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convenes the

FIRST MEETING

CAMP LEJEUNE COMMUNITY ASSISTANCE PANEL (CAP) MEETING

FEBRUARY 1, 2006

The verbatim transcript of the

Meeting of the Camp Lejeune Community Assistance

Panel held at the ATSDR, 1825 Century Boulevard,

Atlanta, Georgia, on February 1, 2006.

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TRANSCRIPT LEGEND

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- -- (sic) denotes an incorrect usage or pronunciation of a word which is transcribed in its original form as reported.
- -- (phonetically) indicates a phonetic spelling of the word if no confirmation of the correct spelling is available.
- -- "uh-huh" represents an affirmative response, and "uh-uh" represents a negative response.
- -- "*" denotes a spelling based on phonetics, without reference available.
- -- "^" represents inaudible or unintelligible speech or speaker failure, usually failure to use a microphone.

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PROCEEDINGS

(9:15 a.m.)

WELCOME AND OPENING COMMENTS

MR. STALLARD: We are still missing one panel member, yet we are hopeful that she will join us as soon as possible.

Welcome everyone to the first Camp Lejeune Community Assistance Panel. My name is Christopher Stallard. I am facilitating this session today. We're going to start off with a welcome from Dr. Howard Frumkin, the Director of NCEH/ATSDR and then I'm going to inform you all on guidelines and setting expectations for this meeting.

DR. FRUMKIN: Good morning, everybody. Welcome to Atlanta for those of you who are visiting from out of town. I'm the Director of NCEH/ATSDR as you just heard. Some of you may be familiar with ATSDR, the Agency for Toxic Substances and Disease Registry. That agency has now partially consolidated with a sister agency here at the CDC called the National Center for Environmental Health. Hence the long name, NCEH/ATSDR, and again, my name's Howard Frumkin.

I've been the director here for about four months so this is relatively new to me. One of the very important places that I've learned about since becoming Director is the Camp Lejeune site. It's an extremely important site to this agency. And I'm delighted that you're all here

to begin moving us forward, continue moving us forward in addressing the health concerns at this site.

Before getting into anything procedural, I just want to say on my personal behalf, and I think on behalf of everybody in this agency, how sorry I am at the suffering and the pain that has gone on in the community in connection with exposures there in connection with illnesses. We don't forget, I don't forget, and I think everybody in this agency doesn't forget that behind all of the epidemiologic studies, behind all of the legal maneuverings and administrative discussions, there are people. And when people are suffering, we care very deeply. And so I hope we can all remember that the center of our concerns as we move forward together.

The Community Assistance Panel is a very important asset to us. It's important because we care very much about working with the communities where we're active. And so a situation like Camp Lejeune where you represent a community that's been affected, and I know that some of the most important leading voices in the community are here today, it's extremely beneficial for us to work with you together to do our work as well as we can.

I expect that as the day goes forward and as the months move on, we will talk together about the need for scientific investigations and other health interventions

in the community, and I think that your community perspective together with the expertise of professionals in this community will help us reach the best decisions we can reach together. We are very, very prepared to listen, prepared to change course if necessary to reach the best decision.

I want to thank each and every one of you for being here today, giving your time. I know that members of your community are grateful to you for doing this, as grateful as we are. I also want to thank Dick Clapp and Jeff Fisher who are our outside experts and will be here from Boston and the University of Georgia, respectively, who will be helping you with some of the technical material you need to deal with today.

And if I can do anything at all to help move this process forward and to help ease your time here, I'll be very happy to try to do that. I'm being very quick because I have a 9:30 that I have to get to. Are there any questions or comments that anybody wants to share before I run away?

MR. ENSMINGER: I have something I'd like to discuss with you later, sir.

DR. FRUMKIN: Okay.

Thank you all, best wishes for a successful meeting. Thank you for being here.

1 MR. STALLARD: To start this process I think it would be 2 a good idea if we just briefly introduce ourselves to one 3 another, your name and perhaps your affiliation on this 4 panel. 5 DR. BOVE: My name is Frank Bove, Senior Epidemiologist in Health Studies at ATSDR. Camp Lejeune activities. 6 7 MR. BYRON: My name is Jeff Byron. I'm from Cincinnati, 8 I'm a CAP member, and I have a website called "The 9 Few, the Proud and the Forgotten." 10 MS. BRIDGES: Sandra Bridges, Charlotte, North Carolina, 11 member of CAP. 12 MS. RUCKART: Perri Ruckart, Principal Investigator, 13 ATSDR, Camp Lejeune Study. 14 MR. ENSMINGER: I'm Jerry Ensminger. I'm a Camp Lejeune, 15 North Carolina, CAP member. 16 DR. CLAPP: I'm Dick Clapp. I work at Boston University 17 School of Public Health, but I'm an expert for the CAP. 18 DR. FISHER: Jeff Fisher from College of Public Health, 19 University of Georgia, just a few miles away from here, 20 and I'm a professor and department head. 21 MS. DYER: I'm Terry Dyer. I'm from Wilmington, North 22 Carolina. My sister, Karen Strand, and I started the 23 website, "The Water Survivors."

MR. MARTIN: I'm David Martin from Black Mountain, North

Carolina. I'm also with Water Survivors.

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1 MS. ROSSITER: I'm Shannon Rossiter. I'm an 2 epidemiologist in the Division of Health Studies, and I'm 3 working on the Camp Lejeune project. 4 MS. McCALL: Good morning, my name is Denita McCall. I'm from Littleton, Colorado, and I'm a member of the CAP for 5 the staff. 6 7 MR. STALLARD: All right, I'm sure that many of you have 8 received quite a bit of read-ahead material, but just to 9 be sure that we're all on --10 MR. TOWNSEND (by telephone): Can I interrupt? 11 MR. STALLARD: Yes, please, Tom. And we have Tom. 12 MR. TOWNSEND (by telephone): Yes, I'm on the line. 13 Could you turn up the volume or put the mike closer? 14 cannot get you on video, and I can barely hear you. MR. STALLARD: We'll do what we can. Go ahead, Tom, we 15 can hear you though, real well. 16 17 MR. TOWNSEND (by telephone): Yeah, the telephone works, but the video is --18 19 MR. STALLARD: Would you take a moment and introduce 20 yourself for us, please? 21 MR. TOWNSEND (by telephone): I'm Tom Townsend. 22 CAP member and have been involved in this since about 23 1999, and I live in Idaho. And it's snowing here. 24 MR. STALLARD: It must be very early. Welcome, Tom,

we'll attempt to do what we can to resolve the visual

25

1 hang up.

MR. TOWNSEND (by telephone): I can hear you now, thank you.

CHARGE TO THE GROUP (GOALS, EXPECTATIONS, PROCEDURES) CHRISTOPHER STALLARD

MR. STALLARD: The objectives of this meeting are to obtain recommendations from the CAP members on the feasibility of conducting specific studies at the base. Secondly, it is to receive CAP recommendations concerning the prioritization of those studies identified. It's very important that we understand that this is a process.

This is the first in a series of meetings until we achieve our objectives. So it is ongoing and evolving. Since it is ongoing and evolving, and we are going to be together for a number of sessions, it is important to establish at the outset guiding principles to govern our interaction. I'm going to go over this list, but I encourage you if you have something else to add here, please feel free to do so.

First of all, we are grateful to have an audience here; however, the audience may not participate during the discussions, zero discussions. Your role is to listen and observe during the formal part of the meeting.

Respect: one speaker at a time, please. This is a future oriented assembly. We're looking to identify the studies that are feasible and to prioritize them. This

is not a forum for a review of the past, zero personal attacks.

I say this for those of you who have microphones, please leave them in the room or turn them off because they will pick up if you leave the room, for instance to the rest room or have a little caucus, it will be broadcast.

We are to seek consensus so that what that means is so that we all understand is that I can live with what the group is saying. If you feel so adamantly opposed, then you need to say that, and we'll have to figure out as a group how to address your issues. But our goal is consensus.

This is for everyone in the room, please. Turn your cell phones onto silent, stun or vibrate, the audience as well. And probably most important, start on time, please, and end on time. That is our goal for all future meetings and this one as well. Is there anything else that members of the Panel would like to offer in terms of guiding principles?

MR. ENSMINGER: Yes, I have a brief statement that I'd like to make before this thing gets started. I know you said you don't want to bring up anything about the past, but I think some of the things that have brought us to this point need to be brought out. And I've prepared a

1 brief statement, and I'd like to read it.

MR. STALLARD: Okay, is there anything about guiding principles -- you will have time, Jerry, to read that statement very shortly as soon as I go through the administrivia, you're up, okay?

Anything else to add to this?

(no response)

MR. STALLARD: Here are some administrative notes for you. The rest rooms and the location, those of you who are here, it's a maze. It's out toward the front guard desk to the left down that hallway just past the elevators. Lunch is between 12:00 and 1:00. It's a working lunch for the Panel. When you came in, you should have received a lunch menu. We ask that you make your selections by the break so that we can ensure it's delivered on time.

This session is being web cast, I think, Tom. At least he's getting it telephonically, and it's being archived which means that at least the video proceedings even if it's not being reached by Tom will be archived and available. We have one member via phone. Please keep that in mind.

Tom, I'll work with you as best I can when you have to have something to say.

MR. TOWNSEND (by telephone): I hear you very well.

MR. STALLARD: Good.

And we have a court reporter here.

The role of the facilitator, my role, is to acknowledge the speakers, to redirect and focus on objectives where it appears that we may not be going toward the objectives, mitigate communication barriers, to summarize or otherwise clarify for understanding. If I can understand it, then that helps me to see that the group understands it. And I am as well your time manager.

So Jerry, right after this will be your opportunity to make your presentation.

This is an exercise right now to find out from each of the members what is it that you want to achieve during this meeting and future CAP meetings, and what you want to avoid. So it's a blank sheet. I need some feedback here. What do you want to achieve?

MR. ENSMINGER: Do you want it right now?

MR. STALLARD: Yeah, I want you to say what you hope to achieve in this meeting.

MR. BYRON: I want to see further studies on the children who were born prior to the ^ base housing and the adults.

MR. STALLARD: That's getting further studies on

children?

MR. BYRON: Yes.

MR. STALLARD: That's getting more into the substance of what you're going to be discussing, but I've got it.

MR. ENSMINGER: Well, and seeing how this is one of the largest contaminations that's taken place as far as actually documented level of contaminants in the drinking water, I think it would be the moral obligation of the people that were responsible to notify everybody that was exposed to this stuff.

MR. STALLARD: Okay, what else?

MS. DYER: I think it would be beneficial to know and talk a little bit about how, where the monies come from, how they're divided, so as far as like studies go, and what different areas go to like advertising, doing the notification, you know, that sort of thing. Is it, the monies that you've been given, is it specifically divided for different areas? And if not, how we can accomplish that so that we can get some of these things like notification done.

MR. STALLARD: Okay, Terry, I have that as financing, resourcing of studies, how is it divided and allocated.

MS. DYER: Right, and maybe even the different people within this organization that are working on it, you know. Who better is it that we need to be in contact with, and...

MR. STALLARD: Who to work with at where?

MS. DYER: Here, at the ATSDR.

MR. STALLARD: At the ATSDR.

MR. BYRON: Byron again. I'd like to know the national statistics on the illnesses that have been, that are being studied in the current in utero study. I'd also like to know the mortality rate of the 103, how many are actually surviving at this time. How it compares to the national average.

MR. STALLARD: Okay, let me make sure I've got this. The national statistics of the current in utero studies and what was the second one?

MR. BYRON: Mortality rate of the 103 children, how many are still surviving and what that national average represents. What that average represents compared to the national average.

MR. MARTIN: David Martin, I'd like to see if there's any way we could figure out how to get some of these people who've been exposed, who are suffering from illnesses, some help as quickly as possible. We have people out there that have never been able to work in their life because of some of these devastating illnesses, people that are sick or receiving treatment at this time with no sources of income and no insurance to cover it. We have to do something quickly to get these people some help.

MR. STALLARD: How to get help for those affected

quickly. Does that capture it? Okay, thank you, Dave.

MS. DYER: One more thing, I'd like to see some paperwork
on other bases across the country that have had, maybe
they're Superfund sites going back as far as you've got
paperwork for, like chemicals, that sort of thing, and
what the studies that the ATSDR has on them. I'd like to
see paperwork with that so that we can compare it to what

happened at Lejeune.

MR. STALLARD: Can I ask you all to speak more directly into the microphones?

MS. McCALL: And I would really like to emphasize the importance of notification. This has to be our first and foremost job. As a CAP member I feel that my responsibility in representing the community is to inform the community. I can't represent anyone in the community without them knowing that somebody is representing them. Does that make any sense?

I mean, this really is just -- I can't get past the notification issue until, you know, we get some kind of an organized way to let people know. I think that's probably one of the most important things we need to achieve in this first meeting is to figure out how to notify, and start notifying, people.

MR. TOWNSEND (by telephone): I've got a couple of items
I'd like to get ^ perhaps some of them ^ first would be

communicate the exposure detail for all people, all persons, childs (sic), wives, service people that lived at Camp Lejeune and I would say that for the time period ^ 1968^. I lived there 30 years before then.

The second is to continue and expedite the water modeling process. I think that's critical for us to provide a credible scientific connection between the known contaminants and what we've got in our tap water in our house.

Third is for the ATSDR to work with the Department of Defense and the Department of Veterans Affairs. I believe somebody mentioned that there are a lot of veterans that are unable to work because of adverse effects of their contamination. And the last thing is I would hope that ATSDR records for the past be made available to the FOIA. I have been continually looking for records from ATSDR, and I have been skipped for the last five years on this subject. That's the end of the initial things.

MR. STALLARD: Thank you.

Now just so I'm sure that I captured it all, Tom, continued communicating exposure details to all who lived at Camp Lejeune. Is that what you wish to achieve?

MR. TOWNSEND (by telephone): (no response)

MR. STALLARD: All right, Tom, communicate exposure

details to all who lived at Camp Lejeune time frame open. 2 MR. TOWNSEND (by telephone): Time frame of ^. 3 MR. STALLARD: Right, continue to expedite water modeling, continue and expedite water modeling. 5 MR. TOWNSEND (by telephone): Right and try to expedite the analysis of the water. 6 7 MR. STALLARD: And ATSDR, DOD and VA work together, and 8 ATSDR records of the past be made available to FOIA. 9 Anything else that you hope to achieve in this CAP 10 Anything that we need to avoid? forum? 11 MS. BRIDGES: I think the studies for the children, that 12 were done on the children, were only done for specific birth defects or cancer. I think that should be expanded 13 14 to other handicaps that these had and had to live with. 15 MR. STALLARD: Let me make sure I've got that. Expand 16 studies on birth defects and other --17 MS. BRIDGES: Not just the ones that you were looking for 18 that the, that had been studied before at different 19 contamination sites. All of the birth defects are 20 affected by different -- what we drank as well as our 21 genes and, you know. But there were different things 22 other than cancer, leukemia or death. 23 MR. STALLARD: Okay. 24 MR. BYRON: Those items, the illnesses and the cancers, 25 the birth defects and cancers, is that based on the Dover

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study over in Massachusetts? Is that where we came up with this?

MR. STALLARD: I guess that's out of scope right now, thank you.

This helps us to understand as a group what the expectations are, some of the expectations are that we can see how we might achieve those and be clear in terms of what things we may or may not be able to achieve in this process.

Yes, Jeff.

DR. FISHER: I have a question of the CAP members. What they might expect from the two people here that are called experts to help them.

MR. BYRON: I think guidance more than anything. We're none of us that I know of, none of us that I know of are professionals in the epidemiology field so we're looking for your guidance as we did the previous panel as to what's the proper way to conduct these studies, feasibility studies, risk assessments, whatever, I mean. I think we're looking for your expertise in that matter to kind of guide us along.

MS. DYER: Well, also in that and as a part of the achievement, I, with talking to the rest of the CAP members last night, we really feel like that we can leave here with work that's going to be done before the next

time. I mean, we've got suggestions that we're ready to go with, and we know that you have been a part of other studies. And so in that, you should be able to help us. Is this feasible? Can you do this before the next meeting? That sort of thing.

MR. ENSMINGER: You know, while we're talking about achievements, you know, an in utero study was done on military children that lived aboard the base, the mothers lived aboard, the parents lived aboard the base. An ATSDR statement back at that time was that they wanted to study the most susceptible population group which would have been fetuses.

The civilian employees of Camp Lejeune, the women of childbearing years were completely left out of that previous study. Those women, who's to say how much of these chemicals, especially in the levels that were in that water, that those civilian babies were born to those civilian employees weren't harmed. I mean, these people were completely left out of this thing.

MR. STALLARD: That, I believe is going to come into again talking about what are the studies that are feasible and then the priority of those studies.

Are there any other achieves or avoids?

(no response)

MR. STALLARD: All right, Jerry, would you give us your

opening comments, please?

MR. ENSMINGER: Once again, I'm Jerry Ensminger. I'm a CAP member.

It has been a long hard fight that has brought us all to this point in the Camp Lejeune water contamination situation. I would like to thank everyone that has been involved in our plight for getting us to this juncture. Early on in this situation representatives of the United States Marine Corps, Department of the Navy, and DOD manipulated other agencies through the lack of cooperation to downright intimidation to keep the lid on the truth.

Thanks to the media some truly concerned people on Capitol Hill and many of us seated here today that lid has been blown off. Previously, the United States Marine Corps, Department of the Navy, and DOD had a large voice in the decisions that were made on what studies would be conducted on the affected community. There have been disparities in exposed population groups, levels and dates of exposure. There have been many incidences of misinformation, disinformation and downright withholding of information concerning this contamination incident, but we have endured.

Look around you today. DOD agencies do not have a seat at this table. It is time for us to ensure that all

of the disenfranchised population groups who were exposed to this contamination at Camp Lejeune receive the long overdue answers to their questions. It is time for the Department of Defense to live up to their own call of support for the people who defend this nation no matter when they served.

The formation of the expert panel of February 2005 and this Community Advisory Panel or CAP is an attempt by ATSDR to usher in a new era of trust and cooperation. I, as a member of this affected community, applaud these efforts. While this Community Advisory Panel has been formed to explore further studies on exposed populations at Camp Lejeune, none of our recommendations will amount to a proverbial hill of beans without the cooperation of DOD agencies.

DOD holds the key to the information that is required to help rectify this wrong. The question is will you cooperate? You know, we spoke earlier about notification of people. I brought that up which I thought, feel is extremely important. I think it's morally required.

You know, you have to put yourself in the shoes of people who have been harmed. I lost a child. My daughter was conceived while we lived in one of the affected housing areas. She was six years old. She was

diagnosed leukemia. I watched that child go through hell for two and a half years before she died. I wondered after the shock of her diagnosis wore off, I began to do what any human being does. I began to wonder why. Why this happened.

All through her illness, through her death, after her death for 14 and a half years I wondered what happened to my child. I looked in my family history, her mother's family history. No other kids had ever been diagnosed with leukemia. By a stroke of luck I heard a news report on local TV in North Carolina when the public health assessment came out for Camp Lejeune. And the reporter -- I was walking from the kitchen to the living room with a plate of food to eat dinner while I was watching the news.

And while I was walking in the living room, the reporter said the chemicals that were found at Camp Lejeune's drinking water between the years of 1968 and 1985 have been known to cause childhood cancer, primarily leukemia. I dropped my plate. It was like God opened the sky up and gave me an answer that I had been looking for for 14 and a half years. How many other people are out there looking for that answer? And I vowed at that time if I did nothing else through this thing, I would try to give those people that answer.

That's all I have, thank you.

MR. STALLARD: Thank you, Jerry.

Perri, this is your opportunity.

MR. TOWNSEND (by telephone): (inaudible)

MS. RUCKART: Tom, did you have a question?

MR. STALLARD: Go ahead, Tom. Speak up.

MR. TOWNSEND (by telephone): I listened very intently to what Jerry had to say. We have worked together for the past four or five years. Jerry started out earlier than I did, and then I, my family was not made aware of the situation until 1999 when the ^ survey began. We lost a child in 1967 ^ chemical exposure. So I have a very definite ^ , but it's very difficult.

I completely go along with the ^, I hope ATSDR ^ of adverse effects ^. It may not be ^ . When I say communicate with ^ personnel, I mean every man, woman and child ^. As far as I'm concerned ^ on the base three or four times a week, still it may not be the same as ^ my child living ^. And I am deeply aggravated with the Defense Department ^ for failing to notify these people that they were being poisoned. I just can't believe that you could send Marines to fight in North Viet Nam and Korea ^ and then expose them to this whatever else is going on without some kind of remorse.

I want the CAP members to know that Jerry Ensminger

and I petitioned the Department of Justice. We want a thorough investigation ^ violate ^ ^ law. It took two years to do this, and it did not go to a grand jury. So unfortunately, there was no criminal action. ^ ^ laws in place that had been enacted by the Congress of the United States. ^ And the Department of Justice does not run criminal investigations. ^ We spent two years of looking, and we got some pretty good indications ^. I just want to ^.

MR. STALLARD: Thank you, Tom. For some reason you were turned down a little bit. We're trying to fix that so, we did hear you. The Panel members all heard you speak, correct?

THE COURT REPORTER: I couldn't hear. It won't be in the record.

MR. STALLARD: Okay. Thank you for sharing your stories. Now we're going to move on toward our objective of looking at which studies to get an overview of what's been done that we may start working toward the future on what studies are the most feasible.

Perri.

OVERVIEW OF ATSDR ACTIVITIES AT CAMP LEJEUNE PERRI RUCKART

MS. RUCKART: Thank you. Earlier this morning I gave everyone a revised presentation that was Fed Ex'd to you about a month ago. This is basically the same except

we've updated some of the numbers because we've been working very hard on this, and we had some changes.

So the first several slides just talk about our past activities, and I think most people are fairly familiar with that so I'd like to start with just where we are with the current study unless there are any questions about our past activities. So I'm going to be starting with the slide, "Current ATSDR Epidemiological Study."

It's after the slide "1998 ATSDR Study on Adverse Pregnancy Outcomes."

So as everyone here knows we're in the process of conducting the study which we've called Exposure to Volatile Organic Compounds in Drinking Water and Specific Birth Defects and Childhood Cancers. It's a case-control study. It's a multi-step process, and the first part of that involved a literature search which helped us to focus on the specific birth defects and childhood cancers that we could attempt to focus on. There was a question before us that was it based on just one study, and it was not. It was based on a review of many studies that have been conducted.

So you can see on the next slide listed outcomes that seemed plausible to investigate further. And as a result of that we conducted a telephone survey. The reason why the telephone survey was necessary was because

as everyone, I believe, knows, there's no central place, no database or anything, where we can just go to and say who lived at Camp Lejeune and who had these things we're looking for. We have to just be very creative and come up with a way to identify everyone who was potentially involved here.

So the way we did this was to call everyone that we knew that lived there at that time based on I believe this was births during that time, and then asking, all those folks that we talked to, do you know of anybody else who lived at Camp Lejeune and was pregnant during that time. We also had a media campaign, and we tried to identify all the people.

And the objective of the survey was to determine if we could go ahead further --

MR. STALLARD: Perri, excuse me just a moment. We've had a request for some copies that people could follow along, and you all have all the copies. So is there someone who could give me one copy that we could quickly go -- as long as you can still read along somewhere, hold on just a moment.

MS. RUCKART: Do you want me to stop?

MR. STALLARD: I do for just a moment if you would. This would be a perfect time for a five-minute reprieve, and take this time to fill out your lunch and then everyone

will be...

(Whereupon, a break was taken.)

MR. STALLARD: Please take your seats. Let's resume.

MS. RUCKART: Okay, we're going to have to go ahead and get back started up here. I've just been told by our facilities manager here that we do need to speak very loudly and into the microphones so they can be sure to pick it up. So please keep that in mind.

Also, I've been requested to mention to you that we will need the lunch orders in as well as the money so we can place our order and be sure to have that on time. There's a woman with a pink plaid jacket. She'll be coordinating that. Her name's Carolyn Harris, so please be sure to see her if you haven't already done so.

So to pick up where I was before, we're talking about the telephone survey, why it was necessary to do that so we could conduct the study. So the objective of the survey was to determine whether we could conduct a study to make sure that we could find and identify a large enough group of people to consider further studying. And could we actually find and verify that there were conditions, adverse health conditions that we could further study. And would there be enough numbers to actually conduct a study.

As part of that effort, we determined that, well, we

surveyed the births that occurred on and off base. So the only requirement was that the mother was pregnant at any time during 1968 to '85, and we estimated that to be about 16- to 17,000 births. We had a pretty good handle on the number of births that occurred on base. But as I mentioned before, those births off base -- it was sort of like an unknown number. Just anecdotal information from the on-base hospital suggested that maybe three to four thousand births occurred off base.

So as you know, we had, we took some steps to try to find those people, one, word of mouth and people that we were talking to as part of the survey asking them did you have any neighbors, did you know of anybody else who was pregnant with you on the base but maybe moved off base before child birth. And we had a media campaign.

So we were able to survey the parents of 12,598 children, and we estimate this to be an overall participation rate of 74 or 80 percent depending on whether you think there are 16,000 or 17,000 births.

That's how we came up with that range of participation.

So what have we determined that we can study. There were sufficient numbers of reported cases of neural tube defects, oral cleft defects and childhood hematopoietic cancers and that includes the non-Hodgkin's lymphoma and the childhood leukemia. So we had 106 reported cases:

35 neural tube defects, 42 oral cleft defects, and the 29 cancers.

So we randomly picked about 800 controls from the survey population. These are the children who didn't have an adverse condition reported. We over sampled just to ensure that we had 10:1 ratio control cases. Maybe Dr. Clapp will talk about that later. It's just kind of like something you do in terms of sampling and to have adequate numbers for analysis, and we'll get into that later. And we didn't match. Possibly again, Dr. Clapp can discuss that with his technical terms.

So we conducted detailed interviews in the spring of 2005, so just about a year ago, to the parents of these identified cases and the controls to obtain just more specific information on maternal water consumption habits such as how much water they drank and different other water use activities like showering or bathing or washing children, I'm sorry, bathing children, and the residential history. Of course, that's very important to find out where they were living during the pregnancy and just other risk factors such as medical history, pregnancy history of the mother, work details, things like that.

And we attempted to interview all of the confirmed and pending cases and controls. And what we mean by

pending is if we couldn't get information one way or the other, any medical records or some kind of report to show that the child had a reported condition or not, we just called that pending meaning sort of like this open kind of case.

So where are we now? So we've been working very, very hard to just find a final disposition for all of the reported cases. And by that I mean, yes, we can confirm they have what was reported. No, they did not have the condition reported. We have medical records that prove or show otherwise if they have something else, just not what was reported. They were ineligible and in a minute I'll tell you what we mean by that. They refused or they're pending which we discussed what that means.

So in terms of why somebody would be ineligible, a reason for that would be that it was determined they were not actually carried in utero on the base, or they were born outside of our time frame here for the study of 1968 to '85. They were diagnosed with cancer after age 20, and they were adopted; therefore, not carried in utero on the base.

So where are we now with the numbers that this data is hot off the presses, is current as of yesterday. We have confirmed 56 of the reported cases as having the condition reported during the survey. That's 53 percent.

Forty-one cases were confirmed to not have the reported condition, were ineligible or refused. And out of that number 29 have been confirmed as not having the reported condition. And we have nine children who are still pending, and a little bit later I'm going to go into some more details about our efforts to confirm the pendings and just some specifics about each of these nine children so you can really see our efforts and what's going on here.

I would like to point out though while I said that we do have 56 confirmed cases, only 53 of these confirmed cases were interviewed. The three that were confirmed and not interviewed include two cases of neural tube defects and one cleft. It's very unfortunate these people are just not locatable.

We worked with a contractor to conduct the interviews, and they have a lot of resources available to them to try to locate people. And they've done extensive searching and we could not find them. And we also worked with the military to see if they could provide some information to help locate these people, and it's just not possible. So unfortunately, you know, we're not going to be able to do an extensive analyses including these three people because we don't have the detailed information that we collected during the interview.

1 So I just want to talk now about each of the three 2 case groups. The number that was reported and where we 3 stand now, where they fall into those categories. For 4 the neural tube defects, we had 16 confirmed having neural tube defects. As mentioned, we couldn't interview 5 two of those. 6 MR. STALLARD: Jeff, do you have a question? 7 8 DR. FISHER: I have a question. The people you can't 9 find, they don't pay income tax in the United States? 10 how far did you go to try to find people? 11 MS. RUCKART: I don't have all of those details because 12 it was mainly by the contractor. I know they have done 13 extensive searching. They've done paid searches and all 14 of those things. I don't know why they couldn't find 15 them. 16 DR. BOVE: Many of these people are scattered all across 17 the country. 18 MS. RUCKART: Or the world. 19 MR. STALLARD: Thank you. Please proceed. 20 MS. RUCKART: So out of these reported neural tube 21 defects we were able to confirm 16 of them; however, we 22 could only interview 14 of them. And we have confirmed 23 that 12 did not have a neural tube defect, two were

ineligible, two refused, and three are still pending.

Out of the oral cleft defects, we've confirmed 24

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as, yes, having the oral cleft defect, 11 as not being the oral cleft, three refusing to participate and four are still pending. As for the hematopoietic cancers, we have 16 confirmed as, yes, they have that condition, six confirmed as not having the condition, three ineligible, two refused and two still pending.

So I just wanted to talk about our extensive verification efforts, kind of an overview, and then I'm going to go case-by-case for these 9 pending and you can see where we are. We have made numerous attempts. It started with trying to obtain birth and death certificates and records from medical providers. We also searched for records at the National Personnel Records Center in St. Louis. That's where the military records would go.

We decided when we couldn't come up with anything with those methods that we would contact the children who had reports of spina bifida and oral cleft to see if they would go to a current medical provider and see if the doctor could look at them today and say, yes, you have evidence that you had, have had a neural tube defect or an oral cleft.

And finally, we sent registered letters to these pending cases. We sent them with a return receipt so we can verify that they did receive the letter; they had to

sign it, urging them to please help us, to please visit the medical provider or give us any records that they have so we could confirm their condition and have them be part of the study.

I would like to mention that as leading up to this numerous phone calls have been made where we've had contact with these people sometimes or not. It wasn't like we just sent a letter. We did actually call them several times and try to talk to them and explain the importance of this process.

With these nine cases, we've had one oral cleft. We've had extensive efforts to locate the parents. They just were not locatable, but that doesn't mean that we still don't want to confirm them. We still would, and we can maybe do some limited analyses with them if we can just confirm they have the condition. So we obtained their birth certificate from Onslow County and no health information was provided.

We were told by the County that this birth was in 1985, I should mention, and we were told that the health information was not available. They had destroyed it. I guess, they enter it into a database, and after that they destroy the hard copies, and there was nothing provided to us electronically to suggest any health information on the oral cleft, and therefore, the record's destroyed.

We can't look at a hard copy.

We have a case reported of neural tube defect, specifically spina bifida. This child was born in 1973. The family does not have any records. We offered the child the opportunity to go to a current doctor, and we talked to this person and they seemed like they wanted to cooperate, but they never made the appointment and several follow-up phone calls have not been answered.

Again, they got the registered letter and they just did not want to follow back up with us. We obtained their birth certificate from Onslow County. Because they were born before 1978, health information is not available. They only have to keep it for a certain amount of time; I think 20 years, and it's just not available.

I should also mention that there comes a point when we've called these people so many times and sent them letters where we just really can't call them any more. We have some standards here that we need to go by. Our studies are reviewed by an IRB, Institutional Review Board, and it places limits on how many attempts you can make before it sort of is bordering on harassment. And we've made like the maximum number of attempts where the person doesn't respond. There's only so much we can do at that point.

We have another case of neural tube defect, also spina bifida. The child was born in 1971.

Unfortunately, this child is deceased, and their birth and death certificates don't mention anything about a neural tube defect. The cause of death as listed on the death certificate is hydrocephalous. So we have found out where this child was born. It's a hospital in Texas, and we're now trying to contact that hospital to see if they may still have some information, some records, and we'll just have to wait and see what happens with that effort.

We have a case of non-Hodgkin's lymphoma. The child was born in 1972. The family does not have any records, and the mother states the child is going through a very difficult time. This child is going through, well, I don't know, going through a messy divorce. And she can't get the child to make a doctor's appointment, and she won't provide any information on where we can, any contact information for us to call this person ourselves, and just the regular searches like we mentioned before, didn't yield any contact information for this person.

We're at the point now where we can't contact the mother anymore. We contacted her many times, and she's basically said she's done all she can do, and we can't call her again.

So based on the information she provided me, telling me about her child was going through a messy divorce, and we know where the parent lives, which doesn't mean we know where the child lives, but we're again, just trying to pull out all the stops here, we've been in contact with that state's divorce records area to see if we could just glean some information from the divorce record, maybe get an address or something to actually contact the child.

Again, we can't call the mother anymore or the father. And the divorce records in that state didn't produce any information, and we are in the process of now trying another paid people search. We'll have to see if that yields anything useful.

We have another case of an oral cleft. This child was born in 1971. In further talking with the mother, she says the child had a deviated septum, almost a harelip. We requested that the child have a medical visit now, and there's been no response after several follow-up phone calls to see if they will schedule the appointment. We have obtained a birth certificate from Onslow County. Again, since this child was born before 1978, there are no records available any more.

We have another oral cleft born in 1977. The family has no records. The parents want the child contacted

directly. This child is now, you know, an adult, over 18 years. We have made several attempts to contact him, phone calls, e-mails, and there's just no response on his part. Again, he was born before 1978 so there's no information on the birth certificate from Onslow County.

We have another oral cleft born in 1980. This child is unfortunately deceased. Some records that the family had were unreadable due to age, and other records that they provided to use did not mention the cleft defect. And those records that were unreadable are no longer available from the hospital. In further talking with the father, he states that that child's palate was high, but intact.

So we have received some birth certificate information -- this is from South Carolina. No congenital malformations or anomalies were noted. The death certificate lists cardiac arrest and aspiration as the cause of death and notes the history of cerebral palsy and meningitis with seizures. The autopsy also does not note the oral cleft.

Through our contacts with the National Personnel
Records Center in St. Louis, they told us that the
records are being held elsewhere as a result of
malpractice suits. So we can't view them. With this
child we just don't know with the cerebral palsy, and the

child, of course, had cleft palate. Maybe possibly there was some confusion when CP was noted. It was cerebral palsy or cleft palate. We can't confirm it. It could be cerebral palsy. We just have to leave it open or pending. We can't say one way or the other at this point.

We have a leukemia. This child was born in 1969. Unfortunately, this child is also deceased. The parents won't answer our calls. Basically, they live with an adult son, and he will not put them on the phone for us. The hospital no longer has this child's records. The cause of death is listed on the death certificate as aplastic anemia. It could be leukemia. We just, it may be, we just at this point can't say. We don't have the records.

We have a few more things we are trying to do to confirm it because we feel it's very likely it will end up to be leukemia. So we are trying to see if the hospital can tell us about the doctor that treated this child.

Now the hospital doesn't have the records. But if we can find out who the doctor is, it may be possible that the doctor kept his own personal records, and we might be able to get the information that way. So we're going that route because, you know, we really want to do

our best to confirm every possible case especially one that looks very likely like this one.

And then our final pending case is a neural tube defect. It was reported as an anencephaly. Now anencephaly is absence of the brain. If you are born that way, you would not live. So this child was born in 1985. This father has said that he will mail us records, and we never received them. We've made numerous follow-up calls in an attempt to get them and have not gotten a response.

Now the thing with this particular child is, we did obtain the birth certificate from Onslow County. And again, there are no, we're told that the health information was not available. It's been destroyed because it's been about 20 years old now.

Now we also requested the death certificate from Onslow County because if this child was born with anencephaly, and they were born in Onslow County, most likely the child would have died in Onslow County because he would have died very shortly after birth.

And we were told that Onslow County didn't have a death certificate which may suggest that this person is not dead. And if they're not dead, they didn't have anencephaly. So... Also, according to their birth certificate their APGAR score was normal which is not

consistent with someone with anencephaly. Again, since we can't confirm one way or the other, we're not going to close it out as a no, we're just going to have to keep it pending because we just don't have any information.

So that's where we are with our verification efforts. Wanted to show everybody that we are working hard. We are trying and just to really give you a sense of what is involved here. Now I'm just going to briefly touch on a few other things.

Just briefly, I want to talk about the water modeling from this. The Marines recently provided additional documents related to the water modeling to Morris Maslia. He's going through them now. He's asked the Marines Headquarters to confirm that there are no additional relevant documents. And they responded saying they will attempt to comply with this request, but they don't have the subject matter expertise to properly determine the relevance of documents in all cases. So -- MS. McCALL: They just need to turn everything over, and you guys decide the relevance because you guys are the experts.

MS. RUCKART: I believe we'll have to talk about that later.

So I just wanted to let everyone know that we are obviously still proceeding with the water modeling and

having all the information definitely that is key to progressing with that.

So just to kind of go over our timeline, Morris is to provide the water modeling results and data to us in early 2007, so approximately a year from now. And at that point we will integrate what he gives into our analysis and finalize our report. And that will be done by the end, or we're anticipating if everything goes according to schedule, which hopefully it will, by the end of 2007.

I wanted to mention that we can't undertake any new studies till we have the water modeling results. That is what's going to give us the exposure information, and the exposure obviously is key here. And at that point we can also re-analyze the 1998 study on small for gestational age. It has come to our attention that there may have been some inaccuracies with that exposure data so we want to revisit that.

MS. McCALL: I'm sorry, but I don't know why we couldn't simultaneously do health studies along with the water modeling. That was one of the recommendations from the expert panel was that these need to both be parallel.

MS. RUCKART: Right, well, this effort right now having the CAP is starting that effort to talk about what may be feasible and prioritize. So we are starting that effort.

I just mean we actually couldn't do a study until we get those exposure ^. That is a key piece of information.

But we obviously are moving forward. We're here today.

MR. MARTIN: Regarding the water modeling, you say early 2007. Is that to complete all three phases of it, the Hadnot Point, Tarawa Terrace and Holcomb Boulevard?

MS. DYER: That's what I wanted to ask Morris. I talked to you about it. If that's okay, I can go ahead and ask him now.

When you and I --

MR. STALLARD: As we continue on, I'd like to encourage the panel members to jot down those things that come to mind in these overviews and --

MR. TOWNSEND (by telephone): (inaudible)

MR. STALLARD: Hold on, Tom, just a minute please.

I'd like to encourage the panel members during these presentation parts which is to give us all a foundation and an overview, to jot down those things that you want to bring up that are relative to moving forward in terms of how we're going to conduct future studies and which ones are feasible and allow some dialogue where it's appropriate, okay?

MS. DYER: Thank you.

And Morris, this will help us in the future so that's why I'm asking now. In several of our phone

conversations one thing that you said was that the, we had a year for Tarawa Terrace, and that year at the time, I think it's 1958. And so if we've got a year that the chemicals, that the contamination started then in Tarawa Terrace, that gives a group of people, it gives us a year. And so why can't we -- and you had talked about possibly being able to release the information for Tarawa Terrace because the wells have been, you kept them kind of separate all along. And so if we've got the information, the year that it started, that gives us a place to go.

MR. MASLIA: Let me -- there are several parts to your question and if I can very briefly separate them out so we're all on the same page I think that, for those of you who have not been in this process for that long, I think it will be, it'll help you out. And if I don't answer exactly what you're telling me, ask it again, and I'll be happy to answer it.

We made the, an approach standpoint decision early on about the, as the complexity of this project evolved, that we would try the water modeling, and attempt to water modeling an area where we thought we would have the best success in having a scientifically defensible end product and information for the epidemiologic study. That turned out to be Tarawa Terrace for a couple of

reasons.

Number one, primarily there is one contaminant, being PCE or perc, and I say primarily because they're all derivatives primarily. We also primarily knew what the source was. The source which was a dry cleaning facility. So from that standpoint we could save some effort and time and try to rule out investigative work, detective work, and trying to understand what all the ABCs of chemicals were there.

And so we've modeled that, and because -- without getting into details; we did this previously, the water modeling panel -- because of modeling considerations, hydrogeologic considerations, we were able to isolate the Tarawa Terrace area and develop a ground water flow model-type transport in that area. In doing so, while we have not publicly released specific information, we have briefed the Marine Corps as is our responsibility to do, to work with them.

And in August of 2005, we briefed them and told them at that time our best estimate was contamination at five parts per billion at Tarawa Terrace well since May of 1960. That's what we reported to General Kelley and his staff at that time. We also told the Marine Corps -- and for those of you who were there at our water modeling panel -- that it was a very strong recommendation, and we

are following up on that from our expert panels.

Number one, go back and do additional data discovery to see if that would impact our modeling assumptions. And also number two and three, do extensive sensitivity analyses and uncertainty analyses. So we could feel confident on the solutions and answers that we provide to the epi studies as far as what the concentration of ground water was at various months that we were modeling as well as at various locations.

And we are currently doing that right now. So that is why we have not put anything in writing because that can change, and when we put something in a report in writing, as I'm sure it's been discussed here previously, from the epi standpoint and from our standpoint it will need to be reviewed by a peer panel or an outside panel of experts. And so we are still, and as I think was mentioned by Perri, we have received additional or more recent information, and we are modifying some tables and some charts and some things of that nature based on recently received information.

So I'd like to stick right now to answer you is 1960 is a very good estimate, but I am not ready, or the agency is not ready to commit that to writing because we are conducting the additional analyses that our Panel recommended so we can be as assured as we can with what

the uncertainty is and what the range, what the range of date possible dates may be for the first level of concentration, five parts per billion PCE as well.

The second, I think if I recall, the second part or an additional part of your question is the other areas. We are currently now working through the hydrogeology and developing, modeling the ground water for the Hadnot Point and Holcomb Boulevard areas. Because of the size of those areas and the size of the computational equipment that we have, we have subdivided those into two additional ground water models.

Does that answer?

MS. DYER: No, a little.

MR. STALLARD: Excuse me, Tom's trying to, let's give him the opportunity. Tom?

MR. TOWNSEND (by telephone): I presume that was Perri talking, Perri Ruckart.

MR. STALLARD: Perri was talking and then she was followed by Morris.

MR. TOWNSEND (by telephone): Yeah, I recognize their voices. I think, I don't know why ATSDR promulgated the number of cohorts involved because the final statistic that I have that I got from the state of North Carolina shows that there was 33,456 children born in the naval hospital between '68 and '85, and 17,211 at Onslow

Memorial Hospital for a total of 50,727, and we're talking about 12,000 people that were contacted. And that doesn't seem to me to be a big, big bite. I just throw that out, and I'm not going to fight about it, but I think that we have been marginalized.

MR. STALLARD: Thank you, Tom.

MR. TOWNSEND (by telephone): Point two --

MR. STALLARD: Thank you, Tom. We have, as you recall, earlier on we have already identified the need to look at further studies on children and if that entails expanding the cohort, that's what this Panel is about to talk about and deliberate then.

MR. TOWNSEND (by telephone): Okay, well, I, some of the Panel has only been around for a certain period of time. The rest of us have been around trying to work on it for the last seven or eight years. And I would say that making cleft lips and cleft palates major objects of decision making is rather miniscule because they weren't doing this in Viet Nam on the hospital ship. Why not some emphasis on terminal illnesses of children? And the last thing is there's plenty of fetal death data in Onslow County. I have it. And what does ATSDR do? I mean they've been doing? They and largely minimalize adata concerning Camp Lejeune.

MR. STALLARD: Thank you, Tom. I'd like to let Perri

1 finish her presentation and then just please try to 2 consolidate your comments that we may also have time for 3 Dr. Clapp and Dr. Fisher is going to be leaving at 12:00, 4 and we'd like to hear from him as well, okay? 5 DR. FISHER: Since Morris is still here, can I ask a 6 question? 7 MR. STALLARD: Yes, you may. 8 DR. FISHER: For trichloroethylene, have you worked with 9 that yet? 10 MR. MASLIA: TCE, we're working with that at Hadnot 11 Point, and obviously from PCE, the derivative DCE and 12 TCE, we actually have ongoing analysis to one of our co-13 operators that do some much more sophisticated, they can 14 transport from a PCE to DCE. 15 So you're going all the way to vinyl DR. FISHER: 16 chloride? 17 MR. MASLIA: As an additional analysis, not as the 18 primary analysis as to when as well. That's classified 19 as that what our Panel was doing initial sensitivity 20 analyses. That's specifically one of the areas that we 21 interpreted as what they meant by that. So we are doing 22 that at Tarawa Terrace. 23 MR. STALLARD: Perri, while we have Morris here, I'm 24 going to have any other questions of him asked that we

may -- from this and see if you want to --

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MS. DYER: Morris, you didn't answer my question. That's why I wanted to finish up with you, okay? Can we be given Tarawa Terrace data before the Hadnot Point is done so that we can go ahead and do a study on Tarawa Terrace? We had talked about that at one point, that you had always divided these studies. So can we go ahead and have -- instead of waiting till 2007 -- have the data from TT so that we can run with it? And if you're saying 1960, are you guys kind of going above that or are you tending to look with this new information a little bit earlier than that?

MR. MASLIA: Well, we will be putting out reports specifically from the Tarawa Terrace area when those reports are cleared by ATSDR. We are currently working on them, and they will be released publicly.

MS. DYER: Okay, so it will be before the 2007?

MR. MASLIA: Yes.

MS. DYER: Thank you.

MR. MARTIN: My question is kind of along the same lines. I was concerned or do you have enough with your preliminary studies at this point as far as a population estimate or the number of residences or quarters in the Tarawa Terrace area that were actually affected that would make it feasible to move forward with notification of people that primarily came from Tarawa Terrace?

MR. MASLIA: That would really be outside the water modeling part and more the exposure. We will be providing the epidemiologists the time and concentration of water delivered.

MR. MARTIN: Okay, I'm concerned also with the water modeling. The way I understand it is you're trying to determine how much water went to an individual residence per gallon per day. Is that correct? Is there any consideration to the --

MR. MASLIA: That is not correct.

MR. MARTIN: Okay.

MR. MASLIA: Based on, again, the recommendation of the water modeling panel, no, at this point, based on the recommendations and then from the water modeling expert panel that we had in March, the recommendation was to use a much more, what we call simple mixing model, and to determine the concentration of the mixed water, the water derived at the treatment plant, from both contaminated wells and non-contaminated wells at Tarawa Terrace.

At this point, short of knowing any additional information, or having any additional informational interconnections that's the approach we're taking.

That's what we'll be providing to the epidemiologists, what's the concentration of the delivered water from the treatment plant by month and by year.

MR. MARTIN: And there again I apologize, it's not real clear to me exactly how the study is effective and all, but does it take in any consideration as far as environmental exposure, the creeks, the new river channel that came through there? You know, because we were eight year old kids. We were always in the creek. We were always fishing, and we ate the flounder and the crabs and everything that came out of the water as well.

DR. BOVE: This is not actually a question for him.

MR. MARTIN: Okay.

MR. MASLIA: Outside the water modeling aspect.

MR. MARTIN: Thank you.

MS. RUCKART: I think that I would wrap up now with my presentation, just a few more things I wanted to add.

One of the CAP members requested that I discuss the annual plan of work, APOW, that we provide to the DOD. So as far as the APOW, we did put in a request for funds to computerize the housing records. There are approximately 90,000 -- I'll say to completely computerize the housing records. There are about 90,000 hard copy records that have information on housing areas for Camp Lejeune. And the only records computerized to date are from the 1998 study. That's approximately 15 percent of these 90,000 records. So we've asked for some funds to undertake that effort.

And we have also asked for funds so we can explore military and navy databases to identify people and health information. And we've also asked for money to fund the CAP meetings. DOD has provided funds to pay for this CAP meeting. We've requested additional funds to support subsequent CAP meetings and so far we haven't gotten a response on that.

MR. BYRON: How long ago did you request that?

MS. RUCKART: Have to ask Linnet. October? October

2005.

MS. DYER: Is there anyone here that has any kind of knowledge as to their approval or disapproval of this? Is that why? Do you know? I mean, what is their stance on the CAP? Are they going to work with us? Are they glad that we're here? Are they going to continue? I mean, it would be nice to know what the Marine Corps or the DOD's feel about this is so that --

MS. RUCKART: I can't answer that question.

MS. DYER: It would be nice to know because that helps to know if we're going to be able to plan a future or not.

So we need to know that.

MR. STALLARD: Do we have that? Would the court reporter need to know level of commitment?

MS. DYER: Level of commitment with the DOD. Are they going to continue funding? Are they wanting to work with

us with the CAP? I mean, this was, we've heard that they wanted to work with us, and if they want to work with us then they need to provide the funds to be able to get us here and to do this job. We're committed, and we want to know how much their commitment is to us. MR. STALLARD: Frank, do you have anything on that?

DR. BOVE: We're waiting to hear ourselves.

MR. MARTIN: I think there again we need to restate as we did in Washington that we're here in the spirit of cooperation. We want to do whatever we can possibly do to help the ATSDR or whoever else requests us for information. We want to provide everything we can, but we'd like to expedite some things and get them moving forward. We've met; we've talked; we all knew the water was contaminated; we all know people are sick. need to move on.

MR. STALLARD: I'd like to talk at some point in terms of what you envision DOD participation in this CAP process. I think that might need to be clearly laid out so that there's a clear understanding and expectation of who's doing what with whom and the level of commitment that we're asking for.

Perri, are you finished with your presentation?

MS. RUCKART: (no audible response)

If it's all right, we're going to move MR. STALLARD:

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24 25 right on into Dr. Clapp's overview and presentation to give us the basics of epidemiology I take it, 101 or something along those lines.

EPIDEMIOLOGY OVERVIEW RICHARD CLAPP

DR. CLAPP: I know we're running way behind schedule so what I thought I would do, I thought I'd just hit three points. What kind of epidemiology studies are done in situations like this, and I'll talk about three major ones. And then what kind of answers can you get from those kinds of epidemiology studies or not get from those kinds of epidemiology studies. And then how do you assess the feasibility of doing these major kinds of studies.

And some of this you've already been talking about, and I'm sure some of you have already heard this in previous discussions. So I'll probably be repeating some things maybe for emphasis or at least my own perspective on some of these things, and also give some of my own personal experiences.

And also, I only know a couple people in this room so I should say a little more about myself than whatever you have, one paragraph, whatever. I started getting involved in situations like we're talking about here in the 1970s because of Woburn, the child leukemia cluster in Woburn, Massachusetts. We've all heard about it, all

seen the movie or read the book.

And so it was because of that child leukemia cluster in a small part of a neighborhood, really of a small city north of Boston, that was eventually traced to trichloroethylene in the drinking water that I started thinking, well, there's a lot to know and a lot to learn and a lot to do in order to try to prevent this kind of tragedy from happening to other children in other communities.

So I started learning about it in the 1970s, and then I worked at the state cancer registry. I was the director of the state cancer registry in Massachusetts where we looked at a lot of situations like this around Massachusetts where there was drinking water contaminated with in one case, perchloroethylene.

We've continued to look at the childhood leukemia pattern in Woburn, Massachusetts. We wrote reports about it. We testified in hearings about it. I was on a group like this, and we call it the CAC, C-A-C, for the Woburn citizens during the period when the ATSDR had funded a follow-up study, what they call of follow-up case-control study of childhood leukemia in Woburn.

And then I continued that work in my doctoral dissertation where I looked at, among other things, Viet Nam veterans in Massachusetts. What kind of cancers Viet

Nam veterans got. As a result of that study, I wound up testifying in Congress actually. It was the Veterans' Affairs Committee about cancer of Viet Nam veterans that they ought to be compensated for.

So I come to this with some personal experience, some pretty intense personal experience I guess. And also, I think, some lessons that I've learned over the years.

I should mention one other thing. I didn't meet
Morris Maslia ^ Township or in Toms River, New Jersey,
where he is doing a very similar model for the water
distribution from contaminated wells in that town as I
know you're aware of this because it's in various ATSDR
summaries and reports. But that is a, mind you, that was
a successful study, a case-control study of childhood
cancer, not just leukemia, in relation to water
contamination and other factors like where do people, you
know, get their fish, or do they swim in the river, and
that kind of thing.

There was a significant statistical association between water, especially from one well field as modeled by, or as it is called at ATSDR, and it was produced as a public report. There was great media attention to it. It was about six years ago. And so it can be done, I guess, is what I'm saying. These things can be done.

They're expensive; they take a long time. There's plenty of experience to draw on. And I think the people who are doing this work at ATSDR are well aware of that prior experience.

So I guess that's enough about -- or I should say I teach environmental epidemiology. I teach this kind of stuff. In fact, Morris co-edits a book about how you do exposure assessment which we're going to use in courses teaching this kind of what we call environmental epidemiology. The key ways to do exposure assessment, for example, environmental epidemiology studies.

So that's where I'm coming from on this. I've got a fair amount of experience. I've worked with citizens' groups, many more than I've just described, and had some personal lessons that I think I've learned along the way.

So I would say briefly now there are generally three kinds of studies that people do, scientists do in response to citizens' concerns in a situation like this. This is the way that Dr. David Ozonoff describes it. David Ozonoff was on the science panel a year ago. He was one of my mentors. He's my friend; he's my next door neighbor at the offices where we work together. He's actually a principal investigator on a grant from the National Institute for Environmental Health Sciences which I'm on, in terms of disclosure or whatever conflict

that is. ^ field and ^ the same thing.

And so I should say also Dr. Ozonoff describes a public health disaster as something that is so bad that even an epidemiologic study can pick it up. So that's the sensitivity that we're talking about. These epidemiologic studies are hard to do, and at the end of it, you're not exactly sure you've really identified exactly what was going on.

It's almost like it's the looking for your keys under the lamppost because that's where the light is, but that's not where your keys are. It's just you have to look where you can. You have to look at the time period that you have available, where you have available data, or you have to look for health effects where there's enough of them that you might actually see something as opposed to something that's really rare, and you're not likely to see it even in a large population.

There are three major types that are done. One is when citizens are worried about a health problem that they know they've had, -- and Jerry just described his daughter's health problem he knows she had. And what caused it is the question they ask. What caused that health problem to happen to them or to their child? And typically, that's answered with what's called a case-control study where you look at diseases that have

happened.

And you ask back in time what were they exposed to or what was their genetic family history, or what other activities occurred besides the exposure that you think may have caused it. And then you try to compare what happened to the cases, to a group of controls who are, say in this case, other children who didn't have that disease but were in the same general area, and what were they exposed to and see if there's some difference in exposure between the cases and the controls.

That's the case-control study. That's what Perri's talking about, and that's a very appropriate way to approach this question of what happened. Why did this happen to cause the disease that we know our children have or if it's adults we know we have.

A second question that people ask is we know we were exposed to something. What's going to happen to us? So there the issue is the exposure's been documented. We know there's something in our drinking water, or we know there's something coming out of that plant down the street. Or in the case of Viet Nam vets, we know we're exposed to Agent Orange. What's going to happen to us?

And that is typically done by following people, a group of people exposed to something, through time to see what happens to them. And that's what's called a cohort

study. And usually it's a much larger study. If it's, say for example, workers at a factory or at a company that has factories all over the U.S. That can be a cohort study of, say for example, DuPont workers.

DuPont Chemical has had cohort studies of DuPont workers. And for those DuPont workers that worked in the dye division, what diseases did they have? And you follow people for years, sometimes ten or 20 years, and famous cohort studies sometimes go on longer than the investigators that started it. They outlive their researchers.

And they're very expensive. They do involve tracing people who move to other parts of the U.S. or even to other countries, trace them. So you have to hire companies like Equifax. That name was mentioned here before, or Westat or some of these other contractors that do have, you know, armies of people that will take, make phone calls, will track down vital records or registry of motor vehicle records in different states and try identifying people to see that you can still contact them as part of your cohort study.

It's a much bigger effort. It's a much more expensive effort. Some people say it's for when you know what the exposure is, but you're not sure what diseases you might see from this exposure. It's the best way to

learn about a variety of diseases from a particular exposure. But in any case it's the second method.

Often in community studies that's not appropriate because people scatter, and also there may be communities that are even larger than large companies in terms of their size. So it becomes unwieldy and impossible to pay for. It's too expensive to try to carry out a study like that.

It doesn't mean it can't be done. There have been cohort studies, and one famous one in England. People lived around a nuclear weapons recycling plant it was called or a nuclear materials recycling plant called Winsgale (ph). And they looked at all the kids that were born in that area, followed them wherever they went throughout England and see how many of them got leukemia, and a fair amount of them did because they were exposed to this radioactive cloud that came out of the Winsgale plant. So that was you could say a positive result from an expensive and long-term cohort study.

And then a third type of study that typically happens in communities is are we sicker than our neighbors. The question is, okay, we think we probably have some exposure. We think we're probably sicker than we should be. But how do we know whether that's true if we compare ourselves, can we compare ourselves to our

neighbors in the next town or the rest of the state?

And that's typically called, or that type of study is called a prevalent study. It's a disease prevalence study. It's not necessarily about a specific disease like cancer. It might be about a variety of things like asthma as well as birth defects as well as autoimmune diseases like lupus. We want to know are those things happening to us more than they are to our neighbors. And that's, as I say, a prevalence study.

So those are the three types generally of community environmental health studies that people have done over the past 20 or 30 years. And then a couple of quick things. What do we learn from these studies? What answers can citizens get? And generally it's answers about broad questions like is there an -- it's a term that's used in epidemiology -- is there an association? Some people say epidemiologists have a national flower, and it's the hedge.

So we can say there's an association. What the people want to know is that, what is an association?

Does that mean it causes something? The answer to that, and often the epidemiologist, well, it's an association, but we don't yet know whether that's a cause. There's a lot of dancing around that happens. A link as opposed to that's the cause.

So as I said an epidemiologist is trained to be cautious about this kind of stuff. I've sort of ignored some of that training myself, but I'll tell you most epidemiologists, that is what you're taught to do is to not leap to conclusions. So there's that unsatisfying result from these studies.

And then for an individual person like Jerry's daughter or Jerry. What caused my daughter to have her disease that killed her? And that, the epidemiologic study generally will not answer that. It will say there was this association so this is a plausible link. But it's the doctor that treated Jerry's daughter that says, I've looked at this. I've known this family. I've looked at all their family history -- and he's described some of it. I know what medications she took, the ones I that prescribed, the ones that somebody else or over the counter. There's no other likely, there's nothing more likely to explain that child's disease than this exposure.

That's the causal statement, the medically plausible or whatever to a reason -- It's used in court. It's called to a reasonable degree of medical certainty. I, the physician, think that Jerry's daughter was, got her leukemia that killed her because of this exposure. And that's not from an epidemiologic study. That's a

clinical statement.

Most doctors are unwilling to make a statement like that for the same reasons as some of the epidemiologists, but also because they would have to play God to know that. They would have to have been inside the genes of this child's -- this unfortunate event that happened to this child in order to know for sure that that was the cause.

But on the other hand some doctors can say to a reasonable degree of medical probability. In other words, if you weigh that it would be more that it did cause it, and I'm willing to say that in court or to an insurance company or whatever it is.

So that's the kind of difference between what an epidemiologic study can tell you at the end of it all. Or even what an epidemiologist, even good ones like the ones involved in this study, will be able to say to you definitively at the end of it. Well, there is an association, and it meets the usual conventions of statistically significant or not.

And then the last thing I want to say is something about feasibility. I guess I've already said some of this, but case-control studies are the most efficient studies. And for a rare disease like a birth defect of the heart, for example, or even childhood leukemia, that

is the most efficient way to go about trying to figure out what happened. What was the association that is most likely the explanation for this pattern of disease that we see in this community.

And so it's the most feasible and part of the feasibility is to see well, are the records available and will people answer us when we call them up and ask a questionnaire over the phone? Perri's been describing that. That's been going on, and it seems like it's feasible. And they're going ahead with it. And I commend them for that.

For a cohort study there's a lot more that I think I've implied that would tell you whether it was feasible or not. I was actually part of an epidemiologic feasibility study for DOE, EPA and the Nuclear Regulatory Commission to see what populations you could study that were exposed to low-level ionizing radiation, and whether you could do a new study that would say how does that affect people with this low dose.

So it's a very specific epidemiologic question, and the feasibility study meant that we had to go to places where there were first of all large numbers of people who were exposed at low dose and that there were medical records and exposure records available, if not all of them, at least a very significant portion of them. And

then my role in this feasibility study actually was to see are there cancer registries where these people worked, state cancer registries so you could pick up the cancers that occurred in this cohort.

So the feasibility study itself took three years. We published it. It was a Journal article in the American Journal of Public Health about it. There were these two thick reports about it. And we did think it was feasible. Actually, there were two groups that we thought it was feasible to study that weren't already being studied.

One was people who had worked at nuclear power plants and all over the country actually that were exposed that had badges that said what their exposure was. And we recommended that at the end of that. And I'm trying to remember what the other -- oh, the other ones were actually cohorts of DOE workers and they were already pretty much being studied.

So that process led us to believe that, you know, there are ideal studies that we would love to do. They would cost a fortune to do them, and we found that out about these low-level exposures to ionizing radiation.

And so I think actually none of those that we recommended are being done. Individual utilities have studied their workers, and then there have been radiation Canadian

studies of nuclear power plant workers that have taught us what we now know about low level ionizing radiation which is if you do a study, you actually can see the risk goes up practically above zero. You know, the dose response is such that there is no safe dose for ionizing radiation. That's what these big studies have taught.

I'll reserve judgment on whether a cohort study of everyone who went through Camp Lejeune is feasible. I think you'd have to find out a lot more about them in order to say anything about that. So one last thing I'll say before I stop is, and I really prefer to do this interactively and answer questions.

There was a toxic waste site in central New Jersey called the Lipari Landfill. And at one point it was the number one, ranked number one on the Superfund list, USEPA Superfund list, and that was because 'was one of these toxic waste dumps. The landfill was a dump where chemical companies from all over New Jersey came and unloaded their stuff. And it stayed in the ground and went into the ground water, went into the rivers.

You know, people were affected if they swam in a pond where there was a Girl Scout camp nearby. They were affected if they ate fish from the rivers, et cetera. And so there was lot of people affected. This was in Glassboro and Mantua (ph) and several other towns in

central New Jersey. The Lipari Landfill site was number one on the Superfund list because of the toxicity of the chemicals and how many people were affected.

So they actually formed their own registry of people that wanted to know, people who lived around the landfill who wanted to know new information about what was learned about exposures. So they formed their own, I would call it a mailing list, but it was computerized. And the organization was called LINK the Lipari Information Network, had thousands of members and people voluntarily joined up.

And there was a person who actually worked out of the town hall who was the coordinator of this. They got a grant from, I believe, a foundation. At one point they had a grant from ATSDR to keep in touch with everybody. They had a mailing list, and they put out a newsletter. And so there was a lawsuit of people who lived around this landfill filed against, you know, a hundred or so polluters.

And as part of the lawsuit, the attorneys for the plaintiffs asked us, me -- I worked at the time at a public health consulting company called John Snow, Inc. -- to do a health survey of the people that were in their database. So we did, mailed it out. They had the addresses. They were all computerized. It went to

several thousand people, and we got the results back. It was all self-reported, so called self-reporting health survey reports.

There were some very unusual findings in it which we summarized and produced a report. And it so it was, I would say -- and then we sent out the results of that through the newsletter to everybody that had participated or not. Those that had responded with a questionnaire in the mail or just were interested in knowing what other people said. And so that was a way of keeping in touch with several thousand.

It wasn't 60,000 or even 20,000. It was four or five thousand as I recall, somewhere in that range, of people who lived around the Lipari Landfill dumpsite and were members who had signed up with the LINK organization. And some of them moved away, quite a ways away. So it was a good way to keep in touch with them.

But it was I would say an informal, we didn't publish this in a scientific journal. It was a report that was reported back to the organization. It was used as part of the negotiations in the lawsuit, but I don't think it was the, by any means, the critical -- and they did have a settlement with these responsible parties. They weren't even potentially responsible. They were responsible, and they paid money to the people that had

been exposed. And so that I just offer as another method.

And I'm not necessarily recommending that you file a lawsuit or even that you try to get a grant to do this database, but it has been done at least in one other community. I will stop with that.

MR. STALLARD: Thank you, Dr. Clapp, and thank you for not hedging at all on that.

I have been asked by those up front that if you want to eat lunch, there are five of you who have not committed both with your votes and your wallets, so we need that. So let's just take a few moments to do that real quick.

Folks, can we take maybe just a few minutes? I'd like to ask Dr. Fisher when we get back if he has anything prior to his departure for a previous commitment.

(Whereupon, a break was taken from 11:10 a.m. until 11:20 a.m.)

MR. STALLARD: Terry, you wanted to mention something about the DOD connection, or do you want to do that -

MS. DYER: We're going to do that after lunch. I'm going to have a statement from someone. So I'll be able to read it after lunch.

MR. STALLARD: Okay, and just for those to know we have members of DOD in the audience, and they would like to affirm their commitment to this process. And Terry will have some more after lunch.

Unfortunately, Dr. Fisher had a previously scheduled commitment this afternoon and will have to be leaving us shortly to make that commitment. So we're going to use this time right now to hear briefly from Dr. Fisher, and then we will open the Panel for open interactive discussion.

REMARKS BY DR. JEFFREY FISHER

DR. FISHER: I'd like to say I'm very excited about this opportunity to assist the CAP. It's a humbling experience, very difficult task where science and policy meet and how far can the science go. I'm not an epidemiologist. You should know that. I'm a token toxicologist, I guess. So my background and what I do is much different than Dr. Clapp. For example, the groundwater modeling perked my interest. I do mathematical modeling only of chemicals in the body. So I can contribute and have, I think, important things to say, but on some of the epi I'm not going to be real strong, so I want that to be known.

I've worked with trichloroethylene though for

about 20 years in the laboratory, and I've participated with the US EPA in the last five or six years in their re-evaluation of trichloroethylene. So I've been very close to trichloroethylene, and I worked with NIOSH in Cincinnati on a dry cleaner study and have done animal studies with perchloroethylene. So I have some sense about the database for perchloroethylene.

I've been involved in citizens' groups. This isn't on my CV so even the citizens here may not know this, but in Dayton, Ohio, where the Mound facility, a DOE facility, I was helping out on trying to come up with a soil cleanup standard for Plutonium-238 and other chemicals that had contaminated a park and onsite remediation.

So I've been involved in environmental contamination issues scientifically as well as in the public-related issues since about 1985. I have several federal grants, one with trichloroethylene through the Medical University of South Carolina working with mathematical modeling of some of the metabolites.

So that's a little background about me. I'm close by so the trip is maybe easiest on me, 70 miles away or less. I wanted to make, I guess, two or

three points that I heard two or three times from the CAP about notification. My question to ATSDR -- I don't expect an answer, but it's just a question. Where do you stand on that? How robust is that particular issue? I don't know. I'm not close to this project yet. I was a year ago, and a little bit more background, I had 30 seconds of fame on CNN. That's how the people here found me out and called me. So some of the people on this CAP I've talked to over the last five years, I think twice a year, and always had very good conversations. They ask every difficult questions and very relevant questions.

But back to the three things I wanted to mention before I go that just came to my mind as I'm sitting here. First meeting, the notification issue, an update from ATSDR on their epi work which looks like it's a lot of work. My general question is how does that body of work meet the needs and expectations of the CAP based on what they said what they would like to achieve. They mentioned they would like to expand the end points, that kind of question, a general, broad question. I don't have a sense for that answer.

When a more technical issue -- and I think I mentioned this on CNN -- in looking at a lot of

military sites, which I've looked at a lot of databases with trichloroethylene, and I don't have the background, but some of the drinking water or some of the monitoring water I should say, concentrations to me were extremely high, actually approaching the limit of solubility depending on the water characteristics.

And it's unusual to me to see so that perked my interest in terms of what is their exposure, this population. Historically, 50 parts per million even 100 parts per million you can see has occurred in the '50, '60, '70s but not a thousand, not a part per million. And maybe that will bear out that that didn't occur through the modeling. I don't know. That's why I asked the question previously. But for the modeler --

Morris, we haven't met, but you may not have a well-mix compartment ^. You're above the saturation of water, you actually have aerosols so you have droplets of trichloroethylene. I don't know if that's true.

I do aerosol work in air, not in water, and that's a technical question that came to my mind when I get my two minutes of time to talk to you about.

Is that feasible? If it's saturation in water then

it's probably collecting somewhere as the liquid itself. Is that true? I don't have data. I'm just asking questions. That was my third question.

MR. STALLARD: Would you like to respond to that?

MR. MASLIA: I'd actually like to think about it a little bit before responding if that's okay.

DR. BOVE: We can ask Morris at the next CAP meeting ^ issues. We are assuming that you are exposed in the shower and ^ water in the house.

MR. BYRON: But are you talking about the gravel, the water under the ground is so saturated that now it's puddling as the chemical itself on top or on the flow depending on where it's heavier?

DR. FISHER: Yeah, it's heavier. It's denser than water, trichloroethylene. But it's more than just collecting on the bottom of an aquifer. It's not being soluble in the water approaching the solubility. So there's, could be droplets and not just dissolved trichloroethylene. Maybe we shouldn't spend a lot of time here about it because it's just a question and more than likely can be answered. I've just never seen trichloroethylene levels that high out in an environment except at close to contaminated sites, very close.

MS. BRIDGES: And we're so glad you're here to help

1 us. 2 Thank you, Dr. Fisher. MR. STALLARD: BEGIN DISCUSSION ON CAMP LEJEUNE SCIENTIFIC ADVISORY PANEL RECOMMENDATIONS AND ATSDR RESPONSE 3 This is where we say let the dialogue begin. 4 Yes, Jeff. MR. BYRON: Number one, talking about the ongoing in 5 utero study. Out of the 106 cases identified were 6 7 any of those where they had two of the symptoms? 8 it counted as one case if you had spina bifida and 9 another case if you had cleft palate or was that 10 individual left, lumped into one case? 11 MS. RUCKART: I don't believe there are any instances 12 where a study child had two of the reported 13 conditions we're looking at, so ^. 14 MR. BYRON: Actually, my daughter has two. But spina bifida was in her record. Whether that's been 15 16 verified or not after I had spoke to you about it 17 some years back. It sounded as though it was a 18 matter of what the severity of the spina bifida was 19 versus actually calling that one of the ^ for spina 20 bifida. 21 MS. RUCKART: Yeah. Well, there is a condition,

spina bifida occulta, and that may be what you're

referring to. And that is, it's unfortunate that

it's actually called spina bifida occulta instead of

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something that they -- but they have different names because it oftentimes gets confused with spina bifida and they're for two different conditions.

And we are not looking at, we are not looking at the occulta here, so there are no, there's a child that I'm aware of and there's two that you're referring to that we're studying. I mean, there may be some out of a ^ another ^ that is verified. It's just not one that we're studying.

MR. BYRON: And secondly, the birth records from Onslow Memorial Hospital where ^ for the simple fact that they didn't list any deformities that my daughter had, and she clearly had several, I think, it listed at least six on her first visit to the base hospital.

UNIDENTIFIED SPEAKER: What's her birthday?

MR. BYRON: Nineteen eighty-five, April 27th. I'd like to find out if the '85 ^ to be my daughter's record ^.

MS. RUCKART: Your daughter ^. Well, let me just say that's why we're not relying solely on birth certificates. That's why the 1998 study did not deal with ^ birth defects ^ certificate, and that's why ^ records that would show they have a condition.

MR. BYRON: And I noticed in our documentation that

was sent to me that a lot of the cases of the 106 had like associated illnesses but not specifically the one that we were looking for, like aplastic anemia versus leukemia. So is there any statistics on how many of those cases are out there that have an associated illness that coincided with the illnesses we're asking for?

MS. RUCKART: No, there isn't ^ and that's part of our ^.

MR. BYRON: That's all I have.

MS. DYER: Frank, first of all I want to say show me the money. Is there any way that we can get a grant? Yeah, I got real excited when he started talking about grants from the ATSDR because if we could get a grant --

DR. BOVE: We have no money.

MS. DYER: We have no money.

DR. BOVE: But that doesn't mean that we can't do something. I'm not the person to talk to about our budget. Actually, Dr. Frumkin can tell you.

MS. DYER: That might be nice to get him in here at some point to where we can talk to him about the money because that's a big issue with this so that we can get moving on it. One of the things that -- and you said this is time to start dialogue. Here we go.

One of the things that I would like to look at is the fact that TT, Tarawa Terrace, is an area that we can, I believe, use as a cohort, and I would like, I was talking to Dr. Clapp about this, if we could take and do combined. You know, you have a cohort study and you have a prevalence study, if we could put them together, and he said that can be done. And I think that that would be something that we need to talk to, talk about.

We need to, if we have Tarawa Terrace, and we take the year, if you're not willing to give me 1958, then we could take 1960 and go ahead now and not wait any longer because we, on this panel, feel like we've waited long enough. We would be willing to do as much work as a community here to help you. Dr. was asking me, well, how are you going to go about getting these people that lived at TT.

And I would say to that that PSAs, public service announcements, can go across this country on major television networks. They're free, public service announcements, free. If you or your family lived at Camp Lejeune on base in the Tarawa Terrace housing area from 1960 to 1985 or '87 -- whenever you want to cut it off -- you need to call this 1-800 number that's going to be provided by the DOD and an electronic survey comes on. You tell if you were a

child. You tell if you were born. You tell if you were an adult that lived out there. You give your age, and then you give your illnesses.

And the reason I say give your illnesses is because I think it's real important that we not just look at the cleft palates and the -- I'm not saying not to, but I'm saying that we've got to, in my thought process because on our website, you know, we've got 800 plus, 886 at this point, people. And I know it's not scientific, but just looking at the data that they're giving us on the illnesses, there's a wide variety of illnesses. But a lot of them, most of them are the same. They're living all over the country.

So right there besides doing the PSAs and getting people to call in, you've got 886 people, and the majority of them it looks like lived at TT. So if we set up a website or, you know, expand our websites to get people onto them if we do the PSAs, if we get the Marine Corps to -- in the Globe and some of their other, the military magazines and things like that, to go ahead and announce it again, VA magazines, VA meetings.

If you're sending out someone your VA benefits or your retirement check comes in the mail. I mean,

why can't a little yellow slip, if you lived at Tarawa Terrace, call, and you're showing any illnesses or your children are, call this number. And I just feel like that we could get this going before even our next meeting. I mean, you know, I would like to be able to see a 1-800 number set up and PSAs going in the next month.

MS. McCALL: Before anymore medical records are destroyed.

MR. STALLARD: So for the purpose of coming to a conclusion at the end of the day, that's a specific recommendation that you're making?

MS. DYER: Specific recommendation. I'm mean we've got VA magazines all over this country. I mean, there's --

DR. CLAPP: I have to say one thing though which is that if you just put the PSA to respond if you've had an illness then you're just collecting illness. I mean, that's the point, but then you have to really say compared to what. And then the answer is, I think, just respond and tell us what illnesses or what other things you've had, and then you can get a prevalence rate for those that respond, not just ask for the people that had an illness. You have to ask for everybody.

DR. BOVE: Even before we do that I think it's important to figure out what we want, why we want to do something; what we're trying to accomplish because if you're interested in a scientifically credible study you'll do one thing. If you're interested in figuring out what kinds of diseases people had just to get a handle on the disease burden of the population and what kind of services they might need, that's a whole different thing.

What I hear you saying is let's figure out what -and there's nothing wrong with it. It's just for a
different purpose. For a scientific study you want to,
you have to have exposed people and unexposed people.
You want to verify their diseases. If you don't verify
the diseases, if you just tell them to report their
diseases, the study doesn't have much credibility.

We've had some problem at my agency, we use to call them -- we still call them -- inconclusive by design.

The reason partly was because we didn't verify the symptoms and diseases that we collected. Other reasons were we didn't do very well on the exposure side.

The third reason is we didn't interpret the data very well, but so there are three reasons why they are inconclusive at least. But one of them was we didn't verify those diseases. In a more credible study, you

want to be able to verify these because that's why we're going to such an effort in this current study.

If you want to determine the disease burden, then we would do that kind of survey. But I think, I mean, there's more to this discussion because in trying to figure out exactly what are the needs.

What do we want to do here. Do we want to produce more scientific evidence? Really what's driving both the two studies, the study we're doing now and the previous study, was driven by we want to add to the scientific literature.

We want to add to the scientific literature because there are so few studies that look at any kind of drinking water contamination and chemicals, and anything would be an advance. If you look at what's out there on birth defects and TCE and PCE in drinking water, you're going to find one study. A two-site study is difficult. But ^ ^ three steps. ^ published, and they said the numbers in that of birth defects as I said were so tiny that the researchers refused to publish that study. I mentioned it in a review of, Perri and I and another researcher talked about it, but they never did release it. So it's one study.

And the second study was Tucson where TCE was,

it was a cluster of birth defects. It prompted a lot of calls for that stuff down there, and very few people believe that study. I tend to, I believe it, but it's a very difficult study, and I think it's unfortunate ^. So -- and then there is the study we worked on in New Jersey. So any additional study would be a great advance on birth defects.

As for childhood leukemia we have Woburn, right, with TCE. We have Toms River. Toms River had a strange chemical in the water as well that we considered one of the causative agents. A Union Carbide chemical that no one knew about before. I think Union Carbide knew. The rest of the world didn't.

So there's those two studies plus the study again in New Jersey which I worked on. The childhood leukemia, but it wasn't the primary focus of the study. The primary focus was adults actually, but we saw an excess of childhood leukemia among females. But that's it. So there's not that much out there for PCE. There's some, there's one drinking water study of adults in Cape Cod. There's several studies actually in the same population. We've looked at several adult cancers.

And then there's studies of toxic waste sites

they found at Lipari, for example, New Jersey, that found small for gestational age. There at Lipari there's all kinds of 'organics' coming out of that site. And as 'was saying, if you tested for a chemical you'd find it. No matter what you tested for it was there.

So because of these few studies that were there, that's why we focus on small for gestational age as at Lipari, to a great extent, -- not because -- and then one study ^ drinking water -- and childhood leukemia and because of Woburn, because of Toms River and because of that New Jersey study.

Neural tubes, oral clefts because as one New Jersey study found for TCE and PCE, and this is what's out there.

MS. McCALL: Well, yeah, I think that's all the more reason to do the prevalence study because this is a larger population. You'll have people voluntarily calling which means that possibly they will volunteer verification. I mean, verification is a matter of, what, collecting your medical records and sending them in? I have a box of medical records. If I've been sick or anybody else is exposed, has been sick, they already have the medical records.

I don't think -- well, actually the idea that

Terry and I are talking about is like the computerized call-in survey where you ask, you know, specific questions and the computer starts out the diseases and then you can choose who you want to contact. If they say they have some weird disease, they can be -- you know, I don't know how to do this, but I know, I just feel like this can be the right way to do it to get all the information we need and not just use the past studies like you're talking about Woburn and all these other things to limit our scope on diseases.

Because as Terry said, there are so many different kinds of things going on. I'm just curious to find out how many more people have the same things I do.

DR. BOVE: We didn't use the previous studies to limit. We used the previous studies to give support to ^.

MS. McCALL: Right. I think this is all new -DR. BOVE: Most scientists don't think, don't think
that what's out there is strong evidence, and we'll
do a study even on these limited end points, you have
to make a case for it. And that's what we use the
previous studies for, not to limit anything but to
make a case for even doing it. Keep that in mind.

We're interested in looking at any, from the scientific point of view, and the purpose, again, because there's this other purpose at least, there's several ^ purposes. For the purpose of finding out what disease burden in a population, then a survey is great. What linked it at Lipari was not scientifically incredible.

You might be able to use it in a legal proceeding. I'm not going to even talk about that because I don't know anything about that whether it would be useful or not. As a study a scientist would say this is strong evidence for association or a causal association or whatever you want to say. They wouldn't do that. They wouldn't do that.

For that kind of credibility you need to do something like we're trying to do here in this study, previous study at Woburn so on and so forth. By the way people disagree with me --

MR. MARTIN: I'd like to comment on something though in Perri's presentation. She stated that people were disqualified because they were diagnosed with cancer beyond the age of 20. Is that correct?

MS. RUCKART: Yes.

MR. MARTIN: Well, that's what we're dealing with now. We have the little, the children, the three to five to ten to 12 year olds that were living there at

that time, the military dependents. And we have a list of 868 people. These are user names. not exactly names that you can contact. We can contact them. There's a database. But these range from several different types of cancer, parathyroid We have people dying from kidney disease, disease. from cervical cancer, just over and over, skin deterioration, cysts, muscle pains, joints, juvenile arthritis in, you know, 30, 40, 50 year old people. MS. RUCKART: This kind of goes back to what we were saying that we had to, we had a starting point and for this study we're looking at the in utero population and cancers diagnosed before 20 or the childhood cancer. So these are all things that we can talk about, and they're on the table for the future.

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MR. MARTIN: So this is what we're looking at in this study.

DR. BOVE: Yeah, the study was on childhood cancers, but one of the recommendations from the scientific panel, maybe we'll get into some of that this afternoon. What is to look to see if it's feasible to look at a broad range of cancers, cancer mortality and cancer incidence if possible. There are difficulties, but a little bit more difficulties with

cancer incidence. But they thought it might be feasible, and so the question is can they identify cohorts at the base, and then follow them as ^ was saying in a cohort fashion to see if we can get that cancer information.

And one other thing that I wanted to talk about today if you have the time. I'm going to give you a sheet of paper about what kinds of databases at least you're aware of to some extent now. In other words it's not quite true that we can't look at databases and start planning the future studies. That's not what Perri meant earlier. We can certainly do that, and in fact, we're starting to do that. And we don't have complete information on these databases, but what we know I'm going to pass out.

MR. ENSMINGER: With the Camp Lejeune situation being the unique situation that it is which was brought out before, this happened to a transient population. This isn't like some community where these people were exposed in one community and had exposure stopped and years later those same people were still there or their relatives were still there. These people are gone. They're all over the country, all over the world.

So basically, I think what Perri was saying,

Dave, Denita, anything that's undertaken at Camp

Lejeune is going to have to be done in a step-by-step

basis. I mean, you're going to have to do a survey

to do a study. I mean, the survey has to be done.

That's to give you an idea of whether or not the

thing's even going to be feasible to go on with a

cohort study.

DR. BOVE: Actually, that's not necessary. What we need to know -- surveys may be important to do, but it's possible to do a mortality study. It's possible. I'm not saying it's feasible. It's possible to do a mortality study, and it's possible to look at some other diseases as well. There are databases, this one database in particular, of -- I guess I'm getting into it, so maybe I should -- MR. ENSMINGER: Well, the CHAMPS, the CHAMPS database only covered people while they were on active duty. How many of these people stayed in the military? How many of them only did one tour in the Marine Corps and left?

DR. BOVE: There are limitations to the database, that's true. One thing you have to understand is you don't have to study everybody. That's the first thing. What you have to do is study, you have to avoid biases in your study. But if I say, if I study

with, if we're studying in the case of cancers, we're studying neural tube defects, oral clefts and TCE or PCE exposure.

Now if you were born somewhere else in the country and exposed to TCE or PCE, you know, the findings in this study are relevant within realms exposed, whether it was exposed in Camp Lejeune or in India or Great Britain or wherever they were exposed. The study is relevant. You don't have to be in the study for the study to be relevant to your issue. That's the first thing.

So the fact that people are not in the study doesn't mean that they're not important. It doesn't mean we're not concerned about their health or anything of the sort. It means these are the people we could study because we have ^, for example. That's where the information was.

Here's where the information is at this database called CHAMPS, and I'll get to that later. And the question would be, and again, it's possible. It's not a question of whether we want to do it. And the question would be is this the best database to use. Will it give us the kind of answers we want, produce a scientific credible study? I'm not going to answer those questions right now because I need to

know more about the database myself.

But you can study some people for some period of time even though you can't study everybody over a longer period of time, you still might be able to get some information that then can apply to other people in other circumstances. And I think that that's -- keep that in mind, that you don't have to include everybody to be able to do something scientifically credible.

But if you want to find out what the disease burden is in a population, you've got to include as many as possible. So it really does matter what the purpose, what you want to see happen. What you need to have happen, purposes are and so on.

MS. McCALL: Wouldn't it be important to the ATSDR to know exactly what diseases these chemicals cause and not slice the bologna so thin as one doctor put on the expert panel? I mean --

DR. BOVE: Yes, absolutely.

MS. McCALL: -- you know, we're just hearing about lymphoma and Hodgkin's and oral cleft. I don't know. As a scientist, to me, all information is important, and I know when you say you don't have to include everybody for a scientific study to develop, I don't know how that works. I don't know how you --

- 1 MR. ENSMINGER: How are we going to further our
- 2 knowledge of what the effects are --
- 3 MS. McCALL: Without knowing --
- 4 MR. ENSMINGER: -- if we don't look at other things
- 5 besides these pointed illnesses.
- 6 MS. DYER: So can we take Tarawa Terrace and go ahead
- 7 and start a study of the children and adults that
- 8 lived down there?
- 9 DR. BOVE: For a scientific study you have to be sure
- 10 we've identified everyone or at least a large
- 11 percentage of the people who were exposed.
- 12 MS. DYER: It was --
- DR. BOVE: It can't just be those diseases we've
- 14 talked about. So in a scientific credible study you
- have to be able identify a group -- there's family
- 16 housing. Or you're saying everyone down there, not
- 17 | just --
- 18 MS. DYER: Well, I mean, the Marine Corps has social
- 19 security numbers. They knew every house that -- when
- 20 I gave them my dad's social security number, they
- 21 knew every house that we lived at in Tarawa Terrace.
- 22 | So they've got the information. So if we're, you
- know, we're here today to talk whether or not a study
- is feasible. We have now decided it's feasible I
- 25 think. Now you say -- well, we have.

DR. BOVE: Remember, it has to be a process. You haven't determined feasibility.

MS. DYER: Well, you said something a minute ago -DR. BOVE: The question is feasible as to what? You
haven't shown me, or anybody yet, that it's feasible
from a scientific credible point of view. You may be
able to convince me that it's feasible to do a survey
to get a sense of disease burden doing this. I'm not
sure about that yet. But you haven't shown
feasibility. That's a strong statement, okay. I
just want to tell you honestly. You're making
recommendations, and let's pursue it.

MS. McCALL: Sick people isn't feasible?

DR. BOVE: No, no, no, the actually finding out information on the sick people, that's the question, not whether people are sick or not. You're not going to convince me that TCE is dangerous. You certainly don't have to do that. My studies show that, okay?

I'm convinced. That's not the issue. The issue is
Actually, there are two issues at hand. One is do you want to find, and again, what is your purpose.

You want to find out what the disease burden is for some reason such as, we need services for these people?

MS. McCALL: Yes. Yes.

- DR. BOVE: And for a different purpose, we want to produce a scientifically credible study.
- 3 MS. McCALL: That's your, see, that's the answer to
 4 your question. You want to provide a scientific
 5 study.
- 6 DR. BOVE: No, I'm not answering my question.
- 7 MS. McCALL: Well, I --
- 8 DR. BOVE: I'm just asking it.
- 9 MS. McCALL: Well, but we don't need a scientific 10 study. We know we're sick. We need services. You 11 need scientific study.
- MS. DYER: Okay, then tell us what you, what do we have to do to show you the feasibility? What are you looking for?
- 15 DR. BOVE: Well, if you did want to do a 16 scientifically credible study, you'd have to go 17 through several steps to see that. If you're interested in just getting a survey of the disease 18 19 burden, I mean, then I mean the feasibility of that 20 depends again on do you -- how high a percentage of 21 people do you want to reach. If you send PSAs out, 22 do we have a sense of how many people would respond 23 to this?
- MR. MARTIN: I think the estimate at this point is like 500,000, a half a million people were exposed to

1 these --2 MR. ENSMINGER: That's total. 3 MS. DYER: Total. 4 MR. MARTIN: -- chemicals during that time. And we 5 were transit. We can get really scientific. 6 born and lived in Midway Park which is on the Hadnot 7 Point water system, but I moved to Tarawa Terrace. 8 So, you know, if we could start with Tarawa Terrace 9 and my older brother and sister who are on this list 10 and then work back to us who were living in Midway 11 Park at that time once that modeling comes out. DR. BOVE: Well, I think it ^ on Tarawa Terrace 12 13 because --14 MS. McCALL: Because it's the only study that's almost finished. 15 16 DR. BOVE: No, they'll all be finished very soon, so 17 you need to, I wouldn't call it a study. A study is 18 19 Water modeling, I'm sorry. MR. MARTIN: 20 MS. McCALL: Water modeling. 21 DR. BOVE: Water modeling will be done soon. 22 people at Hadnot Point, received Hadnot Point water 23 which includes those who switched over to Holcomb 24 Boulevard --25 MR. MARTIN: Which also went back into the 1940s

also.

DR. BOVE: But Hadnot Point is where we're seeing the high TCE.

MR. MARTIN: Right.

DR. BOVE: So it's very important -- now here I'm talking about including more people. I think it's important that those people exposed to those high levels of TCE are included in any surveys we're talking about.

MR. MARTIN: And we're also going to move back 20 years as far as notification.

DR. BOVE: So I would want to wait, and it's not that much longer for Morris to finish his work on this. So we'd actually could notify, and could affect the notification issue, too. Because what we want to do, want to do is put on the website the information so you can go there -- we'll have to figure out how to do this exactly, but this is the...

So you could go there and if you were at this housing in this period of time and it would tell you what level of contamination, what you might have been exposed to. That's what we're hoping for. And have it on the website and send out a media thing so that people would know to go to that website to get that information.

MR. MARTIN: And I think that's where a lot of it's lost because my family has lived in Jacksonville,

North Carolina, 12 miles from the main gate since my father retired back in 1974. I was unaware of this until July 4th of 2005, when my brother just went through some major colon surgery, colon cancer. And the question was did you know the water was contaminated when we were kids at TT. And I said no, what are you talking about. And that's when I got involved in, became very passionate about the research because I have a deceased sister and mother.

So we can start looking at this list which is a very, very small list which I believe probably resulted from the media blitz that we were told went on when we were in DC.

MS. DYER: No, it was a result of a personal and then getting those people in those different states to go around to their media.

MR. ENSMINGER: When you do an in utero study -- and I remember discussions from the e-mails and other documents that I've looked at. ATSDR ran into a brick wall as far as being able to locate, and there was meetings with DOD representatives, maybe Marine Corps and the DMDC, was it DMDC database? There was some haggling back and forth about privacy act

issues, but finally they broke this thing loose, and the lion's share of people were located through that website, or through that database for the in utero study.

DR. BOVE: The current study.

MR. ENSMINGER: Yes.

DR. BOVE: There's all kinds of databases out there.

MR. ENSMINGER: For the survey. I'm talking about the survey.

DR. BOVE: Yeah, that's part of the ^. The survey used all kinds of methods, not just the data in our data centers. So you use media as well, you use the military network of e-mails and newsletters. We use CNN. We use also any information we can gather from searches as well. So that's basically, we did a whole bunch of them. They're basically outlined in the -- we sent to you on the survey.

MR. ENSMINGER: Well, and you know, just like I mentioned in my opening remarks. Anything we recommend here is not going to amount to the proverbial hill of beans unless the DOD comes forward with their databases and actually, truly tries to locate these people. And that's number one before we can do anything.

Now Chris came in here after that last break

and said there was DOD reps here that pledged their cooperation. I don't know who it was, but I would like to hear that from the people out there so it could be a matter of this record that they pledged their cooperation.

MR. STALLARD: And Jerry, just so you know, I've got, I'm writing down recommendations for action so we can actually see things that are going to be action oriented. And I have here identify senior DOD point of contact to work with. In other words, we need a senior-level support to ensure that we have all the things that you're asking for in the commitment. And we do have someone here who is willing, that Terry's going to manage that transition to speak.

DR. BOVE: One thing we stated earlier, too, that they're not at the table, and that's my fault. What I thought was important was for CAP to, the citizen people first, and then you decide, you decide. It's given that, honestly, there's a lot of anger, and there's mistrust. And so I thought that if you decide to include as one of your CAP members someone from the Marine Corps Headquarters or whatever, that's up to you. If you make that decision, that's fine with me. Also, you can invite someone to come to a special meeting.

In fact, Morris, if you want to talk more about the water modeling, you can invite someone from the Marine Corps, another researcher. That's up to you.

And so this first meeting I wanted to just the community people so that you can make that decision.

MS. DYER: I don't know if I would want them on the CAP, but I would like a chair and a microphone to where if we would like to speak to someone specifically, and that there's someone that we want here at the next meeting, we can let you know. But I do believe that we do need a DOD person that will at least be at the meetings and be available to ask questions to if we want to.

You said something a little while ago that I want to address because it was kind of a slip of the, I don't know if it was out of the side of your mouth. I didn't quite get it. But it was something about not everyone at the ATSDR believes that we need a study or that it's, the chemicals, that the exposure was that high, or you said something that -- DR. BOVE: I said this at the science panel that there's controversy within my agency as in any agency. But in certainly our agency, about the health effects of TCE, just what it causes, and that is in a microcosm what is happening in the outside

world, which is there's this debate. And you can see that others can talk about this. EPA ^ has stated, ^ science panel maybe we'll see it in our lifetime get finalized.

You know, that's the level of controversy around TCE. PCE is less so. But the way to do this is start talking about doing a new risk assessment on PCE and then I have a feeling we'll be right back up there with TCE risk assessment. So that is what I, that's probably what I meant is that. We have our internal battles that reflect what's going on in the outside, you know, in the scientific world about these issues.

MS. DYER: Are your internal battles though, are they high enough up that it's going to cause any conflicting, any conflicts in us getting a study?

DR. BOVE: No. No, I think the question is can we, is it feasible to do this scientifically, and there's a scientific study we're interested in. Is it feasible to do and do a credible job? Will it mean something at the end of the day?

MS. DYER: But we can't, as CAP members, we're not scientists so we can't answer that. So do they believe that this study needs to take place and move on?

DR. BOVE: One of the goals in this is so that, you know, at some point we all can understand these issues. What it takes, and let's just focus for a minute on just the scientifically credible study. What it takes to actually do a scientifically credible study. What information do we need to have. So you'll all understand, so you'll come to an agreement on it.

That's so even though there are experts in the room, and non-experts in the room, I'm hoping that at the end of several meetings we'll be able to, we'll all understand these issues and see why it is or it isn't feasible. That's the goal. That's really, you know, it should be left up to experts to make these decisions, and also it's my opinion at least, that people who are non-experts become experts rather quickly in the outside world.

MS. DYER: So you're saying it's going to take several meetings to decide whether it's feasible to have a study?

DR. BOVE: That's what I, yeah.

DR. CLAPP: This survey, Tarawa Terrace or larger
surveys. That's what we're talking about, right?
MS. DYER: Tarawa Terrace, because I thought we were,
my thinking was was that we were getting together

here to decide who the cohorts were going to be and then move on. And so that's why we were coming together to say that we felt like that the cohort should be Tarawa Terrace, that that was a good place to start because we have a year, 1960, that we can start with as far as being able to notify people.

And that's why we're ready to move on with trying to notify them and get a survey going. And then once the survey comes in, you can decide once you see the different illnesses what kind of studies need to be done.

DR. CLAPP: Let me pose a dilemma here. Suppose you put out a PSA and say everybody that ever lived in -- I'll try to pronounce this right -- Tarawa Terrace (pronouncing).

MS. DYER: Tarawa Terrace. We all say it the same. TT.

DR. CLAPP: And somebody who has an axe to grind says, you know, I actually am a member of an organization that can respond to that. And none of us lived in that area, but we're going to say we lived in there. There's nothing wrong with us. How would you know?

MS. DYER: Well, that's when you go back to your archives of who lived there. That's where we were

just given this information, and so we'll have that.

We'll know if you lived there or not. And as far as like putting out a PSA, it's going to be somebody like this gentleman on the end that knows how to speak well and can write out a PSA that would reach the people we need to without saying all the diseases like we were talking about before. But it can be done.

DR. CLAPP: And that all can be done. I agree. And then the question is how many would respond to that. How many people would see that PSA and say, yeah, I don't know if I'm sick or my family, but I'll still, I'll put in my two-cents worth on this survey. That's what, we're talking about a response rate here is the term. And if it's really low then you don't know what you've got. You may just get the list of the sick people and sort of volunteers that came forward saying, yeah, I'm sick and I think it was caused by whatever I drank there. And that's, it's not even the disease burden.

MS. McCALL: Well, we have to start somewhere with something.

MR. ENSMINGER: That's why I was asking about these databases. I mean, we've got to find out from DOD what they've got available from the Marine Corps,

from the Department of the Navy. What kind of records you've got available. Can we seek these people out and find them without doing a public service announcement, can we find these people? Can we dig through these records, find these people, find out their last known address prior to leaving the service and try to track them down? That's the question.

(Whereupon, Dr. Fisher left the meeting.)

MS. DYER: Is someone from the DOD here that would respond to that today?

MR. STALLARD: Hold on just a moment, we have some competing voices.

Tom, what's your question?

MR. TOWNSEND (by telephone): My question is I have a comment on the public service announcement. ^ went through a media blitz about 2002, contacted virtually every radio station and television station and every newspaper in the United States, and they didn't even do a market penetration. And I checked on about a hundred different places, a hundred different facilities, TV, radio and newspaper, and none of them ran the story. It's too old. It's a dead fish in an old newspaper. It's not going to work.

You've got to personally contact these people,

and the way to personally contact them is to have DOD get off its butt and start notifying the individuals that were exposed. This is just ludicrous. I mean, a public service announcement's going to be put in small print some place in a county newspaper, and no one's going to respond. And there is a case, there is a chance for fraud. There's some fraud in the ^. But what the hell, that's the chance you take when you put an announcement out.

I'm very angry that 500,000 of my fellow
Marines, at least that many, have been exposed to
this crap, and the government of the United States
that expects us to go off to war, and I've been in
the Marine Corps since 1949, prior to Korea, and
won't do, and just absolves itself from
responsibility and accountability. The least they
could do for us is have a morally, ethical base and
go out and start looking for the damn people.

I have three serial numbers, three numbers that identify me. I have an enlisted serial number, ^ serial number and a social security number. My God, if they can't find where the hell I'm at and what's going on with my family, then there's something bloody wrong with the system.

MS. DYER: They know where Tom is.

MR. STALLARD: I just would like to point something out as a matter of procedure. I've reminded this audience to be here to listen and not participate, that we are finding ourselves finding the very people that would participate would be in the audience. we're going to have to figure that out in terms of ground rules for future meetings. Terry has suggested that we'll have a place and that if you come in as the audience, you may be called to respond to the CAP. So at this point in time --DR. BOVE: We'd like to, if we can, identify those people beforehand to make sure they're here and want to do it. We want to know beforehand, not the day of

it.

MS. DYER: I understand that a lot of them, especially at the DOD, are going to have to go back, and they're going to have to get permission for the things they say. And so whoever comes back is going to need to be someone that's going to be able to speak for them and answer questions and give answers to them.

MR. STALLARD: Okay, and so for the purpose of today, the ^ that represent DOD ^^^, and specifically this CAP is asking for a senior person to work with directly. There have also been specific questions

that have come up that the responses were ^. You're
under no obligation to respond. If you choose to and
would like to, you may in terms of the specific
question that has been imposed. All you have to do
is say if I can respond to that.

All right, now Jeff.

MR. BYRON: Real guick. I lost my train of thought,

MR. BYRON: Real quick. I lost my train of thought, sorry. Go ahead with someone else first.

MS. DYER: I think he was wondering if you wanted him to answer the question.

MR. STALLARD: I don't know.

UNIDENTIFIED SPEAKER: Do you want us to respond today or take the questions back to respond at the next meeting? This is your forum. We're happy to participate, but we're not sure what the ground rules --

MR. STALLARD: We're not either.

MR. MARTIN: If we asked you to respond at the next meeting, that would assure we have another meeting.

MS. DYER: But the question was from Jerry is are you willing to give us the records we need to get hold of the people we need to get hold of?

UNIDENTIFIED SPEAKER: Do you want me to come to the
microphone and say who I am?

DR. RENNIX: I'm Dr. Chris Rennix. I'm an

epidemiologist from the Navy Environmental Health Center

--

COURT REPORTER: The mike's not working. I can't hear you. The mike's not working.

DR. RENNIX: All right, I'm Dr. Chris Rennix. I'm an epidemiologist at the Navy Environmental Health Center. I was at the last meeting as an active-duty Captain and I retired. And your question ^ because the Navy, the military collects information for a specific purpose and we just can't turn over a list to private citizens.

MR. ENSMINGER: No, no, I didn't mean to me.

DR. RENNIX: You said you turn that list over to us, and we'll find them.

MR. ENSMINGER: I meant to the agency.

DR. RENNIX: We, Dr. Bove and I have gone back and forth trying to identify databases of value that they can use to grab information. We know that there are some databases, I'm sorry. We know that there are some files out there that are not databases that may have some value going back into the '60s. But they're not databases, and the problem is they're just long distances sitting in a file folder somewhere that DMDC hasn't had a request for in 30 years, and they've forgotten that they're there, and

the guy that used to manage it, retired.

So you have to go and really aggressively seek these, not databases, but just records and where to get them. But they're not going to be, the service back in the '60s kept their own system. I'm an expert in the Army systems. That's where I do my research, and I can go back to 1964 and find officer and enlisted records. No family records, no beneficiaries, just the fact that they were in the active service and what their job was.

So yes, there are records that are available at the VA. When a person gets out, part of your discharge process is you have to give a record, a place where they can contact you. From my experience trying to locate people, they're not there any more. They've gone.

Another issue is that 75 percent ^^^ five years old. So huge holes in the people you're really looking for were only in the service for one tour, probably, maybe a tour and a half against six years. So the volume of address that you have to go and find again becomes a huge hill.

I was looking at 350,000 women and was only able to locate a very small portion of those for my study. They don't tell the service, oh, I've moved;

I've moved; I've moved. They only tell them once and that's it unless they're getting a check but that's not that 25 year old Marine who got out. So it's just difficult. The records may be there. But can we use those records to further the search is the question.

MS. BRIDGES: And how credible will they be with all the children that we're talking about with all the problems they had, learning problems or disabilities, they're not the run-of-the-mill-type people that you can locate quickly. They might be in Timbuktu or a rehab hospital, in prison. They may be dead. They may be living in a, you know, these people are, these are sick people that we have.

MR. ENSMINGER: What we're talking about is finding a sponsor. If we can find sponsors, we can find the kids if the sponsors are alive.

MR. MARTIN: We're talking 30, 40 years ago.

MS. McCALL: Well, then my question is which one is harder, using military records or using the media with the PSA? Which one is going to pose less barriers and obstacles? I think having people respond voluntarily is an easier mechanism than trying to go back 30 years, 20 years and try and find somebody who lived at Camp Lejeune maybe one year.

It doesn't matter. People if they're sick, they will respond.

If I'm sick, and I don't know why, and I see something on TV that might explain why I'm so sick, I would respond whether, I responded to the in utero study. They didn't ask for me, but I responded anyway because I believed something that, something happened to me. I don't know what it was, but I got so sick. I am so sick compared to people my age in my family, I'm the sickest one around for blocks. So I don't really buy that, you know, there's going to be a lot of fraud, and can't help it. If people are truly, genuinely sick, they will respond, and they will have medical records for verification.

I know the hurdle you have in trying to find people, using the military records. To me in my mind it doesn't make any sense to do it that way because all you have are old addresses. If we can't use social security numbers, then why can't we just try to reach people and have them voluntarily call in and start there? We can sit out here all day and talk about how hard it is to notify people, but we can't do that anymore. We just need to try. That's all we can do. We just need to try. It's very important.

MS. DYER: Yet if we don't notify them, how are we

going to get a study going? And when we were in Washington last time, one of the things that was stated was we asked them are you going to help us with notification? And at that time they said no because they said they felt like that they had notified everybody that needed to be notified.

But now we're here today to say we want another study. We want a study of the children and adults that lived out there. So if that's the case, they've got to be notified. Now one way if it looks like they're going to be able to be notified is if the Marine Corps will agree again to do a media blitz.

MS. McCALL: I would like to --

MS. RUCKART: I agree that the only --

MR. STALLARD: Excuse me just one moment. Do we have more questions?

MS. RUCKART: I agree with you that the only way that you can tell if a PSA or some kind of notification effort is going to work is to do it. We can have some anecdotal information to suggest whether it would work or not. But I just wanted to kind of remind everyone of something.

Everyone here is very concerned about what happened at Camp Lejeune and these exposures. And there are many other people who are not here today

who are also very concerned. But there are some people who are not as concerned, and they may have health defects.

And they may not want to participate because we have, as I tried to express to you, undertaken this very thorough effort to try to get records. And you would think why aren't these people helping. You know, why didn't they report during the survey that they had whatever, and we've had to contact them so many times, and sometimes it results in getting some records and sometimes it doesn't. So I just wanted to kind of point that out that there will be some people like that. We have to acknowledge that.

MS. DYER: Sure.

MR. MARTIN: Right.

MS. McCALL: Sure, I'm positive.

MR. MARTIN: You can't force cooperation. There again I think there's enough people involved in this incident, enough people that were exposed that if they were aware of it, your phones would be ringing off the hook. If you get comments now, your phone's ringing off the hook, and they're not getting called back. So, and I, you know, that's not accusing you of anything. That's what we're hearing is they had called the ATSDR, did not get calls back.

MR. STALLARD: Dr. Rennix has chosen to come up here to answer some of the questions you had specifically for him. So if you have a question for Dr. Rennix, thank you very much.

MR. BYRON: Okay, my question is -- I have my train of thought back now. You have 12,598 families identified right now that you had some kind of record of as far as contact. What's the matter with a sampling of those individuals, siblings, of the kids who were in utero study and the parents, and then go from there based on population of 12,598 what's the percentage of sick people.

MS. RUCKART: Well, the thing is we had those people in the survey and that survey occurred during 1999 to 2002. And you say, well, gee, that's only four to how many years ago. It's not that long ago and we're not talking about like the 1960s. And you know, we're talking about this is a transient population. A lot of those people have even moved since as recently as 2002, so it's not as simple as just going back to the address they reported at that time. That's why we had to go back ^ and try to locate those people.

So that is a starting point like you're saying to contact the people or other family members. All

we know about is their in utero child. I do want to let you know that it's not as simple as just sending it out to the most recent address. There's still a lot of work involved to find out where are they today four plus years in the future.

And that's why some people who were part of the survey could not be part of the study because we couldn't find them. So there is some work that could be done there, but it's not a perfect universe.

MR. BYRON: Right, right, I wasn't expecting to and that's why I said the same.

MR. MARTIN: And attached to your public service announcement, if you participated in the in utero survey, call this number immediately. You know, just add something to the public service announcement.

DR. BOVE: Yeah, I mean, again, what I've been trying to say --

MR. MARTIN: I mean, there's got to be a starting point. We can sit here and make excuses all day, why we can't do it.

DR. BOVE: There has to be a starting point. The Science Advisory Panel gave us the starting point and that was the mortality study, a scientifically credible mortality study. That's what they were talking about, and if you have social security

numbers or if you have full name and date of birth, there's a National Data Index and that can be done.

And I think that that definitely can be done.

And I think that there are -- the question is not whether it can be done. The question is how far back can we go? The machine ^ was computerized and goes back to the early '70s. What Dr. Rennix was mentioning were files that aren't computerized that we have to see what is available from the Marine Corps. He knows about the Army ^ the Marine Corps to see if you can go back further than the early '70s. The further back, I think, the better.

But that's the question. But certainly from the early '70s on, from '72 to '85, I think it's pretty feasible to do a mortality study across the country by the National Death Index, so that can be done I'm convinced. But we'll work, there are some finer details to work on to make sure that it can be done, and that's what we're trying to pursue now and see what data's --

- MS. McCALL: Did you just get convinced today or have you been convinced about the mortality?
- DR. BOVE: I was convinced back in February.
- 24 MS. DYER: Back in February, last year? You were convinced then to --

- DR. BOVE: We pretty much believe the Panel we'll look into the feasibility of it, yeah.
- MS. DYER: Could you go ahead and start it then if
 you agreed with the Panel a year ago? Couldn't you
 have already gone ahead and started it then and done
 it?
- 7 **DR. BOVE:** We started to identify databases. That's as far as we got.
- 9 MS. DYER: In a year.

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- 10 DR. BOVE: Right, between other things, projects.
- 11 MS. DYER: Is there a group within the ATSDR that is
 12 only doing Camp Lejeune?
- DR. BOVE: There's Perri and Shannon, well, no.
- MS. RUCKART: We don't only do Camp Lejeune.
- 15 DR. BOVE: They don't only do Camp Lejeune.
- MS. RUCKART: We only do Camp Lejeune as far as
 there's no other people in the agency doing Camp
 Lejeune, but we don't only work on Camp Lejeune.
 - MS. DYER: And see that's our frustration, and I know you understand that, but I mean I think I need to give it to you again. This is taking too long. I mean it's been a year since they, that we got together last year. It took a year to get the CAP together. A year, do you know how many people have

25 died or gotten sick during that year?

We as the CAP members, each one of these people have a responsibility, not to ourselves and our family only, but to the thousands of other people that are out there that are sick and some of them don't know it. We've got to do something. We've got to get them notified. We've got to get a survey going, and we can't wait another six months or another year to start this.

DR. BOVE: The water data, the water modeling won't be done, and again, until 2007. These things take time as Dr. Clapp was mentioning. During the process of doing any of these activities, people will be dying from these exposures, getting sick from these exposures. There's nothing we can do about it.

So that's, that's happening, but let's focus if we can on what we can do to put the data that's available, what makes sense to do in terms of what our purpose is, what we really want to see happen to the community. Speed is important, but we have to, whatever you're going to do, you have to do it right, too. So that's all I'm saying.

MR. MARTIN: The only thing I see --

DR. BOVE: A mortality study will not necessarily take a long period of time. Once we have learned exposure situations set, and we know the data, we can

get. If we have to computerize files that are scattered around, that's going to take time. So the question will be really how long will it take to go beyond the early '70s back to the '60s.

How much time will it take to computerize all those records so we can actually send them to the National Death Index to see what we've got. We're doing that because we want to move more quickly, we'll stop at the early '70s, but that leaves the people before that out of the study.

So these are the, there are trade-offs, and that's, these are things I want us to grapple with because I don't want to make that decision. But you know, if you want to move further back in time, it's going to take more time, but it may be worth taking that time. On the other hand you may decide that it takes too much time and want to know now or as soon as possible and you go with those computerized.

That's why the two studies, the previous study and this study, stop at '68. Not because we thought the exposures ended or weren't there before '68. ^. We knew the exposures were at least as far back as '68. We thought they were earlier, but the computerized birth certificates weren't available till '68. That's the reason, pure and simple,

because to go further back in time would take even
more time and ^ computerized records.

MR. TOWNSEND (by telephone): Frank? Frank?

DR. BOVE: Yeah?

MR. TOWNSEND (by telephone): The vital statistics people in the state of North Carolina are more than willing to put that stuff they have on paper onto a database if you pay them the money to do it. I am particularly outraged because when you draw the line in 1970, what the hell happens to the people in the 1960s or 1950s? That stuff is available in North Carolina. I don't care if it's on paper, they have every kid that was born in the naval hospital at Camp Lejuene has two birth certificates. He's got one from the Navy, and he's got one from the state of North Carolina, and God damn it, you can find that stuff and start getting off your butts and looking for it.

DR. BOVE: Tom, Tom, let's -- first of all, birth defects were not put, not captured on the birth certificate in North Carolina until 1978.

UNIDENTIFIED SPEAKER: Sixty-eight.

DR. BOVE: 'Seventy-eight, '78. When they were captured, they did a horrible job because they had the ^^ database. There were very few birth defects

listed, and it's impossible; it's impossible. I know you can't do a birth defects study using birth certificates; I know that. I've seen it in New Jersey how poorly it's done. This is really bad. I mean, this is useless. It's just useless.

So that's why we're not, if we get a birth certificate from after '78, and it doesn't say anything about birth defects, we don't say, okay, they don't have a birth defect. We just say, well, we can't use birth certificates to help verify because we know that the birth certificate is missing most, virtually all, of the major birth defects, I'm not talking about minor, but major.

MR. TOWNSEND (by telephone): No one has mentioned the fact that the National Archives, the records center for NARA, has most of those health records of all the military people that have ever been in the military. I mean, have they been required to come up with that stuff?

MS. ROSSITER: I went to the --

MR. TOWNSEND (by telephone): At NARA, the national records center.

MR. STALLARD: Tom, we have Shannon who's going to respond to that question.

MS. ROSSITER: I went to the facility in St. Louis

looking for records for this study, and they do have some records. There was a fire, I believe, in the 1980s that destroyed a number of records. MR. TOWNSEND (by telephone): That was the Army people. It didn't affect any of the Navy or Marine Corps records. MS. ROSSITER: There were also records that they don't have. They just --MR. TOWNSEND (by telephone): That's probably true because they can't find the damn things. There's a

because they can't find the damn things. There's a specific protocol for the records being sent to NARA. NARA gives them a location, a file number and all that crap, and they tell that to the Navy and the Marine Corps ^ before they send the data in. And by golly, if they can't find it, then there's something wrong with the system.

MS. ROSSITER: I had a very good contact at St.

Louis, and you know, like any records filing system,
especially from older time periods, they're not
perfect. You know, a child's record may be filed
with his father, may be filed with his mother, may
have his own record. It's a good resource; it's just
not perfect. Nor is it automated necessarily.

MS. McCALL: That's why we need to do, we need to use the media. We just keep going around in a circle.

Well, we can't get the records. Well, we can't get this. We can talk to people through the television, you know. I don't know why we just keep going around and round and round trying to find people.

Have them find us. Have them come to us. That to me makes the most sense. That gets rid of all of this privacy, you know, issue. And so I don't know why we're sitting here spending another hour on how are we going to contact them, and how hard it's going to be. Let's just contact them.

I mean, we can call this ^ Law Firm and ask them how many idiots are calling you with, you know, fraudulent cases, and we can -- people do this all the time. You see the lawyers on TV. If you've been injured by Vioxx, call this number. Well, I'm sure there's a lot of dumb people calling out there saying, well, you know, I'm sick from it. But, you know, I mean, to find out how they deal with that. Because to me the hurdle of contacting people is not such a hurdle if we use the media.

MS. DYER: I mean, you're saying that, you know, you can't use the birth certificates. You can't do this. You can't do that. You said, well, you were talking about birth certificates before certain years and things like that so why then can we not just do a

survey and have someone come up with a program, a computer program, that answers the questions that you need answered.

And if you don't want to go with TT because the water modeling is not done, and you want to open it up to everyone then that's fine. We were just saying TT because that would narrow it down until Hadnot was done, and we could go ahead and start something now.

DR. BOVE: The problem is not narrowing it down, and I haven't ruled out anything. All I'm saying, I'm pointing out the limitations of the dataset so we have some sense of what we can do with it, and what we can't do with it. But I didn't say anything about we can't do a survey. I didn't say anything about we can't do a study. I didn't say that at all. In fact, I don't agree with that.

MR. MARTIN: I see one major limitation though is just having two people that are there or capable of answering the phone. I mean, I meant no disrespect when I said you weren't returning their phone calls. But I understand, I mean, 50 percent of your time is on the phone with us. So that's very limited.

We need to find a resource. We need to find some scientific agency that wants these same answers that are so inconclusive from all their studies in

their animal research, and also, the private sector or something that will establish an office, a phone, where people can call in 24 hours a day with a staff that can answer their questions, that can screen some of these people that are going to call and say, oh, I think I lived in Tarawa Terrace. You know, if they know anything about Tarawa Terrace, and if they were a kid at Tarawa Terrace, they're going to be able to answer some specific questions.

DR. BOVE: Two things: one, let me go back to what you said. The same problem we have with Tarawa Terrace, we have with Hadnot Point Boulevard. The datasets aren't distinguished by where they lived. In order to identify who lived in Tarawa Terrace, it would be the same problems that everybody's having or any place on this. It's going to be the same problem. The difference will be whether you're a civilian or an enlisted. That would be one big difference. Whether you're an active or inactive, that'd tell you another difference. There'll probably be some others so it doesn't matter.

Narrowing of Tarawa Terrace doesn't really narrow anything because what we have to do for Tarawa Terrace is the same problem with the entire base. So that's, you could narrow it for Tarawa Terrace for

other reasons, maybe you just want to focus on PCE and not TCE or whatever. But it won't make a difference in terms of the data availability.

Your issue, the problem, if we want to do a survey, then we will have what you suggested, an office with staffing. We design the survey so that people can call in, whatever is easier. We have people calling in, maybe it would be electronic and it went over the web, whatever. I mean we can discuss this.

I don't expect us to come up with any answers today. I know there are people that say they want to, but I don't think that was realistic. These are tough issues. They're not that easy, even to devise a good survey. I think you want to do a good survey. There are some steps, like anything, fixing a car or anything, there are some steps. And so that's what we want to do. Plus, the data, doing this National Death Index mortality study.

So that's -- say that's what we decide to do, then we would talk about just how we would set it up so people could call in. There'd be a staff, finding the resources for that, the best way to do it. And that's what we're here for.

MS. DYER: Okay, if we decide on those two things,

and we put kind of a little sideline to the survey, I don't think that the question -- and I could be wrong, and I apologize if I'm asking this again and it was already answered, but I don't think it was -- is DOD going to give us or will they get in contact with the people that lived on base again?

Will you do another media blitz? Will you get in touch with the people so that we've got callers coming in? Are you going to help us? Are you going to get in contact with people? Are you going to help us get in touch with the people that we need to? If they can't do it, if they don't have the resources to do it, then it's got to come from you all. And we can't move on it seems like until we get some of these people notified.

DR. BOVE: Well, we will need to do that first before we ask that question. We need to tell them what we want done. We need to sit down and say these are the stats, and this is where you come in. This is your piece. This is what you have to do in order for this to work.

If we give it to them that way, then they can vote it up or down, whatever they decide. And then if they say no, then there are steps we can take. If they say yes, then there are steps we can take and so

1 on and so forth. But you can't ask them that 2 question until we can tell them exactly what we 3 really want to do because they won't know how to 4 answer that. 5 MR. MARTIN: As you said also, it's going to take 6 steps. 7 MS. DYER: Do you know what we want to do? I mean --8 DR. BOVE: That's what this process is about. 9 MS. DYER: But it seems like -- I don't know, and I 10 could be wrong, but it seems like you've already 11 decided you know in your mind what needs to be done, 12 and if that's the case then tell us. We're telling 13 you and it's not --14 DR. BOVE: Just like the science panel said about the 15 mortality study, I think we should do that. MR. MARTIN: Present them with a plan. This is what 16 17 we'd like to do. 18 MR. BYRON: On page seven, right here on page seven. 19 The ATSDR agrees that mortality and cancer incidents 20 should be receiving the highest priority. 21 DR. BOVE: And that's the only thing that's set in my 22 mind, and the rest is wide open. You know, I'd like 23 to do a cancer study. There's a lot of things I'd

like to do. But the question's whether it's possible

to do it, you know, whether the data's there to do

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it, and then of course whether the resources are 2 there, and we can get the resources to do it. 3 there's a lot of things I'd like to do, and there's a lot of things you'd like to see happen, too. wouldn't rule anything out.

> MR. STALLARD: Well, folks, you can hear me. getting close to lunch and so --

MS. BRIDGES: I just want one thing.

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MR. STALLARD: You do. The sandwiches are out there, but go ahead.

MS. BRIDGES: We're talking about three generations ago. We've got proof. We know. Why can't the three generations be studied? We're talking about three generations that these chemicals are being passed from one to the other. And children were altered by From our children and going down to our it. grandchildren, exactly the same. Our grandchildren are reliving what our children did. And back and forth it's the same thing. At TT, ^ can tell you the same thing that I could tell you about our children. The last meeting I wasn't here. I didn't come in that one first day. Jeff got up and I guess --MS. RUCKART: Sandra, you need to talk into the microphone.

MS. BRIDGES: He was talking about his children and

what their problems were. I wasn't even here that day. Some other woman got up and talked about her daughter. I wasn't here that day, and I came in the second day. Well, I came in and I said my speech, my spiel. It was exactly the same as Jeff and Mary Byron's children. My children's problems were the same as his children. His grandchildren are experiencing the same thing that mine are. I'm just a little older, and mine are going through it a little earlier.

MR. STALLARD: Okay, when we come back, I'm going to

MS. BRIDGES: That's not fair. It's not fair that we're not doing something now to stop it. If my child knew, if my son knew he was going to pass his handicaps on, do you think he'd have children? No. MR. STALLARD: Thank you, Sandra. I have captured a generational study in terms of whatever we do.

Folks, what you're talking about here is bigger than a survey. It's a coordinated media campaign really to reach the people that you're talking with support, specific support, that needs to be detailed out in terms of what you want from our partners in this effort to contribute. And if that's notification, then that has to be put together in a

1 very detailed methodological approach. And it seems 2 that we're working toward that dialogue right now. 3 MS. BRIDGES: We need to do it soon. 4 MR. STALLARD: Well, you have this afternoon to work 5 out a plan or at least put more meat on the bones 6 here. 7 So I'd like to propose that the audience may 8 leave, and we'll resume in an hour and 15 minutes. 9 You are on your own for lunch. 10 MS. RUCKART: We need to come back sooner. Because 11 we ran so late, I think we need to shorten our lunch 12 a bit because some people have planes to catch, and 13 we need to make sure we get to the airport on time. 14 So it's a quarter of 1:00. Let's say come back here 15 1:30. 16 MR. STALLARD: Okay, 1:30. Thank you. 17 MS. RUCKART: But the CAP members will be eating here 18 together. 19 (Whereupon, a lunch break was taken from 12:45 p.m. 20 until 1:40 p.m.) 21 CONTINUE DISCUSSION MR. STALLARD: Welcome back. I think it's fair to 22 23 say that the notion of our working lunch didn't 24 exactly work out as planned. We continued the

dialogue outside here, okay.

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When we broke for lunch, we were in a very heated discussion about what can we do or what would be appropriate to do. I think Jeff had --

MR. BYRON: I know that ATSDR has handed out their response to the scientific panel, and clearly, ATSDR is saying that they agree that the mortality and cancer incidents should be the highest priority. I think if that database is already there through the state, I think we should all agree to proceed with that right away.

And then the further studies that we're talking about, cohort studies, prevalent studies, and so forth, of the children and parents or adults at Camp Lejeune, even the panels suggest that there could be a parallel study going on before the in utero study is finished. I think everybody here agrees that there should be further study. Now the question is how we're going to go about getting that accomplished.

Perri made a lot of recommendations. I agree. It's going to take a multitude of avenues to contact the personnel over at Camp Lejeune because they are transient. They are all over the country and some of them in other parts of the world, you know. We can't have DOD putting out an inch and a half notice in the

"Globe" or whatever that has to be read with ten power magnification either.

I've seen some of the notices on previous releases at Camp Lejeune. I'm 49 years old, and even with these reading glasses, I'd still need ten power magnification. So if they're going to do it, I'd like to see a true concerted effort. How about a one-page ad in some of these magazines? The Marine Corps has the "Marine Corps Gazette." The Marine Corps has the Marine Corps League as part of retired marines.

- MS. DYER: Websites.
- 13 MR. BYRON: ^ magazines.

- MS. DYER: Marine Corps websites.
 - MR. BYRON: The Marine Corps websites. I mean, it needs to be a true effort, not just the mealy-mouthed showing of oh, here's what we did. It has to be a true effort because of the differences that we have had over these years. I mean, it's been for my family since 1982 we started experiencing health issues, documented, for my oldest daughter. It continues to this day for my youngest daughter who is part of this study.

So some little tiny ad that can't be read by anybody unless you're 18 is not going to cut it. It

doesn't give me any trust in the Department of Defense, the Marine Corps, the Department of Navy.

They have to make true effort not just --

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Let me tell you, I didn't hear about this at all through the media. I got a letter from the organization at ATSDR, permission to do the study. That's how I found out, the official letter. saw anything in the media about it. I am in Cincinnati, Ohio, so I'm not near Lejeune. If Dave who lives 12 miles from Camp Lejeune doesn't know anything about it, the DOD needs to make a stronger concerted effort to get this notification out. MS. DYER: I did an interview with a Jacksonville television station a week ago about this meeting. And I've already had several calls come to my home of people that live in Jacksonville, again, that had just heard about it. I'm going to read this statement from the DOD, but first, you know, to talk about what you're talking about.

It does need to be an effort by this group and by the ATSDR and the DOD working with us to get the word out. And if it means doing it not just one way but many ways. Then if this thing is big, we just have to realize this is a big thing but the only way we can do it is to get it out there, whether it's

PSAs, whether it's we send someone around to the talk shows to get it out.

You know, I mean, Montel was a marine. Let's have someone call him that's got some push that can, to make these things happens. There are people that can make it happen, but we need help with that. So, you know, we can send someone on the circuits, to the talk shows. There are so many different ways to do this. There's e-mail; there's the Internet. It's worldwide now. I mean, when you put stuff out there, if you put the words in Camp Lejeune, that's how we're having people contact us is if you were stationed at Camp Lejeune every time they put it in Water Survivors comes up, and they're like whoa, what is that, Water Survivors. And then they contact us. We had no idea.

You know, so people are looking at it, but there's got to be a large effort, it's going to be expensive, and we have to know. Now you did a blitz for the children in utero, and we know that you got a response to that or you couldn't have the studies that you've got. So this is a new study that we're talking about so it needs to be a new effort. It needs to be a bigger effort because you're talking about a larger amount of people.

Now the DOD said, "We appreciate ATSDR taking proactive steps to establish this Community

Assistance Panel"-- So they're happy we're here. -
"to look at the feasibility of conducting future studies. We support this effort and continue to support ATSDR's activities. Right now we are working hard to identify ways to properly provide funding for this important issue.

"In addition, we remain committed to providing ATSDR with all records that may be relevant to their efforts. We recognize that it is not appropriate for us to determine what is relevant to the ATSDR studies. We rely on ATSDR for science and answers the same as the other members of the CAP."

In funding I would just say, you know, if you're looking for ways to fund this thing, then it would be up to you to go to, yourself, DOD, for the funding or get Congress to appropriate funding for this. Now are you going to do that or is that something you're going in turn turn around and tell us to do, to go to Congress to get funding for this?

MS. McCALL: We did that.

MR. STALLARD: We want to avoid putting people in the audience on the spot.

MS. DYER: This time, that's right.

MR. STALLARD: I think what we have is the issue that to identify senior level DOD support and point of contact and develop a strategy in how to do that. If that requires a Congressional approach, then so be it if that's what it takes. But that is what, we, this group has to come up with is a strategy to get that level of support because these may not be the people in the audience appropriate to respond to that, but thank you for the statement.

So Jeff put something on the table here about do we have consensus as a group that the recommendation from the expert panel. Is that something that we should support as an immediate first step?

MR. BYRON: I say yes personally.

MS. DYER: The mortality, absolutely.

MR. BYRON: And cancer ^.

MS. DYER: And cancer, yeah.

MR. BYRON: Because the data's there in the state records, right? Am I correct?

DR. CLAPP: Most states, yeah. It's not possible in some states, but if there's like two or three states where most of the Camp Lejeune people are located, North Carolina's got to be one, but some others, you could go right away to those states.

MR. BYRON: What's the possibility of having a
hundred percent participation anyway, right? So
that's not going to be the case, but the effort could

be put forth and probably get plenty of data.

DR. BOVE: It would be nice if we could do all 50 states, but that I don't think is probably feasible per cancer incidence.

DR. CLAPP: I'll tell you right now you've got zero for Mississippi, zero for North Dakota and a little bit from Arkansas.

DR. BOVE: So I think that what you just said ^ too. Identify those states with good registries going back as far as '79, and they're also alive on most Camp Lejeune, people from Camp Lejeune may reside because the cancer registry picks up, where you lived at time of diagnosis, so it would have to be places where people after they've been to Camp Lejeune where they tend to reside, what states. And that means someone in the study. But again, it doesn't matter if they're not in the study as long as there's enough in the study to find something in that study that's relevant to that, whether they're in the study or not.

MS. DYER: Okay, so we're doing that, okay.

MR. STALLARD: Is there a consensus on that?

UNIDENTIFIED SPEAKER: ^ have a timeline for doing
that?

DR. BOVE: A timeline? Well, I'd have to think about a timeline.

MR. BYRON: How about the starting point, right away?

DR. BOVE: The starting point would be right away,
and again, identifying those databases, a database
that will identify the people at Lejeune. And that's
the first thing is to see if, and go back to the
early '70s with the data -- you all have that sheet,
yes. The data may empower ^, going back to, if you
look at that the notes there for that DMDC, it goes
back to '71 for active duty and '72 for, December
17th, for civilians.

And my understanding -- but this has to be checked -- is that we have their social security number and that'll be helpful and in the earlier years it wasn't filled in. I'll have to see exactly what that means. But certainly from the mid-'70s on they did. So that's what this database can tell us.

Now to go beyond that, to go back to '65 as Dr. Rennix was talking about, there's data in storage somewhere that's not computerized. So we'd have to see exactly what that is and how hard it would be or how long it would take to computerize. These are

- 1 things I have to find out.
- 2 MR. ENSMINGER: It's computerized, isn't it? It's on
- 3 disk.
- 4 DR. BOVE: It's on disk. It's not in a database.
- 5 It's text files. Yeah, and they shouldn't take that
- 6 -- and correct me if I'm wrong, Chris -- and it
- 7 | shouldn't take that much time to convert text to ^.
- 8 So I think the problem will be identifying where they
- 9 are ^.
- 10 MS. DYER: Can I ask you a question? The mortality
- 11 study, some of these people that have had autopsies
- done, if you can't find medical, you know, records on
- them, isn't the state required to keep the autopsy
- reports for an indefinite period of time?
- 15 DR. BOVE: The National Death Index has death
- 16 certificate information.
- 17 MS. DYER: Death certificate, but what about autopsy
- 18 reports?
- 19 MR. MARTIN: You have to go back to the hospital.
- 20 DR. BOVE: You have to go back to the -- yeah, yeah.
- 21 But at least we can follow them. You know, it's not
- 22 impossible.
- 23 MS. DYER: Because the hospital that I'm talking
- 24 about is saying that they don't keep that
- 25 information. And then I went to the state, and it

can't be found. So I'm just, I mean, I thought there was some kind of law that autopsy reports had to be kept on record somewhere.

DR. BOVE: I can't answer that.

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MS. McCALL: And Terry, they only do autopsies when somebody dies without anybody, I mean, sight unseen. That's the only time they do an autopsy.

MS. DYER: That's not the only time they do an autopsy.

DR. BOVE: But the mortality studies we're talking about would use the death certificate information. And if you wanted to do something, a special study on, that required some further information besides the death certificate, we would have to look into that for cancer incidence, which is preferable to cancer mortality in many instances. That's where we have to go to cancer registries. Then we may know. We only do certain states. That would make sense. MR. ENSMINGER: Dr. Clapp and I were just sitting up here talking about this. From my experience in 24 and a half years in the Marine Corps and then doing a tour as a drill instructor, Texas, Pennsylvania, Ohio, California and New York are all big states for the Marine Corps. I mean, if you took everybody from those five states that were in the Marine Corps and

- put them all in one big formation, you'd have probably 50 percent of the Marine Corps.
- 3 MR. STALLARD: Name those states again.
- 4 MR. ENSMINGER: Texas, Pennsylvania, Ohio, California 5 and New York.
- 6 MS. DYER: And North Carolina.

- 7 MR. MARTIN: They grew up in the Marine Corps so they 8 all leave.
 - MS. DYER: That's not necessarily. You might not have a Jacksonville if it wasn't for the Marine Corps. So a lot of those guys that stayed around and retired, I mean, my family has, so North Carolina also.
 - MR. ENSMINGER: You're talking about retirees, but I'm talking about the largest portion of the people you're looking for did not stay in the Marine Corps. You know, 20 percent, more than that. I mean, I'd say 80 to 90 percent of the people that go in the, join the service, do one tour, and they get out, and they go home. So you're looking at a handful that stayed in and retired.
 - MR. MARTIN: Yeah, but now the, a lot of dependents stayed in North Carolina. Now as far as our statistics and the people that we have registered on our site --

1 MR. ENSMINGER: If the man is retired.

MR. MARTIN: -- the majority of them are still in North Carolina.

MR. ENSMINGER: But the people that did one or two tours in the service or enlistments, and when they got out, they went back home and their kids went with them. I think these five states right here would give you a, and they have good cancer registries according to Dr. Clapp.

DR. CLAPP: They all do. Those would all be possible to do this --

MR. MARTIN: Now as far as the mortality study, is that going to give any type of weight or precedence toward continuing further studies? I mean are we going to go from the cancer to kidney disease to parathyroid disease to -- I mean where will we, what information is that going to provide us?

DR. BOVE: Well, it just provides, if it's a mortality study, just mortality. It will just provide us with various diseases. If you want to study something that is not a major cause of death, you have to go to another type of study. Some of the diseases mentioned will not necessarily kill you. So you'd have to figure out a different way to study those if you decided to study.

The mortality study can stand on its own. stand on its own. It doesn't have to lead to something else or not lead to something. And the answer to that question is do we see any excess mortality, and for cancer it's the same thing. see an excess of any particular cancers. And again, you're not going to get everybody. The question for the, you know, it's true that those have a short, have one tour or one tour and a half or two tours, and so the question there would be, even so, the people who are in the CHAMPS database for a lengthy period of time, that they're not that different from the people who aren't in that CHAMPS database, from people who just go in and go out quickly, we can still learn important information based on that population than generalized ^. So keep that in mind.

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Again, just like New Jersey, the state of New Jersey, doesn't mean that what happened in New Jersey isn't relevant to everyone who's exposed ^. So again, by looking at this light post it might, it sheds information on everybody, even the ones that weren't in that light post. The question is is there enough to study or, and then the second question, are they so different from the people who weren't in that database, and is it related to their drinking water

exposures, how ^ would be unlikely. So I think we can learn a lot even though ^ numbers ^. I wouldn't put down that database quite yet because I think it's, it might be worthwhile.

MS. DYER: All right, so we've got the mortality study. What about adding the civilian women that were in utero -- they weren't, that worked on base to your current study? I know that, can we add it along? Can it be parallel?

DR. BOVE: That could be another study.

MS. DYER: Well, then, I mean, that might be something we need to look at.

DR. BOVE: We can't change this study, but the question is why would we do that?

MS. DYER: Because there were a lot of women that were teaching, that were drinking that water, that were working in the cafeteria, that were working on base in offices, and their children are sick, too. And we owe it to them to let them be a part of this study.

DR. BOVE: Well, for the current study we're looking at these birth defects and childhood cancers. If we find something in this study it will generalize to their situation. So you do not have to be in the study. Just what I'm say, just like New Jersey, ^.

When you study New Jersey people, it's relevant to Camp Lejeune.

Our study population in this study will only find things relevant to the civilians who worked there, too. So that's, you don't have to include them in the study for the study to be relevant for them.

A survey on the other hand is different. A survey, if you want to find out what diseases are in the civilian population who worked there, that's a different question. What kinds of diseases do you have predominantly and the purpose may be for some screening or health services or something of that sort. Then you might want to focus on that. The civilian portion of this Data Manpower Data Center database, I'd have to see exactly what's in there.

If you worked on base, you should be in, you know, after '72, whatever, they should be in that database. They could also be looked at again through the mortality study. Any part of the cohort, any cohort, we have social security number on, full name, or full name and date of birth or something like that we can do a mortality study on.

MR. ENSMINGER: Yeah, I want to bring one other thing up on these feasibility studies. And I agree with

some of the statements that have been made in the past, concerning exposures. And some people were going to be in higher risk than others. And I agree with that. Look at civilian employees.

You know, a guy that worked in base maintenance and was running around on that base from 0800 in the morning till 1700 in the evening was not exposed to a lot of VOCs more than likely. That's a given.

However, there were high risk populations. People that worked at the base laundry, not where they did the dry cleaning. I'm talking about the people that worked in the laundry where they washed the sheets, the pillowcases, the coveralls, and then pressed these things. With 1,400 parts per billion of TCE, those people were working in a gas chamber because of the volatility of the stuff. Those people very highly susceptible to mega-doses of these chemicals.

It's the same thing with the active duty marines. Look at the cooks for God sake. These people worked in mess halls where they had steam tables keeping the food hot. They had steam kettles in the galley, and they had a scullery machine or better known in the civilian world, dishwashing machine, running 24-7. Those people worked in a gas chamber.

And when they got off work, they didn't go home to take a shower. They went back to the barracks and showered. There are certain groups of people we need to identify that had these mega-doses and work from them. Identify these people, try to locate them, get the information. That will give you the basis to keep moving on this thing.

And the housewives and the kids that lived in housing, they lived in this stuff 24-7. The women cooked with it. They bathed in it. They bathed children in it. They cleaned house with it. They washed dishes. We didn't have dishwashers back then.

MS. BRIDGES: We had portables.

MR. ENSMINGER: But there are certain populations we need to identify. We need to look at. We need to locate these people, get a feel for what we've got. If it justifies and bears out that these people got a lot of problems, then move on.

MS. DYER: With that being said we need to go ahead and do a survey. I mean, we need to talk about how we can go about it; where we can get the funds and do it.

MR. STALLARD: Jeff, go ahead.

MR. BYRON: Well, the only thing I'd like to see us do is to go through the seven recommendations from

the Panel, get those over with real quick so we can get back to what we're supposed to be studying. We've already identified, Jerry's already identified some, Terry's identified the children and, you know, and the stay-at-home mothers that should be identified. If we get through these seven and get them out of our way real quick, we'll probably have half of this done. Does anybody have a problem with that? You want to go through the seven real quick because I think four of them are already answered. DR. BOVE: I did do a two-page compilation of the larger document so we can work from the larger document, too. This might help; it may not. But I guess that the sheet that we're passing out, if you go to the second page, because I think we all know what the Panel charge was and the fact that there needed to be a CAP.

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But the first bullet, identify the cohorts of individuals with potential exposure. The scientific panel mentioned four cohorts: Those who lived on base so that would include family members, or adults who worked on the base but resided off the base. Children who lived on the base and then those exposed in utero. So those are the four cohorts they identified. And that's in that bullet.

And then I took snippets of what they said dealing with those things. The first thing, the first bullet, or semi-bullet says that a pilot study may be the thing to start off with they were suggesting. And then in the second they also said a limited subset of the overall eligible population, for example, the thing Jerry just mentioned, the hottest people with the most exposure.

And a possible subset or some other group might be a possible subset, i.e., those who we don't have any data for initially as opposed to -- And I think that's what the Panel spoke about. We can define that any which way we want.

And the third point under that is that there are a lot of studies that are conceivable but a lot of them are extremely challenging to do, but there's agreement that a study of mortality options would be feasible assuming the availability of adequate personal identifiers. That means being able to get those databases there as mentioned to study mortality and a study of incident cancer cases might be feasible as well. So that's what the Panel suggested and that we should initiate 'completion of the current study. That's on the second page of this '.

So I think we all agree about the mortality study. I think we're all in agreement that, correct me if I'm

wrong, that we can also see what we can do with an incident of cancer study because in some sense on the cohort side, identifying people is somewhat the same issue. The issue on the outcome side is identifying those states where it makes sense to use the study given how good the cancer registry is and given where a lot of these end up. So I think there's probably consensus about that, too? Yes?

(no audible response)

DR. BOVE: So the -- so that -- and for a consensus that we should keep moving on it and not wait until the current study is done. I'm sure you all agree with that.

DR. CLAPP: You've been listening, Frank. You have been listening.

MS. DYER: Keep going.

DR. BOVE: Well, that's the end of the science panel's recommendations, but other -- that are --I thought the CAP. ^^ it doesn't mean there aren't other recommendations here we can't discuss. Of course the panel, also, they mention stuff about notification, those two issues, funding and health. So if you want to discuss, I'm up here.

MR. STALLARD: I am, and I do want to try to summarize something here. We have basically going on, if we're following the path of the recommendations, the

notification, the cohort studies, the mortality study, right?

(no audible response)

MR. STALLARD: And what was that last thing you said?

MR. BYRON: Incident cancer.

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MR. STALLARD: No, notification and what else?

DR. BOVE: Source of funding.

MR. STALLARD: Source of funding. They're all big What I'd like, and I don't want to put you on the spot terribly, Frank, but the question came up in terms of timelines. Assuming that we have consensus now to proceed with the mortality study concurrent with everything that's going on; we don't have to wait or anything. Can we start talking about what that might entail; what needs to be done to advance that initiative? DR. BOVE: Well, of course, money, but let's not talk about money right now because I think that ^. The very first job would be to identify and talk with the people who use, who work with these databases and see, in CHAMPS and so on, and see what they really have. What they have on paper is one thing and what the people who actually work with those databases know about the data is important.

And there has been a request made to have a conference call with us, the Marines and so forth, Marine

personnel, I guess, who run these databases to sit down and see what we have. So I think that that's the first thing that has to get done. Probably have to physically go out and see what data are not in these text files 'physically to see what we've got and how feasible and how easy it is to convert it. That needs to be done, too. So that's the key thing.

After that we have to prepare the data to send to the National Death Index, and they also, you know, as part of the CDC, you have to provide funds for that type of service. But that's the second. I don't know how much each one costs. I think maybe we can get a deal, maybe not. But we, that'll be the next step. So there's a, but I haven't thought all the steps through, but I think those are the key steps.

MS. DYER: What's the timeline you're looking at to complete a study like that?

DR. BOVE: I don't know. It's hard to --

MS. DYER: Are we just going to do this study then or are we going to go ahead and try to parallel several studies?

DR. BOVE: I don't see why, again, because the,

identifying the cohort in these -- ^ DMVC databases like CHAMPS is like and so on, will facilitate several studies I think. I mean, it doesn't, you know, and so in a sense they can go sort of parallel. Once we know what cohorts

we can identify and how far back we can go, and what data is there in terms of personal identifier information that can be useful later, the National Death Index, cancer registries that CHAMPS has, then I can see a couple of studies going in parallel, ^, a couple of studies going in parallel.

MS. DYER: Okay, if that's the case, do we need to go ahead and start working with DOD or on our own to get funding so that we can go ahead and get this notification out because you can't do a study without people. So does that need to be something that we investigate? How we were going to go about specifically --

DR. BOVE: No, what the studies I'm talking about now won't require notifying anybody. These are data-linkage studies. We have data from identified cohorts, and we link that with the cancer registry data, we won't have to contact anybody. That's what's nice about those studies, and the outcomes are verified. So we don't have to verify the outcomes, they're already verified.

So those studies, you know, the outcomes can be looked at this way and do not require contacting anybody. So it's a ^^ with personal identifiers and so on, but we don't have to track people down and contact them.

So for those outcomes that are not available in a database, and for our study, for example, there was no

birth defect registry in effect in '68 ^ until 1985. The cancer registry really wasn't in place with decent data until the late '80s either. So if they were, if there was a birth defect registry going back to '60 whatever, we would have used it and we wouldn't have to worry about verification. In New Jersey, I did my study without contacting a soul. We did the cancer that way. We did birth defects that way. We did ^ that way.

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The endpoints that we've done are no available database, no surveillance data, no registries. endpoints are the heart of this, and that's what they were saying on the Panel. They were saying that for diseases you mentioned, for example, there is no thyroid disease surveillance. There's no lupus surveillance system. Autism growing start ^. The only way to get at those is -- or one way to get at it is through a survey like we did to find these birth defects. It's not the best way to do it, but it may be the only way. That's the problem. I wish we could have used the registry method; it's a whole lot better ^. So that's, when we start talking about those diseases where we don't have registry for them, then that's much more difficult. need to think whether we can do it or not, whether we can identify the cases through the survey or some mechanism like that.

MS. DYER: All right, so can we go ahead and discuss how we can get a survey going? Yes, I mean, yeah.

MR. MARTIN: I had one thought, too, and there again I'm trying to address this looking on a, on a very large scale of 200 to 500,000 people. And one thought that came to mind with technology and computerization and everything else, any type of survey or notification or questionnaire that says if, did you live in Camp Lejeune, North Carolina through these years, and then if so, dial this number.

Well, they dial in and then the basically the computer asks the same question when they dial in. And it says, if so, please enter your number now, you know, you will be contacted in the future. This is a survey by the ATSDR or whatever it is. So it would actually log and register their telephone number at that point.

Between now and the next meeting or whatever, before a survey is compiled, we could come up with questions that people could answer I mean as far as going down here listing the diseases that we saw a majority of and start out with the number of cancers or whatever and work it down to a smaller scale.

But if people are really affected by this then there are a lot of things that we could really start out saying Camp Lejeune, North Carolina. Then we could go to Tarawa

Terrace, North Carolina. Then we could go to Inchon Street, North Carolina. So all these things, it wouldn't be a one-time survey questionnaire or whatever it would be. You'd start at the top with the bulk of the number of calls, and you would phase out a majority of those as those go.

But at least that would give them some way to contact us. And we would have not even their personal information, but we would have a number where we could re-contact them and just see how many calls that would generate.

- MS. DYER: And Jerry, you mentioned certain states a lot of Marines settle in.
- MR. MARTIN: New York, Texas, New Jersey.
- 15 MS. DYER: So we could --

- 16 MR. ENSMINGER: States where they have a high recruiting
 17 --
 - MS. DYER: Then why don't we take those states and do our media blitz or whatever through those states first with a 1-800 number and start the survey through those states where you're saying --
 - MR. ENSMINGER: Is something like that available?

 MS. DYER: Well, he said it's going to be hard, and we know it's going to be hard, but it might be the only way we have to get it. And that's why I'm saying let's not

wait three CAP meetings.

DR. BOVE: We need to wait because we need to think this through because what I was saying about the mortality study and the cancer incident study, I'm talking about scientifically credible studies. We're back to that difference between that and a survey, which is not credible science but would serve some other needs.

From a credible scientific point of view, if you're talking about looking at some of these other endpoints that you don't have registries for, we have to do a lot more work, a lot more work to get anywhere near coming up with a credible design. Now when you're talking about a survey, that's different. Because now we're not talking about something that's, when it has to be scientific in nature, it has to be credible in that sense.

But we still have to figure out what we want to do with this survey. Suppose we survey 12,598 or some other figure, and we have now, ten percent of people who called in said they had Hashimoto's disease or something like that; not often. But what do we do with this information? What do you think we can do?

MR. ENSMINGER: We're going to have to get some statistics like that through a survey to use as a springboard for an in-depth study.

DR. BOVE: Not necessarily, no, because -- well, I mean

it might be a springboard; it might not. I mean, even if it was a springboard, you'd still have to design a study -- it's very difficult to do -- of that particular disease. You'd have to figure out a way to ascertain and completely verify the diagnosis, just like you're doing in this study. The fact that you've done a survey and ten percent of the people said they had disease X, that might be interesting to some extent from a service point of view or some something, but as a springboard, you still have to sit down and figure out how we study this disease. How can we make sure we get, you know, relatively complete, ascertainment, so it's not a biased ascertainment. Have we captured most of the cases of that disease.

And then we also have to take a sample of the population ^^ getting a little more technical, but that's how we'd have to design the study. But I would be befuddled, I think, at the first step which is how can I be sure of ascertaining many or most of these cases? And how can I be sure I'm sure I've verified the diagnosis? How can I be sure I can contact these people? That's where I'd be stymied. That's not necessarily stymied and then not, no --

MS. DYER: How did you do the study in utero? I mean you contacted those people, you listened to what they said

1 over the phone after a list of questions, and that's how 2 you started the study. That's what we're talking about 3 doing. 4 DR. BOVE: Yeah, we got those cases and then we found out 5 that how many of those cases were confirmed not to have a 6 diagnosis? 7 UNIDENTIFIED SPEAKER: Twenty-four, 25. 8 DR. BOVE: So, you know, that's what I mean. 9 MS. DYER: And that's what we're saying. We're saying, I 10 mean, but you've got to start somewhere so why not take 11 Tarawa Terrace through a certain year and have them 12 contact, and we start the survey. We get a list of 13 diseases. And when you start seeing that 50 percent or 14 70 percent of these people have female problems then 15 you're going to know, a red light's going to go off. 16 DR. BOVE: The only reason I would focus on Tarawa 17 Terrace is if I was not interested in TCE. I don't know 18 why you want to focus on Tarawa Terrace because those 19 exposures have had no ^. ^ people in the barracks were 20 exposed. Why are you now --21 MS. DYER: We're only saying Tarawa Terrace, and this is 22 what the CAP talked about last night because it's the 23 closest to being completed. And you've got Midway Park -24

DR. BOVE: We're not talking about that much difference

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in time. We're talking about a couple of months. I wouldn't fixate on that difference. That's not a good reason to do a survey one versus another. It's going to be just as difficult to look at, identify those cases in Tarawa Terrace people as it is for anybody. So that's something that, you know, it' going to be difficult to identify and locate these people regardless of where they were located.

MR. MARTIN: Right, but it's a starting point. I mean, you have to start somewhere. We can wait and start in Midway Park.

DR. BOVE: You can also make a case like Jerry just said, start with people most exposed first.

MR. MARTIN: Right.

DR. BOVE: There are various starting points. I don't think the starting point should be because of the water modeling will be done for Tarawa Terrace and then a few months later for Hadnot Point, that that should make a difference. I can't see that.

MS. DYER: All right, what about the children? Any child, because isn't that one of the things that the Panel brought up before was children seemed to be more susceptible? They're lower to the ground. They're immune systems have not fully developed, their developmental things within their body --

MR. MARTIN: That was an ATSDR statement what the Toms River study is --

MS. DYER: Exactly, so why don't we start with the children? If you were a child that was born or lived on base, contact this number. We have to have a starting point, and we have to have -- you get a computer guy to write up a program, and you put it into a 1-800 number, and it asks the questions. And then it's weeded out.

But they should be able to say this, you know, when you're looking at this and you're seeing, okay, these 500 kids grew up at Camp Lejeune, and they've all got MS or, you know, like 50 percent of them or 25 percent of them have MS. I mean, that's what you're going to see because that's what we're seeing in just our little puny study that we're doing on the website. You know, we've got 800 and some people, and when you ask them to list their diseases -- there's no reason for them to lie.

They're not putting their name on there. It's secret. I mean, you're not looking at that. You're looking at purely scientific. Someone saying I have thyroid problems. I have a muscle disease. I have asthma. I've had miscarriages, and that's what we're talking about. So if you get a survey and you have this and you allow them to list all this stuff then you'll categorize it. And that's where we start. And it's

simply a survey but we have to start somewhere.

DR. BOVE: They way we do the survey you do, we do start somewhere. We start at birth certificate records. We only could identify them, these births. We do not have, right now that's one of the jobs is to see if we can identify a database for children on the base, maybe their school records. That's what we need to explore.

But if you want to start somewhere, you're going to have to start with something. What you want to do -- if you want to make sure you've captured many of them if not most of them, otherwise you have no idea. You've sent that message out, and you don't know how many kids were actually on the base so you're not going to find out if their records ^.

I mean at least for this survey I had birth certificate records, and these are at least 12,498, or whatever it was, births that occurred on that base during that time period. So we had something to work with. We had the names of the people and so on. You don't have the names or the numbers of those children who lived on that base. And that's what we need to find out, if there's a database that captures some of them.

MS. DYER: There isn't a database that captures that. We've got to create our own.

DR. BOVE: But then you have no idea if it's complete.

You have no idea.

MR. MARTIN: We've said this several times. You cannot force people to cooperate. If we get the word out, if enough people know -- I know when I was growing up, the Marine Corps community, even these guys that have been retired 20, 30 years run into an old buddy they knew 40 years ago, those are a pretty tight-knit group of people. There are still several of them, some of the old timers or lifers that are still involved in the VA and Veterans of Foreign Wars. The word's going to get out.

We'll never achieve a hundred percent. We've already decided that at this point. But if we get enough people with word of mouth, and with newspapers or radio advertisements or whatever, calling us, that eliminates us having to chase anybody. If they don't want to participate, they don't have to. But we're talking a half a million people here. I think we're going to get a pretty good response.

MS. McCALL: And we understand that you, that this is what you do for your living. You take surveys. You do studies. You study. You do this, and I understand that you know what the obstacles are because you could already predict with this large population of exposed people what's going to happen. But what we're saying is if you always do what you've always done, you always get what

you always got. That means we need to do something different. We need to start this out in a different way so that we don't --

MR. MARTIN: This is an opportunity really. You think of the scale, and if we get a varying degree of all these different diseases from skin, just from skin rashes to terminal cancers or kidney diseases or liver infections or whatever this might help the scientific community in everything that I've read that have, their conclusions are not comprehensive because they haven't had enough studies. They don't know what it causes. They don't know who's affected by what chemical and what diseases it caused because they don't have enough studies.

That's everything you read in most of this documentation is enough studies have not been conducted. So this is a prime opportunity, and all these agencies that are spending these millions of dollars might have an opportunity to find out exactly what these TCEs have done to people.

DR. CLAPP: I'd like to throw something into the mix here. There have been a lot of studies of people exposed to TCE done, and all of the information isn't in yet, that's for sure. And this would be a way to get new information. I have a feeling we're barking up the wrong tree here. I don't think ATSDR is going to do this what

we call a hypothesis generating kind of survey.

There are other places to go. And I think we should at least consider, as I mentioned before and at lunch, that the Lipari study was not actually, was initiated by a grant from a foundation. And then that got other people's attention, and it was actually written up in a way that I think was of some use at the end of it all. But it wasn't because ATSDR endorsed the idea of a survey of Lipari information.

MS. McCALL: But it helps if they endorse the idea.

DR. CLAPP: Well, you know, it's like it probably would, but since you can't convince the person who it is that knows the most about it in the agency, then it may be that there's some place else to go.

MS. McCALL: Right, but we're not the CAP sitting here in the ATSDR building trying to work with the ATSDR. Then we're just the stand and the few, the proud and the forgotten over here working by ourselves again. We all came here together --

DR. CLAPP: Oh, we're doing a lot here today.

MS. DYER: But what she's saying also is, okay, the ATSDR is not or if they're not the place that we need to go to get this survey done, then we're going to have to turn around and go back to Washington and try to get DOD to fund an independent study apart from this through a major

university or teaching hospital. We're going to have to do that. So we're going to have to go back, and we were thinking that we were coming to the ATSDR and that the ATSDR does surveys, and they could help us get started with funding from the DOD to do it.

DR. CLAPP: The ATSDR has done a survey in this instance that as Frank explained was based on a list of births from a particular population.

MS. DYER: Right.

MR. MARTIN: Right.

DR. CLAPP: We're talking about something different, and it may be that that's not a survey they're going to do.

I just mean, I'm throwing it out, and I think I'm expressing what is obvious which is that there's not complete agreement here that from the ATSDR folks this is the way to go. Come up with other ways of getting it done.

MR. STALLARD: Jerry.

MR. ENSMINGER: Frank, why don't you sit down and give us a roadmap, I mean, as you view, and clarify what your stance is and what you think would best serve all these concerns.

DR. BOVE: The study we're doing here, the study at Toms
River was cutting edge. We're not doing the same-old,
same-old. So that is ^. That's all. We've been talking

about looking at a wide range of diseases, mortality, I mean, to do consensus. A mortality study can look at a wide range of diseases that cause mortality. The cancer incidence studies we can do them will look at a wide range of cancers. They either kill you or don't kill you. So those we're committed to trying to do. And I think they're important.

At the same time there's studies done of occupational cohorts across the country where some other diseases -- see, Camp Lejeune population, although exposed, may not be the best population to look at all these diseases to be frank with you. An occupational cohort may be a better one. And I know there are occupational exposures here, but I mean an occupational cohort like say in a plant that produced, that works with TCE.

Because the record's there, the population itself that's self-contained. You have medical records there. You can actually answer the question of whether TCE causes a particular disease. With that cohort and what happens with that cohort is then generalized to anybody who's exposed to TCE at those levels. The kind of levels we're talking about here are pretty high. They're not that different from the population ^.

MS. McCALL: Does it matter whether you showered in it or

ingested it or just working around it? I mean, does it, I mean, because the Camp Lejeune people lived in it, and you're talking about people who just work in it, go home and have safe water and come back to work and have that exposure and go home and have safe water for the weekend. But we're talking about people who drank Kool-Aid, bathed, showered, swam, everything with the water. DR. BOVE: Right, the difference is that possibly, you know, the occupational exposures were higher for a shorter period of time, and there's some question about whether that's relevant with other doses for a longer period of time. But you can still, you know, there's always uncertainties anyway in science. And so we couldn't answer some of those questions. And some of those questions have been answered. We do know with our tox profile, it's seven years old now, it goes through a list of studies, both animal and human, for this information. So, you know, we're not in the dark here about TCE and PCE. It's been used throughout industry, TCE, sure and PCE, certainly. So I think we know something about the health effects based on this occupational study. The only question in my mind, and maybe not in other people's minds, is that for exposures lower than that, lower than occupational exposures, what's the effect? But in the case of, and is there

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something different about a drinking water exposure and a work place exposure. In the case of these ^ I'm not convinced that there's a whole lot of difference, but there's a debate about ^. So ^, I digress, but what I'm saying is you don't have to study every disease in this population, the Camp Lejeune population, in order to know something about what TCE or PCE can cause. That's the first thing, so --

MR. MARTIN: Well, and there again we're --

DR. BOVE: -- so we can focus our attention on a particular disease. We don't have to study every disease there if we're interested in a scientifically credible study. Again, we would want to focus on other diseases where we felt we could do the best study. Now, if we're not, if we're interested, again, in finding out what the disease burden is in this population, not interested in comparing to anybody else, just trying to find out how much disease is here, then all kinds of survey mechanisms have been discussed in this meeting or some combination of them.

But it's not a credible study. It's not something you would publish in a scientific journal. It doesn't add to the scientific learning. But it's useful for other purposes. It's not a useless thing, but you have to at least think of what its uses are like do we want to

provide services and show the Veterans' Administration or the military that there's this much disease in this part and this number of people responded to this, what do you think? There may be even more out there that need services. That might be a use of this survey data. There may be some other use.

MS. McCALL: Okay, well, I can tell you this much. I'm not a scientist. None of us besides the people who work here are scientists. We don't care about a scientific study. We want services. Do you care about a scientific study?

MS. DYER: I mean, I understand why you're doing it. I mean, it's a pure love of science, I understand that, but you're talking to people here, and we don't care about, you know, we want results, and we want action, and -- DR. BOVE: Well, when you say results, what is results?

MS. DYER: I'm frustrated because I really felt like that, you know, we were to get here today to decide whether or not we were going to study the children and adults that lived at Camp Lejeune and how to go about that. And I'm ready to start doing that, and I know you want to go ahead and go with the mortality. I think that's great. Go ahead and go with it, but I just feel like, you know, are we going to study them or not?

And if we are, how are we going to start doing it?

And let's get some, you know, black -- you know, get it on paper; what we're going to do to get this done. And we don't understand when you start saying, oh, what's the feasibility of this, and what's the, you know, and this study and that study. You're talking to people that don't know. All we're hearing about is that, it's like a doctor. You can have crazy words you guys use when you're talking to somebody. We don't know. We just want to hear you're going to do a study. It's going to start here. This is how we're going to do it.

MS. McCALL: Right.

DR. BOVE: When you said I just want results, I want you to tell me what you mean.

MS. DYER: What kind of results --

DR. BOVE: Exactly right, yeah.

MS. DYER: I want answers. I want answers to why I'm sick. I want answers to why my dad died at 45. I want answers to why a lady that I just talked to the other day, her grandchild died of leukemia. I want answers to why every time I go to the doctor it's something new, and I'm only 49 years old, and this has been happening all my life. I want answers. That's the results, and the only way you can do that is getting together a group of people that lived there during a certain period of time and finding out what all they've got.

We've got a crazy mess going on. It's not your normal stuff. And that's the kind of results. you to be able to tell me, Terry, you're not crazy, you Those headaches you've had all your life and the fact that you were hurt 24 hours a day there's a reason for it. And the only way I can see you doing that is to contact all the people that lived out there and find out what's going on in their lives and in their health. You're not going to get a hundred percent like you said,

but we've got to do it. We've got to start somewhere.

And I'm ready to do it.

DR. BOVE: Why do you think that doing this survey will answer that question?

MS. McCALL: Dr. Bove, because --

MR. STALLARD: Wait, wait, please, one person at a time.

MS. DYER: Why do I think a survey? Because a survey is going to reach as many people. We can reach a -- let's just go with small numbers. If we can reach a thousand people that lived at Camp Lejeune, and we ask them certain questions, you know, were you sick as a child when you lived out there? What kind of illnesses did you have? As you were growing up did you develop normally? You know, answer some of these questions. Are you having neurological problems, okay? And then once you got to

your developmental stage, whether male or female, can you have children? Have you, you know, are you, all these things. Do you have breathing problems?

When you get a survey going like that, and I've got a hundred things across here, and I'm checking them like this for everybody that calls that's going to show you guys something. It's not pure science, but you're going to go whoa, we do need to look at this deeper. That's what I'm talking about. A survey will give you the start to see that what we're saying is real. There's people all over the country that have the same thing. They're not everything that you're saying they should be. It's more.

MR. STALLARD: Hold on just a minute. Just a moment. Denita's been waiting to speak.

MS. McCALL: Well, I just wanted to give you an example of why we need results. And I'm going to use my, and it just doesn't matter any more because, you know, my cancer was diagnosed six years ago. I've already had the surgery and the radiation, and you know, I'm living with it. So results aren't really going to help me. The only thing it's going to help me do is get another priority rating at the VA so I don't have to wait five months for a doctor's appointment. That's the kind of result I'm looking for.

MR. BYRON: Can I elaborate on that? I mean, let's face it, every one of these CAP members here either has someone suffering now or their grieving a family loss. So we want answers of what happened at Camp Lejeune, not only so we can help the scientific community, which we are interested in doing. Because personally, I didn't ask to be a lab rat. What we want is accountability from DOD. If you poison my daughter, I want healthcare for my daughter. I want compensation for her past injuries, and I'm going to put right out there on the line so y'all can hear it because that's what we're leading up to.

The information that comes from here is going to go to DOD. It's going to go towards Form 95 Plane, and you guys decide whether that's just to ask for or not. You may come back with something that's agreeable because everything in life is a compromise.

I'm going to ask Frank this. We're talking about the study here at Camp Lejeune. He said that this light post here sheds light over here. So does it have to be at Camp Lejeune or can we find another affected community that's similar to ours and get this rolling, that might already have a database. Is there, are there studies that are already out there for the children that we already can identify diseases that now we can associate back to the mortality and the cancer incident rate or

not?

But I do want to elaborate that we are here because we want answers. We want this kind of stuff to stop. There's 120 sites, I believe, on the DOD National Priority List, 142. My understanding is, is we are the very first group to come before the DOD with this issue. Do you think there's not another 142 groups out there potentially? Maybe not 142, but I'll bet there's 70 potential groups. You just don't know it yet.

MS. DYER: They're asking us for causation. Where are we going to get it? If I'm going in front of them, I have to be able to say that my illness that I've got was caused because of Camp Lejeune. You're the only place we know to go to.

MR. BYRON: And the other reason I'm asking for a comparison to the national statistics is so that we can, for once and all, know where do we stand. If Jerry's daughter has leukemia, and the leukemia rate at Camp Lejeune is ten times higher than the national average, I think there's causation there. And if you're doing that with each one of these items, spina bifida, cleft palate, and they're all astronomically high compared to the national average, you can bet I'm going to the Commandant of the Marine Corps and to General Counsel and say I want action taken for my daughter now. And I'm not really

- willing to wait much longer. It's either we produce
 results here or I'm going back to my life and I'm going
 to fight them on my own, and I don't want to do that. I
 want to work with ATS -- I really want to work with DOD,
 but they have yet to step up to the plate. I think
 they're willing to more and more as we get into this.
- 7 But that's where we're at.
- 8 MS. BRIDGES: And stop the effects on the next generation of children.
- 10 MR. BYRON: We want to stop it from happening again to any other communities.
- MR. STALLARD: Let me see if I can't seek understanding
 for myself. You have an issue of do you see a survey as
 a method of notification? Those two things are basically
 one and the same for you.
- 16 MS. DYER: Exactly.
- MR. STALLARD: So the question then is if it could be done, how would we do it?
- 19 MS. DYER: Where would we get funding from?
- MR. STALLARD: Well, how would we do it in a way that
 will provide, elicit the most useful responses that can
 be verified, correct?
- 23 MS. DYER: Uh-huh.
- 24 MR. STALLARD: I'm just trying to understand so we understand really what's on the table here. So the

question would be, if it could be done, how would we do it in terms of a survey, right?

MS. DYER: Would you write the survey? I mean, you know what you need to know. You know what you need to know. Would you all write the survey? See if we can come back next month, and you've got a survey ready for us.

MS. RUCKART: I'm sorry, but it already is 2:45. I know that people do have flights right around the five o'clock time, and I just wanted to allow a little time for wrap up and time for talking about the next meeting. ^^ Table these issues, but just talk a little about the next meeting.

DR. BOVE: Just to answer quickly. A survey's been done ^, so that's not the problem. The question is what the purpose of the survey is. I still am not clear on that. If you're interested in notification, it's a whole, that's a good purpose, we can tailor the survey and all the other steps if the purpose is notification. If the question is what caused my disease, that's a scientifically credible study.

MR. MARTIN: Frank, I'd just like to say one thing. This is a list of everybody that's registered at our website, 860, 886 people that are all sick with varying diseases that we've all discussed today. The only thing we have in common with these other 886 people is that we all

- lived at Tarawa Terrace. And that in itself, I mean, it's almost a thousand people here at Camp Lejeune.
- We're talking about a cocktail from what I understand of all the chemicals that whose reactions were enhanced by chlorination which they dumped into the water system also
- 7 MS. DYER: Tulene, ammunition --

trying to clean it up.

- 8 MS. McCALL: And fed through lead pipes.
- 9 MR. MARTIN: So it's a disaster is what it is.
- 10 MR. BYRON: And part of the problem is, is that when they
 11 found out in 1980, they let the world know in '85.
- 12 MR. MARTIN: That's another subject.
- MS. DYER: That's another subject, but do we want a survey? Does everyone from the CAP, I mean, does everyone say they want a survey?
- MS. McCALL: Well, let's vote. Everybody who wants a survey raise your hand.
- DR. BOVE: Let me ask for the next CAP meeting that you flesh that idea out a little bit. A survey of what, and what do we want the survey to do? And after we get all the information in, what do we think that survey can do for us, for you? Not us, for you.
- MS. McCALL: Well, if you show a level --
- DR. BOVE: Well, no, you don't have to answer the
 question now. I want you to think about it because given

1 what we've said today because in order to show harm and 2 causality, we're talking something a lot more than a 3 survey. And that's what you have to, and so you have to 4 really give us a sense of what you think can be 5 accomplished with the survey the way you see the survey, 6 and what do you think we can accomplish. 7 MS. DYER: Would you start a study before you started a 8 survey? 9 DR. BOVE: Yes. 10 MS. DYER: You would. DR. BOVE: 11 We haven't done a mortality look at Camp 12 Le jeune. 13 MS. McCALL: We'll take anything --14 MS. DYER: Do a study on the children and the adults 15 living at Camp Lejeune. 16 MR. STALLARD: Folks, I need --17 MS. McCALL: We'll take anything we can get, study, survey --18 WRAP UP AND PLAN NEXT MEETING CHRISTOPHER STALLARD 19 MR. STALLARD: Can I have your attention, please? I want 20 to try to summarize where we are as I understand it. 21 Frank has asked for you, the CAP members, to do a little 22 bit more work in terms of thinking about what would a 23 survey do. That means the notification issues, and all 24 those things that we talked about, what would it do.

Likewise, I guess it would be fair to ask for them to consider if it could be done, how would you do it so that hopefully those two topics can mesh.

What we have agreed to do is that ATSDR is going to proceed with this mortality study. Is that correct?

DR. BOVE: Right.

MR. STALLARD: And I presume that you will be notifying the CAP members in terms of what that timeline will be looking like and what the process will be, okay? I don't have anyone assigned responsibility here for, but clearly this is a very important issue to resolve, and that is identifying senior DOD people to work with who are committed to participating with this process.

However that has to be done, I think we have to determine, Frank, I don't know what your legislative arm does, but --

DR. BOVE: There's someone in my agency. I'm not the person. I'll tell you right now I'm not the person, but there's some, we have a ^ who works with DOD all the time, and I would refer to them ^.

MR. STALLARD: Okay, so can we say then that ATSDR will contact people within our agency to find out what the best method and mechanism is to do this?

This PSA campaign linked to a web-based survey, that's all that we've been talking about, that's a

comprehensive plan that we need to think more thoroughly through for the next meeting and pick that up as a topic of discussion. Is that what we all have agreed to?

It appears that all this stuff about laundry workers, cooks, a new study on civilian females in utero, that that is subsumed under the mortality study that's being conducted, correct?

DR. BOVE: It's subsumed under looking at what the databases can tell us. If the databases can tell us, for example, that they were cooks whose occupation was in the database. I don't know exactly what that means. I want to talk to Dr. about that and others, military occupational specialist, so that's the --

MR. STALLARD: What about this? The recommendations from the Panel on adults who lived on base, adults who worked on base, children who lived on base, children exposed in utero? How does that come in then? Does that come under the mortality?

DR. BOVE: Well, it fits under the mortality study, but the adults on base, check the civilian database that's available to see the adults who worked on base. That's a second cohort. For children we're going to have to see what records or information is available on base. So I don't know --

MS. DYER: That's for the mortality.

DR. BOVE: Well, that's, for anything we want to do with children, I would want to see what they have in terms of school records, if any, and what shape it's in. So that we need to go and search out.

MS. DYER: And you opened a whole new can of worms when you said you could do a study before we could do a, that you could do a study before a survey so just to let you know.

DR. BOVE: Absolutely. What I meant by that is simply this that it's not that we don't know anything about TCE. There are occupational studies. There are previous studies like the studies I'm working on. There's animal studies and Jeff Fisher can tell us about those. So there's, you can justify looking. I want to look at arsenic and neural tube defects, for example. There's never been a study on that. I want to do it because there's some hints in the animal data that's there. I don't need to do a survey. If I can find the right population who was exposed and a birth defect registry, I'm off.

MR. BYRON: Am I mistaken in saying that a survey provides the registry?

DR. BOVE: The survey is not the best way, but the survey if you don't have a registry, that's one way to do it.

MR. MARTIN: It's a start.

- MS. DYER: And I guess some of the things that we learned today is that DOD being out in the audience, even though they weren't invited or, you know, part of the CAP, that they've got to go back because there's a lot that we've talked about here that we wanted Mike to have answers to
 - MR. STALLARD: Okay. Well, let's speak about that, the next time we get together. First, let's figure out how well we did; what went well today, and what did not go so well today so that we can adjust accordingly for our next meeting. So what went well?
 - DR. CLAPP: People spoke frankly, put it out on the table.
 - MR. MARTIN: It was open and honest, yeah, and allowed us to relieve a little bit of frustration to be honest with you. Yeah, sorry to take it out on you, Frank.
 - MR. STALLARD: Open, frank, and what else?

the next time we get together.

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- 18 MS. DYER: Great facilitator as always. Lunch was good.
- 19 MS. McCALL: And don't think that Marriott bed is going 20 to change my mind. They've got beautiful beds.
 - MR. STALLARD: What didn't go so well?
- 22 MR. ENSMINGER: I don't like the fact that -- I think DOD
 23 ought to have a seat up here, Dr. Rennix.
- 24 MS. McCALL: We can take a vote on it.
- 25 MR. STALLARD: We can and then you all can figure out how

1 the --

MR. ENSMINGER: I mean, I don't want to have him sit up here and shoot questions out there. And we're relying on these people for a lot of information, and they need to be up here. They need to have input, and we're beating around the bush. We're chasing our tail without having them up here because we're relying on them.

MR. STALLARD: That was an issue about identifying, perhaps afterwards you all can talk offline about from their perspective what would be the best method to get someone invited to sit at this table as a member of the Panel.

So I think I'd like to put DOD participation sort of in the middle. It went well because these folks did share, and they are here, and yet we have more to do in terms of finding the right level of support.

What else didn't go so well? I'll tell you one thing. The AV support. The microphones, I think you mentioned one --

MR. MARTIN: I talked to some people that were watching the streaming at lunch, and they said they said that the only people they could recognize were who were in the audience. They couldn't see the Panel at all, that the camera was really just too far away.

MR. STALLARD: So America's Most Wanted ^ in the audience

1 The webcast camera angle on the audience. 2 What else? 3 MR. MARTIN: I think you mentioned earlier the comments 4 from the audience, having a podium or a microphone to 5 where they could present all their information. MS. DYER: If we include a DOD, we won't need it, but 6 7 it's got to be a DOD person that can answer the questions 8 and give us answers. 9 MR. STALLARD: Well, let me put it this way. Having a 10 chair and a microphone for invited audience 11 participation. 12 MR. ENSMINGER: And I thought we were going to have a 13 briefing today. I guess I was mistaken, by Morris, about 14 the water modeling. We didn't get one. 15 MR. STALLARD: Do you want one for the next meeting? 16 MR. ENSMINGER: Yes. I mean, a detailed, not too 17 detailed, an overview of where he is and what he's gotten 18 accomplished, and anything else that he may be needing. 19 When is the next meeting? MS. DYER: 20 MR. STALLARD: That would be the next question. 21 MS. DYER: Is there going to be a next meeting? 22 MR. STALLARD: There appears to be a need. Let's just do 23 a check --24 MR. ENSMINGER: Well, we've got a rep down here from

I&L^. We can have a next meeting, Ms. Dreyer.

UNIDENTIFIED SPEAKER: ATSDR.

MR. STALLARD: Well, they're going to send out the invites. Is there, there is a reason to meet again, is there not?

(general affirmative response)

MS. DYER: So we're funded to meet again?

MS. RUCKART: We can talk about some potential dates, but we can't really finalize until we can see the availability of the room and the staff here who do the AV, but we can talk about a time frame of several potential dates, and then we can narrow it down from there.

MS. DYER: Next month?

MS. RUCKART: We had initially talked about every other month so I guess that would put us in April. So April, you know, there are some bad dates in there, Easter and other. But anyway, I guess what we can do is maybe we can't select an exact date now because I don't have the calendars for them, but we could all communicate by email and people can send me blocks of time that they are available. We'll see which is the best date in terms of the room.

MS. DYER: So you're wanting to look towards April?

DR. BOVE: I've been asked to reiterate that we don't

have money for the next meeting yet. And maybe we

shouldn't plan the next meeting because right now at this
moment, we don't have money for the next meeting.

MR. STALLARD: So I'll put that under not so well for today.

MS. RUCKART: I would like to say if we don't have money for the next meeting, from DOD, it doesn't necessarily mean that we can't have a meeting. We still may be able to have a meeting. Up until recently we weren't sure we were going to have money for this meeting, and we were going through with it anyway. So I don't think we should focus too much on that now. I think we should go about planning it and try to make it happen and then see if the funding will just fall in place. I don't want it to wait until the last minute, then we can't get it scheduled; find out about funding the week before.

MS. McCALL: Thanks, Perri. That's good, thank you.

MR. STALLARD: Is there anything else? A short comment that anyone would like to make before we close this out?

MS. McCALL: Thank you.

MR. MARTIN: Thank you.

MR. STALLARD: Thank you, and I want to thank you all for abiding by the guiding principles. It really helps us to move forward together. No formal conclusion, this is it. Thank you very much.

(Whereupon, the meeting was adjourned at 3:00

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CERTIFICATE OF COURT REPORTER

STATE OF GEORGIA COUNTY OF FULTON

I, Steven Ray Green, Certified Merit Court Reporter, do hereby certify that I reported the above and foregoing on the day of February 1, 2006; and it is a true and accurate transcript of the testimony captioned herein.

I further certify that I am neither kin 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 4th day of March, 2006.

STEVEN RAY GREEN, CCR

CERTIFIED MERIT COURT REPORTER

CERTIFICATE NUMBER: A-2102