmington Star News, and this is the first time that the CDC is putting on a --

MS. SIMMONS: Did you participate last time?

DR. BOVE: Yeah, I gave reports, and I gave a presentation.

MR. PARTAIN: And to make it official from the CAP -- I think everybody will agree with me -- we would like to officially invite the United States Marine Corps to participate in the CAP meeting next meeting and have a representative there for the community.

MR. STALLARD: I'd like for us to talk seriously about the kind of flow of the agenda. We're going to be in a public forum in the home territory of Camp Lejeune. For me, personally, if I'm considering that I think that it would be helpful to have Jerry give a presentation about all the work that the CAP has done to give a background and context for people so that they understand.

MS. RUCKART: At the CAP meeting or at the public forum?

MR. STALLARD: Probably both because the same people who are going to be at the CAP meeting are going to

be at the forum. And so from that point on -- Five hundred people is a lot in the audience, and I think we have to manage the communication. And it's going to be a different dynamic than this. So I'm asking for your help that in doing an agenda, we need to be thinking as a unified CAP that we're presenting an image to the public that we operate and have been working together. Here's our history. There's the things we've accomplished, and then we can get to the meat of whatever it is we want to talk, but we have to set the stage. Think about that.

MR. PARTAIN: An hour and 15 minutes is the perfect vehicle to do that, and it's called "Semper Fi, Always Faithful".

MR. STALLARD: And if we want to show that --

MR. PARTAIN: That would be a great opportunity because it shows everything we've been going through, our trips to Washington, our CAP meetings, on everything that's been going on --

MR. ENSMINGER: If you're going to do that, then you're going to have to do that separately, early.

DR. BOVE: Yeah, yeah, that's what I'm thinking. Then it makes sense to have that like at five and then follow that up. I still think that you're absolutely right. One of the CAP members should

give a short presentation for as long as they need to take actually. The CAP, what it is, what it's done.

MR. STALLARD: And what it's not done or what the challenges are still that are facing the barriers. I mean, what we have to show in my view there's been tremendous, there's been progress and there remain challenges. And this is what collectively we've been able to do, and this is what collectively we're trying to solve. So you guys can draw straws.

So it's unanimous. Jerry has just been nominated and ratified. So but we'll continue to work that out. I'm sure there's going to be a lot of dialogue between now and then or some dialogue I would hope in terms of agenda building and organizing.

And who's going to see if that, if it can be shown, "Semper Fi"?

MR. PARTAIN: I will.

MS. RUCKART: Then you would need to get there earlier? I mean, we have to iron this out because it's going to be more cases for running a movie.

MR. STALLARD: Like projection for one thing.

MR. ENSMINGER: The second film festival will be over by that time, too, so Silver Dock in D.C. or

Silver Spring, Maryland, that's going to be shown there. There are different environmental groups that want to get separate screenings of the movie for Capitol Hill, specifically congressional staff. So July, well, this is in July. It shouldn't be too much of a problem to get a screening at that meeting, before that meeting. I'll check on it. I mean, I can't say that for sure, but I'll have to check with the producer.

MR. MASONE: Please let me know in terms of the timing, the space and AV requirements as soon as possible, because we do have to pay on an hourly basis so we do have considerations for planning purposes. So if you could let me know as soon as possible that would be helpful.

At some point we are going to be locked into a contract where we have to pay for it in advance. So once we have done that, made those arrangements, we're going to be pretty much locked in, so if you could let us know as soon as possible it would be helpful.

MS. RUCKART: When you say as soon as possible, can we set a date then that means?

MR. ENSMINGER: Yeah, what's your drop dead date, Jim?

MR. MASONE: I don't know that, and I'm afraid to commit to that right now because I'm not, I wanted to negotiate with, we'll find out from you folks what -- here's what we need to do.

MS. RUCKART: Why don't you later this week give me your absolute deadline, and I'll communicate it to the CAP.

MR. MASONE: Okay, very good, thank you.

MR. STALLARD: So that's the CAP agenda that we're going to work on. In terms of the open public forum who organizes the flow of that, speakers and this and that?

MR. ENSMINGER: ATSDR.

DR. BOVE: Again, the CAP member to speak about the CAP, and Morris will talk about the water modeling, and I will talk about the studies.

MR. STALLARD: Are any congressional people going to be there?

DR. BOVE: Huh?

MR. STALLARD: Any congressional people?

MS. RUCKART: Probably in the audience.

MR. ENSMINGER: I think the whole, I think the entire CAP ought to be present for --

MR. PARTAIN: With the lodging and stuff you've got I'm assuming we're going to be there two nights?

I'm assuming because it's a special event.

MR. STALLARD: Yes. I mean, for instance, if we were doing a presentation we'd want to show some of the, you know, when we do introductions here, it's your name and CAP member, but we have Dr. Dick Clapp who is expert in X-Y and Z. You know, to sort of, who are the people that are here representing these interests to give a little bit more depth to just a name.

MR. PARTAIN: Well, one of the things I'd like to see at the CAP meeting, too, as far as when you talk about the community coming in and everything, most people are visual these days. It would be good to have some of the blow-up maps of contamination plumes, water distribution centers, you know, where, you know, you could do a street map showing where buildings were located, where people lived, the street names. Have them on the walls so people can see and interact.

MR. STALLARD: That animation that Morris showed us today.

DR. BOVE: Morris has all those maps.

MR. PARTAIN: I mean that would be good to have out there in like around the chamber so people can see that because those are the frequent questions we

get. They want to know what was where, how bad, my neighborhood, how do I find out where I lived, where's such-and-such street, and the Hadnot Point --

MR. ENSMINGER: I disagree. I don't think they ought to be in the meeting area. They should be, if there's a lobby for this building, that's where those easels and those maps should be, out in the lobby. Because you're going to have people going up there with other people, and they're going to be conversing. And if you have that in the same hall as where you're having the meeting --

MR. PARTAIN: Get them up on the wall or something.

MR. ENSMINGER: Not on the wall. Put easels up.

MR. STALLARD: They also need something to take away, reading material or follow-up information, who can they contact, stuff like that.

MR. PARTAIN: Including reading material and participating completion dates. What you all are doing as ATSDR.

MR. STALLARD: Appropriate reading material.

MS. SIMMONS: I'd hand out all the presentations.

MR. STALLARD: What?

MS. SIMMONS: We do meetings like this a lot. I'd hand out copies of all the presentations. That

would be one handout to take away.

MR. STALLARD: So maybe what we need between now and then is make a list of presentations and commit to who's going to do those, and then handouts and what those would be so that we can have that printed well in advance for that. I'm sure you guys do this all time. I'm just thinking extemporaneously.

So we're agreed we're all going to Wilmington, right?

MR. ENSMINGER: Yeah, down to the River Walk.

MR. BYRON: How's the surfing?

DR. PORTIER: Wilmington in July is about as hot as you can get.

MR. ENSMINGER: Yeah, but the River Walk's nice. In the evenings go down on the River Walk.

MR. STALLARD: Do I need to make any administrative things? You all turn in your vouchers, send them in, do what you're supposed to do. There's always that.

MR. ENSMINGER: I notice this envelope that they handed out they've got a cover letter in there about filling out our travel and then mailing it back in.

MS. RUCKART: This is what our secretary has given to me so I guess this, this is what the secretary gave to me.

MR. ENSMINGER: Since I've been on the CAP since 2005, I've never mailed anything. I've sent it back electronically, and it's always sufficed.

MS. RUCKART: It's a new secretary.

MR. PARTAIN: Can you clarify because I don't have a large amount of wealth to wait for my reimbursement. I either mail PDF. I scan PDF and mail it to, e-mail it in. As we know snail mail takes awhile. Can we make sure that there's email?

And also speaking of e-mail, there was some change with the e-mail. I'm not getting all the e-mails.

MS. RUCKART: Our servers are migrated and this is what's happened and I have let them know, the way the e-mail addresses showed up, I have no control over that. It's a behind-the-scenes thing, and I brought it to their attention. And their response was I need to notify every person that they should not, they should look for us in their junk mail. And my response was if somebody e-mails me, and I e-mail them back, I have no other way to get in touch with them than to e-mail them back. If it goes to their junk mail, how else can I e-mail them to tell them to check your junk mail.

MR. PARTAIN: I'm not even getting them --

MR. ENSMINGER: No, no, no, when you hit reply like when responding back to those e-mails, and I hit reply all, ATSDR's e-mail address comes back with this word in parentheses right after ATSDR, target. And when I send it, it says it's an undeliverable address. Where the hell's the word target come from?

MR. PARTAIN: The old saying if it ain't broke, don't fix it. Well, someone fixed something that wasn't broke.

MS. RUCKART: The agencies are having a lot of e-mail problems since they migrated us, and I told them we're having a problem, and their response was I need to tell everybody to make sure it didn't go to their spam folder. And I'm saying how am I going to do that if, I mean, this is a public mailbox. Anyone can e-mail me. I cannot know who's going to e-mail me to contact them. Basically, after bouncing around the answer is --

DR. BOVE: The easy solution would be just, I'll e-mail you from my account and you can e-mail me.

MR. ENSMINGER: No, what I do, I delete the e-mail address that they send it on, then I go back into my contact list and put the old address on it and send it, and it's fine.

MR. PARTAIN: As far as addresses, who do we send them to?

MS. RUCKART: Well, I have to get the new secretary's e-mail address. I don't know what her e-mail address is.

MR. STALLARD: We're wrapping it up. Dr. Portier, any closing comments? Thank you.

DR. PORTIER: Thank you all for being here. Thanks for the ideas and suggestions of ways that we can improve what we're doing. Thanks a lot.

MR. STALLARD: Everybody safe journey home. This concludes our meeting.

(Whereupon, the meeting was adjourned at 3:20 p.m.)

CERTIFICATE OF COURT REPORTER

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I, Steven Ray Green, Certified Merit Court Reporter, do hereby certify that I reported the above and foregoing on the day of April 5, 2011; and it is a true and accurate transcript of the proceedings captioned herein.

I further certify that I am neither relation nor counsel to any of the parties herein, nor have any interest in the cause named herein.

WITNESS my hand and official seal this the 1st day of May, 2011.

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