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TRANSCRIPT OF PROCEEDINGS

NASA/JPL CERCLA RPM MEETING

November 6, 2003

Raymond Basin Management Board

4536 Hampton Road

La Canada Flintridge, CA

1	NAME	AFFILIATION
2	DAVID AMIDEI	NASA
3	KEITH FIELDS	BATTELLE
4	DAVID CLEXTON	BATTELLE
5	MARK RIPPERDA	USEPA
6	RICHARD GEBERT	DTSC
7	JUDY NOVELLY	JPL
8	CHUCK BURIL	JPL
9	MUHAMMAD ZAIDI	LA RWQCB
10	KIMBERLY GATES	US NAVY
11	ALAN SORSHER	CA DHS
12	GARY TAKARA	Pasadena Water & Power
13	KAREN ARTEAGA	GeoSyntec Consultants
14	TONY ZAMPIELLO	Raymond Basin Management Board
15	ROBERT HAYWARD	Lincoln Avenue Water Company
16	RON PALMER	Consultant to the Board
17	MICHAEL ISKAROUS	DTSC
18	BILL GUARINI	Shaw Environmental
19	DENNIS HOWE	US NAVY
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23		
24		
25		

1 La Canada, California, Thursday, November 6, 2003

2 10:02 A.M.

3

4 MR. AMIDEI: Well, let's get started. Introductions.
5 There's a primary introduction, I believe, that's
6 appropriate for this meeting, but just for the record, let
7 us go around and introduce ourselves to the tape-recorder.

8 I'm Dave Amidei from NASA.

9 MR. RIPPERDA: I'm Mark Ripperda from USEPA.

10 MR. TAKARA: Gary Takara, Pasadena Water & Power.

11 MR. HAYWARD: I'm Bob Hayward, Chair of the Raymond
12 Basin Management Board today.

13 MR. GEBERT: Richard Gebert, DTSC.

14 MR. ISKAROUS: Michael Iskarous, DTSC.

15 MR. SORSHER: Alan Sorsher, DHS.

16 MS. COLLINS: Heather Collins, DHS.

17 MR. ZAMPIELLO: Tony Zampiello with the Raymond Basin
18 Management Board.

19 MR. PALMER: Ron Palmer with Raymond Basin.

20 MS. ARTEAGA: Karen Arteaga, GyoSyntec.

21 MR. **GUARINI: Bill Guarini from Shore **Envirogen.

22 MR. FIELDS: Keith Fields with Battelle.

23 MR. CLEXTON: David Clextton with Battelle.

24 MR. BURIL: Chuck Buriil, JPL.

25 MR. NOVELLY: Judy Novelly, JPL.

1 MR. HOWE: Dennis Howe, Department of Navy.

2 MS. GATES: Kimberly Gates, Navy.

3 MR. AMIDEI: Good. Well, that's the general stuff.

4 Now, Rich, if would you like to take the floor
5 for a second.

6 MR. GEBERT: Okay. Yeah. I'd like to introduce
7 everybody to Mr. Michael Iskarous. He's going to be the
8 new RPM from DTSC. I have been given a whole bunch of new
9 projects, so I'll have to kind of give off the older ones
10 to other people so I don't get overwhelmed.

11 Michael has been with DTSC for longer than I
12 have, so it's about 15 years. He's been in site mitigation
13 for, I think, 10 or 11 years, so he has a lot of
14 experience.

15 MR. AMIDEI: Welcome aboard.

16 MR. ISKAROUS: Thank you.

17 MR. AMIDEI: That was easy.

18 MR. RIPPERDA: Can you send, I mean -- well, I guess,
19 either one of you, if somebody could send an e-mail with --
20 to the whole group. I don't know if you have the whole
21 group's mailing list or not.

22 MR. ISKAROUS: I believe I did.

23 MR. RIPPERDA: If you could just send an e-mail out to
24 all of us with your phone number and e-mail address.

25 Does anybody else want to sit at the table?

1 MR. AMIDEI: We're a scary looking --

2 MR. RIPPERDA: Yeah.

3 MR. SORSHER: We don't take any comments from the
4 peanut gallery, you know.

5 MR. GEBERT: We have to leave one for Muhammad here.

6 MR. AMIDEI: Oh, well. Okay. OU-2.
7 OU-2's operating along. We received some
8 comments from the Regional Board and have responded to
9 those comments. They were relative -- they were pretty
10 easy to respond to. You guys saw a copy of that, I
11 believe, that the RPMs did. So it's operating away.
12 That one's the easy one. I like OU-2.

13 MR. RIPPERDA: Is that it? Can you tell us anything
14 about mass removed? How long it's been going? If there's
15 been down time? Just give us a little information?

16 MR. AMIDEI: No, I can't.
17 Can you guys fill that in? Kimberly or --

18 MR. FIELDS: We haven't been connected with Geofon**
19 on that.

20 MS. GATES: Oh, okay.

21 MR. FIELDS: Linda was supposed to be here.

22 MS. GATES: Yeah. Linda, actually, was --

23 MR. RIPPERDA: I'm sorry about that.

24 MS. GATES: -- supposed to be here to give a monthly
25 update, but she's sick. She called in today, so I actually

1 don't have that information.

2 MR. RIPPERDA: Okay. It's not like I have to have
3 it but it's --

4 MS. GATES: Do you want me to e-mail it to you?

5 MR. RIPPERDA: Yeah. That would be great.

6 MS. GATES: Okay.

7 MR. RIPPERDA: Since we only get together quarterly,
8 it seems like a -- you know, maybe she would have given
9 everything that I --

10 MS. GATES: Right.

11 MR. RIPPERDA: -- was interested in, but it's nice to
12 have a little slide show of the mass produced curves, see
13 how it's doing, see which -- when the SVE system gets moved
14 to a new well. Just, you know, complete little update.

15 MS. GATES: That's what she was anticipating.

16 MR. RIPPERDA: Okay.

17 MR. AMIDEI: I know I didn't get it. Sorry.

18 OU-1 actions. The expanded treatability studies,
19 it's been finalized. I sent it off to the RPMs. Right
20 now, we're working with the JPL facilities in a wonderfully
21 cooperative way, I must say, to site the facility and put
22 it in place to have the -- both the proposed OU-3 interim
23 action treatment facility and the OU-1 treatment facility
24 co-located to take advantage of some common infrastructure.

25 Looks like it's going -- OU-1 is going to go into

1 a parking lot on JPL, kind of up in the middle area of JPL.
2 And that's moving along.

3 As far as the schedule goes, I got put into a new
4 order, which came from high -- much higher than me.
5 Basically said that we're not allowed to touch dirt, you
6 know, do any drilling, do any site infrastructure work at
7 all until after the scheduled public meeting, which is
8 scheduled for late January, early February.

9 What that did is for OU-1, it's going to delay
10 drilling into the rainy season. It's going to delay any
11 pipe installation, any kind of infrastructure installation
12 into the rainy season.

13 MR. SORSHER: That treatability, that's the in situ
14 bio?

15 MR. AMIDEI: The treatability study has actually
16 extracted any in situ work whatsoever. It's ex situ
17 fluidized bed reactor, perchlorate, and carbon for the
18 VOCs.

19 MR. RIPPERDA: And then reinjecting the --

20 MR. AMIDEI: And then reinjection.

21 MR. RIPPERDA: So there's nothing we can do about that
22 now. David explained to me earlier, drilling contractors,
23 the contracting is kind of lost. So it's going to have to
24 be delayed. You know, a two-month delay on OU-1 isn't that
25 bad.

1 But we're still not happy about it, so I'm going
2 to have my management send a letter to David's management,
3 just basically expressing our displeasure that they would
4 delay something that, you know, has been in the works for a
5 long time.

6 You know, I'd appreciate wanting to wait to do
7 any work until after you have a public comment period. But
8 the public comment period -- you know, the public meeting
9 is much more focused towards, you know, the City of
10 Pasadena wells, and something that's happening on-site
11 really shouldn't be dependent on that.

12 So like I said, it's kind of too late. Nothing
13 we can about it now. But, you know, for the record, I'm
14 going to send a letter, and you guys might want to also
15 just -- you know, there's been so many delays over all the
16 years on this site and just, you know, soften them up now
17 so that in the future they already know we're unhappy.

18 MR. GEBERT: All right. All of the issues with the
19 water board as far as the disposal of any permit
20 requirements have all been worked out?

21 MR. AMIDEI: We got a letter in to Muhammad now, which
22 outlines our interpretation of all the substantive
23 requirements and how we're going to meet those substantive
24 requirements for their approval.

25 So, yes, those are the sum of what you have got

1 to do. So that's in to them right now.

2 MR. GEBERT: Okay. So the ball's in their court as
3 far as -- okay.

4 MR. AMIDEI: And, let's see. There was mention also
5 of the in situ pilot study, the final report next month.
6 And that's the end of the in situ work, for the moment, at
7 least.

8 Any questions on OU-1?

9 MR. ZAMPIELLO: I had a question.

10 When you're talking about the phase that has been
11 delayed, it's going to treat water, where was that water
12 going to go? Was it going to go in the stream or --

13 MR. AMIDEI: ReInjection.

14 MR. ZAMPIELLO: And you're just going to inject it
15 back in the basin, is that it? Raymond Basin hasn't had a
16 letter or anything saying that's what you plan to do.

17 MR. AMIDEI: Okay. We can let you in on --

18 MR. ZAMPIELLO: Kind of what we'll talk about this
19 afternoon. We'll get into that but --

20 MR. AMIDEI: Yes. And that's something I want to
21 coordinate with you. It's one of the questions I've got,
22 is how -- how does the Raymond Basin fit into any sort of
23 reinjection ideas?

24 Is there an approval step, or what do we have to
25 do? And the Regional Board was kind of first on the list

1 and then --

2 MR. ZAMPIELLO: Sure.

3 MR. AMIDEI: -- definitely we want you to know about
4 it.

5 MR. RIPPERDA: You know, we're so far ahead of
6 schedule. Let's talk about it a little now in case there's
7 people here now who aren't going to be here this afternoon.
8 In fact, why don't you give a really quick overview of,
9 like, how many wells, how many gallons per, whatever, day
10 or year and just --

11 MR. AMIDEI: Okay. The expanded treatability study is
12 going in -- it's really going to be installed in two
13 phases, but the total of which is going to be four
14 extraction wells -- no -- two extraction wells and four
15 injection wells total.

16 And they're situated in such a way that the
17 extraction wells are at the down gradient side of the hot
18 spot, and the up gradient -- and the injection wells are on
19 the up gradient side, so it's going to create a flow cell,
20 if you will.

21 Total GPM is envisioned at the 300-ish up to 500.
22 The treatment technology that's -- can be employed can be
23 ex situ -- everything's ex situ -- first liquid phase,
24 granular activated carbon to get rid of the VOCs,
25 followed by fluidized bed bio reactor to get rid of the

1 perchlorate.

2 MR. RIPPERDA: Does Raymond Basin, in its
3 adjudication, care within a site if it's net zero gallons
4 if something's withdrawn and then reinjected or is it
5 basically just an information letter or is something --

6 MR. ZAMPIELLO: When I talked to David before, I
7 think, just off the top of my head without having our
8 attorney review the judgment, would be, if nothing else, to
9 get an endorsement by the Board to say -- you know, a Board
10 action saying that we have no problem with this going on.

11 There's no existing permit. This is all new
12 ground. But we are charged by the Court to oversee and
13 look out for everybody's rights. That's part of what this
14 information thing this afternoon is.

15 MR. RIPPERDA: Uh-huh.

16 MR. ZAMPIELLO: Just off the top of my head, it would
17 probably be just an agenda item for the Board and they
18 would --

19 MR. PALMER: Any time that someone other than a party
20 to the judgment produces water from the basin, that's a
21 violation of the judgment. But as we did in the past, we
22 had a letter on file telling us how much was going to be
23 extracted.

24 The Board, as the judgment is written, can
25 approve of these types of programs, but they have -- if

1 someone is going to extract water, that's -- they have to
2 know that.

3 MR. AMIDEI: Okay.

4 MR. PALMER: But to put it back -- straight back into
5 the ground, I'm sure is a formality or the Board will
6 approve of that, and they certainly are endorsing
7 (inaudible), involve the idea of assisting with the cleanup. It
8 isn't costing us water from the basin. They're going to
9 endorse it. It needs to get their approval.

10 MR. AMIDEI: Okay.

11 MR. RIPPERDA: And how often does the Board meet?

12 MR. HAYWARD: We've got a scheduled meeting January.

13 MR. ZAMPIELLO: Yes. That is the big Board. The
14 executive committee can review it so if there are any
15 concerns before it's ratified in January -- I mean, you
16 know, if the -- pretty much, if the executive committee
17 approves it, then it's a matter of ratifying it in January.

18 MR. HAYWARD: My -- just clarification for me, David.

19 In light of what we're just discussing, I was of
20 the opinion that if we have a question whose water you're
21 pumping, I was of the impression that it would be the City
22 of Pasadena's water rights that you would be working with.

23 MR. AMIDEI: And in the -- the OU-3 activities, that's
24 going to be a combination of the City's rights and a
25 similar reinjection scenario.

1 So it's a -- since it's a net zero -- when you're
2 reinjecting, it's going to be a net zero action, so it's
3 really -- if you look at the big picture, we're not really
4 extracting water except to clean it and then put it back.
5 So it's not really a water right, unless I'm wrong here
6 somehow, that was my interpretation of things.

7 MR. HAYWARD: So, in one case, we are dealing with the
8 City of Pasadena's water rights, and the other case we're
9 not --

10 MR. ZAMPIELLO: On OU-3, the comment letter that we
11 sent, we made a note on the water rights.

12 MR. AMIDEI: Okay. What I'll do for OU-1 is I will
13 send -- I should send it to --

14 MR. ZAMPIELLO: We're going to have the executive --
15 or the majority of the executive committee at 1:00 today so
16 they can probably -- we can figure out those details of how
17 they would -- you know, what they're looking for to move
18 ahead.

19 MR. AMIDEI: Okay. Let's talk about it this
20 afternoon, then. But you're welcome to a copy of the
21 extended treatability study which outlines exactly what's
22 going on and not quite when.

23 MS. COLLINS: Has the Regional Board issued comments
24 on that proposal?

25 MR. AMIDEI: They have an expanded treatability study.

1 We did get comments from the Board on them, and we
2 addressed those comments.

3 MS. COLLINS: And your treatment goal for this is --
4 for perchlorate is N.D.?

5 MR. AMIDEI: Below four, which is nonreportable.

6 MR. HAYWARD: David, referencing what you talked about
7 earlier and the delay in the on-site excavation because of
8 seasonal concerns and weather concerns and the desire to
9 have a community meeting, did the City of Pasadena issue a
10 position on that? Did they -- as Mark did, you don't like
11 it, but if that's the way we have to approach it, we will.

12 City of Pasadena has a specific view as to what
13 do you go along or --

14 MR. TAKARA: For OU-1?

15 MR. HAYWARD: Yes.

16 MR. TAKARA: Not that I know of. Not from Sean.

17 MR. HAYWARD: Okay.

18 (Mr. Muhammad Zaidi enters room.)

19 MR. RIPPERDA: Hi, Muhammad.

20 MR. AMIDEI: Good morning. Man of the hour.

21 Okay. That's OU-1.

22 MR. RIPPERDA: Well, let's just -- so we're talking
23 about OU-1, the on-site treatability, you know, pump, treat
24 ex situ reinject.

25 And DHS had asked if you guys had had any

1 comments on it, and David had said that you did and you
2 resolved it. So since you're here, we might as well make
3 sure --

4 MR. ZAIDI: Well, about a month ago when we had a
5 meeting, after that I talked to (inaudible). I think he might have
6 mentioned in the meeting also that perchlorate is not
7 covered by the WDR that we have a general permit for here.

8 MR. AMIDEI: Okay.

9 MR. ZAIDI: So -- but he said that if the EPA is --
10 like to exempt JPL from the WDR requirement, then we would
11 have monitoring require -- work plan for monitoring; that
12 we have enough monitoring control to reinject.

13 MR. AMIDEI: Okay.

14 MR. ZAIDI: But we need a letter from EPA.

15 Anyone discuss with you, but without (inaudible).

16 MR. RIPPERDA: Okay. Well, let's --

17 MR. ZAIDI: I think we can discuss that later on.

18 MR. RIPPERDA: Yeah. Why don't you call me either
19 tomorrow or Monday or --

20 MR. AMIDEI: Yeah, Monday. Not Tuesday.

21 MR. RIPPERDA: Actually, I'm working on Tuesday.

22 So is this something he wants from a water
23 division person, since this is -- ties in with the Clean
24 Water Act Porter Colonge or is it something that can come from
25 me?

1 MR. ZAIDI: I can confirm with him. He's not in until
2 Friday. Monday, I can talk to him and give you a call.

3 MR. RIPPERDA: Okay. Or maybe the two of you can talk
4 to me directly. What I don't understand how the federal
5 EPA can exempt a site from the -- your basin plan waste
6 discharge requirement.

7 MR. ZAIDI: I understand. Because last time, I think
8 David mentioned in the meeting that -- some CERCLA section
9 exempt --

10 MR. RIPPERDA: I can -- I can send him a letter
11 explaining that.

12 MR. ZAIDI: Yeah.

13 MR. RIPPERDA: So if anybody doesn't know the whole
14 CERCLA process, if a cleanup is being done under the
15 federal law CERCLA, that cleanup is exempt from local or
16 state permits, actually, getting the permit. But that
17 action still has to comply with any conditions that permit
18 would have had.

19 This is very different from DHS's permit process
20 for distributing water because that's actually done by the
21 water purveyor. So NASA is not exempt from DHS's permit
22 for distributing water, but they are exempt from permits
23 for on-site actions, you know, such as pumping water,
24 treating it, and reinjecting it.

25 Normally the Regional Board would have to issue a

1 permit for that. Under this federal law, NASA is exempt
2 from it, but they still have to comply with any
3 requirements that permit would have had in it. So any --

4 MR. ZAIDI: Exactly.

5 MR. RIPPERDA: Right.

6 So if all he wants is a letter from me --

7 MR. ZAIDI: Substantive requirements (inaudible) --

8 MR. RIPPERDA: So then you have to provide the
9 substantive requirements.

10 MR. ZAIDI: We will provide. But we need a letter.

11 MR. RIPPERDA: And then I'll send a letter that just
12 says this is a CERCLA action and they are exempt from the
13 local permit.

14 Okay. Now I understand.

15 MR. ZAIDI: Yeah.

16 MR. FIELDS: I have a question.

17 Is a substantive requirement for reinjection
18 with -- for treating water for perchlorate, probably would
19 be to remove the perchlorate to less than four. So -- you
20 know what I mean? The action, even though your WDR doesn't have
21 perchlorate in it, a permit that you would issue would
22 require removal of perchlorate probably due to levels we
23 are talking about.

24 I don't see how -- I'm just wondering how the
25 action may not achieve the water board's substantive

1 requirement for perchlorate since it's removing the
2 perchlorate.

3 MR. ZAIDI: I need to, again, make sure this first
4 instance that we're dealing with this kind of situation so
5 I need to discuss with my management. And we can probably
6 follow the same examples. They are going to give me some
7 guidance on how to proceed --

8 MR. RIPPERDA: There's all kinds of hazardous waste
9 cleanups for -- mostly for solvents, but providing things
10 in ground water where -- there's different ways to
11 interpret the State's law and that's -- you know, either
12 that whatever you pump out, treat, and reinject has to be
13 nondetect under the whole non-degradation policy, or that,
14 as long as you're improving the quality of the water, you
15 don't have to hit some nondetect or some treatment goal.
16 You just have to improve it. Different boards interpret it
17 differently, and I don't know what your --

18 MR. ZAIDI: Yeah. Anti-degradation policy.

19 MR. RIPPERDA: Right. But there's -- like I said,
20 there's different interpretations of the anti- --

21 MR. ZAIDI: Yeah.

22 MR. RIPPERDA: Some boards view it as, you know,
23 improving the quality of the in-situ water, and others view
24 it as, you know, meeting pristine conditions.

25 MR. ZAIDI: Well, I think we are pretty flexible.

1 MR. RIPPERDA: Okay. That's good.

2 MR. SORSHER: And the term "permit" was used, but in
3 this case the WDR is the Regional Board's permit --

4 MR. ZAIDI: Yes. Any injection into the land --

5 MR. SORSHER: Right.

6 MR. ZAIDI: -- into the vadose zone would require a
7 WDR.

8 MR. SORSHER: And that is the permit, in effect.

9 MR. ZAIDI: That's the permit. Yeah.

10 It's a discharge to, it's kind of a NPDES
11 permit, but NPDES is to discharge surface water to
12 maybe storm drains. But this is -- if you have an
13 infiltration basin, if you discharge there, that will be --
14 that will require WDR.

15 MR. AMIDEI: Anything else on OU-1?

16 OU-3.

17 As you know, on OU-3, we're working with the
18 City of Pasadena to try and install a removal action
19 utilizing the City's wells, Arroyo and 52, treating the
20 water for VOCs and perchlorate, and then taking that water
21 and reinjecting that water on the western boundary of the
22 facility, unless the City would like the water and then
23 have them take the water and purvey it.

24 The -- that action requires a couple of things:

25 One is for the purveyors, they need the water supply

1 permit, including the 97-005 policy, since it's an impaired
2 source. And that's what we're working toward.

3 As far as status goes, we're working an agreement
4 with the City to do just that.

5 The 97-005 policy documents and the source water
6 assessment, we've got DHS comments, good comments. We're
7 incorporating those and should have the source water
8 assessment back into NASA's hands -- do you remember the
9 date?

10 MR. FIELDS: I submitted it.

11 MS. GATES: It's in our hands.

12 MR. AMIDEI: It's in my inbox.

13 MR. SORSHER: Whenever we come back into my hands.

14 MR. AMIDEI: Yeah. Right. Well, actually, it will go
15 to the City first.

16 MR. SORSHER: Okay. So what are we looking at? A
17 month? Two months?

18 MR. AMIDEI: Not that long. Next week.

19 MR. SORSHER: Okay.

20 MR. AMIDEI: I'll get it to the City by next week, and
21 then we agree that we can do a simultaneous review?

22 MR. TAKARA: Yes.

23 MR. AMIDEI: So there you go. It'll have a table with
24 the comments and how each comment was responded.

25 MR. SORSHER: Great.

1 MR. AMIDEI: Raw water quality, couple of technical
2 problems associated with that. But we should be solving
3 those and having that in NASA's hands --

4 MR. FIELDS: The date is November 18th.

5 MR. AMIDEI: Hoo-ha.

6 So that's getting accomplished as far as
7 contracting for that. Although it may seem a little bit
8 ahead of the game, but it's not really when you try and do
9 things as fast as possible.

10 Contracting for the removal action treatment
11 system, that's going to be a Navy contract scheduled to be
12 published in the CBD. I think everything's happening on
13 the 18th. Seems that way. It must be a magic date, but
14 that's going to be published in the CBD on the 18th.

15 MR. RIPPERDA: What's CBD?

16 MR. AMIDEI: Commerce Business Daily. It used to be a
17 paper; now it's a website.

18 And then that contracting action looks to be
19 awarded in the late February time frame.

20 MR. SORSHER: Have you, therefore, made a firm
21 decision exactly what the treatment train is going to be if
22 you can --

23 MR. AMIDEI: No. No.

24 MR. SORSHER: How are you going to contract it if
25 you --

1 MR. AMIDEI: It's a good question.

2 The contracting mechanism is called the best
3 value contracting scenario where you have some basic --
4 some basic requirements, and then you have best value
5 criteria that you judge the proposals.

6 The basic requirements are that it take water
7 that is from an impaired source, and we give the water
8 quality and the contaminant levels, et cetera. You take it
9 and remove the VOCs and destroy the perchlorate. And it
10 will be done in a fashion that has, at least, conditional
11 acceptance by DHS.

12 Part of the data requirements is how are you
13 going to comply with the conditions of the conditional
14 acceptance? Some of the best value criteria are schedule
15 and how quickly can this be installed and delivered,
16 sustainability type things, electrical consumption, that
17 sort of activity; how toxic and -- toxicity and quantity of
18 the waste produced, that sort of thing. And then we'll
19 judge the contracts and award it.

20 So I don't have a way of distinguishing
21 between -- or deciding right now, without having proposals
22 in place, which DHS conditionally accepted technology to
23 utilize for the removal of perchlorate.

24 MR. SORSHER: So basically you're going to be looking
25 for value.

1 And is there a targeted effluent quality
2 that --

3 MR. AMIDEI: Absolutely.

4 MS. VECCHIO: And what is that, by the way?

5 MR. AMIDEI: For what component?

6 MS. VECCHIO: All of them.

7 MR. AMIDEI: Drinking water standards, basically.

8 MS. VECCHIO: Okay. For operable units, you have to
9 treat to ND for most constituents that you are treating for
10 VOCs, perchlorate, nitrate.

11 We don't -- we allow for blending of nitrates to
12 bring it down to acceptable levels. But if you're treating
13 for specific constituents in operable unit (inaudible) you
14 must treat constituents down to ND, not drinking water
15 standards.

16 MR. SORSHER: I think that was --

17 MR. AMIDEI: Oh, really?

18 MR. SORSHER: -- mentioned in our comments on -- you
19 know, in passing, somewhere in the comments, in the source
20 water assessment. Somehow that had come up.

21 MR. AMIDEI: Okay. Ring a bell? It doesn't to me,
22 but I'm --

23 MR. FIELDS: It was probably before you were involved
24 with the project. But there was in another RPM
25 meeting or DHS meeting where --

1 MR. SORSHER: Yeah. In fact --

2 MR. FIELDS: -- other permit under 97-005 that
3 required.

4 MR. AMIDEI: So --

5 MR. SORSHER: In fact, we had sent a letter, I think,
6 to the City on this kind of issue about a year ago,
7 explaining what our requirements would be for 97-005. I
8 think it was a year ago in November, as a matter of fact.

9 MR. TAKARA: Was that cc'd also to Peter?

10 MR. SORSHER: I'm sure it was.

11 MR. TAKARA: Peter or Richard.

12 This brings up a good -- I would to bring up a
13 point here. I know, David, a new RPM is going to be
14 assigned.

15 What mechanism is in place to ensure that a lot
16 of these communications will be passed on to the next
17 person? Because there has been a lot of discussions and
18 dialogues and letters being passed back and forth between
19 Pasadena, DHS, the other agencies to Peter Robles,
20 Richard Zuromski. We notice that this has been a
21 problem -- a current problem.

22 MR. AMIDEI: Yeah. I see it as a problem.

23 MR. TAKARA: And right here, again, this is
24 what Vera had mentioned.

25 MR. AMIDEI: You're asking what mechanisms are in

1 place?

2 There's a transition period between myself and
3 another person. As far as absolute purity of 100 percent
4 transmission of information, I don't think I can guarantee
5 that between anybody. So -- but the mechanism is in place
6 for a transition period between me and another RPM.

7 But this is -- this particular point is really,
8 really important. I'm not sure it's doable.

9 MR. HAYWARD: David, comment?

10 As Vera pointed out, OU-3, the City of Pasadena
11 involvement, the Raymond Basin perspective, it's an
12 assumption that the City of Pasadena expected that water to
13 be treated to ND before they would accept it into their
14 system.

15 MR. AMIDEI: ND for all constituents?

16 MR. HAYWARD: Yes.

17 MS. VECCHIO: For the constituents that need to be
18 treated. Okay. We have exceptions to that. For example,
19 nitrate is one of them.

20 MR. AMIDEI: Okay.

21 MS. VECCHIO: Okay?.

22 MR. AMIDEI: Actually, the nitrate will be taken care
23 of.

24 MS. VECCHIO: Right. Right.

25 So we'll have to deal with that on a

1 constituent-by-constituent basis, but the more likely
2 scenario is that you treat down to ND.

3 MR. AMIDEI: Okay.

4 MR. SORSHER: And so far, you know, all you've
5 identified -- and we haven't finished the step one and
6 step two of the 97-005. So, so far, all you've really
7 identified as problems were the VOCs and the perchlorate.
8 Now, I think they -- you know, they can be treated to ND.

9 Now, if something else turns up in the source
10 water characterization or something, then we'll have to
11 take another look at it. Maybe the -- maybe whatever
12 equipment is envisioned for those first two contaminants
13 will also handle -- for example, if there's some other
14 organic that's removable, if you're going to be using GAC
15 for the water, maybe that will also take care of it.

16 MR. AMIDEI: Okay. Let me take this back and analyze
17 it for what the actual impact is and see what we can do
18 from there.

19 MS. VECCHIO: The other question that I have is that
20 you're going to have probably a number of -- I'm not
21 sure -- vendors or whether they're consulting firms, make
22 the proposals to you.

23 MR. AMIDEI: Uh-huh.

24 MS. VECCHIO: Are we going to be allowed to be part of
25 that process to make the evaluation and provide input based

1 upon our knowledge base of a lot of treatment technologies
2 that are in place to date? Or are you going to make a
3 final decision and say, "Okay. This is what we're going to
4 do. This is our proposal"?

5 MR. AMIDEI: I don't have a problem running it by you
6 before it's awarded.

7 MS. VECCHIO: Okay.

8 MR. AMIDEI: I don't have a problem with that.

9 MR. RIPPERDA: I would think that NASA not only should
10 not have a problem with that, but you almost must, in the
11 contract selection process, you know, include DHS, City of
12 Pasadena, obviously, and the state and federal regulators.

13 You want to make sure that everybody is on board
14 before you're selecting -- if you -- to follow the CERCLA
15 process, you've got to do an FS. And part of the reason
16 for that, where you evaluate implementability and cost and
17 the effectiveness, community acceptance, date acceptance,
18 blah, blah, blah, and all the criteria, you know, you do
19 your contract procurement and select bio, because it's
20 cheaper.

21 And then DHS or the regulators or the public
22 says, "No. You didn't evaluate your criteria effectively."
23 So -- you know, maybe you're in a catch 22, but you can't
24 just go out there and select your process without -- and
25 your treatment system without going through the whole

1 selection process.

2 MR. AMIDEI: Okay. What I'll do is I'll -- man, that
3 complicates the --

4 MS. VECCHIO: Yes, it does. But I think ultimately --
5 I think ultimately it's to your benefit, to the City's
6 benefit, and also in the sales process that we have to do
7 in the public hearing process.

8 MR. AMIDEI: I think what I'd like to do is in
9 probably early February, before the contract is awarded,
10 present to DHS the RPMs, and the City's going to be
11 involved in the selection. So present the what's and why's
12 of what we're selecting and give you a background of what
13 the proposals are. I don't think you want to be actually
14 involved in the reviewing of all the proposals for
15 everything.

16 MR. RIPPERDA: No. But we -- I guess we need to back
17 up a minute.

18 We only hold these meetings quarterly, and some
19 people aren't at all meetings, so just really quick, you're
20 planning on, as soon as possible, getting a treatment
21 system in place, pumping water out of the City's wells or a
22 new well you install immediately adjacent, and then
23 reinjecting it back on NASA property while you're waiting
24 for the 97-005 process to go through. And that's being
25 done as a removal action. And that's -- you know, that's

1 fine. That's legal.

2 One problem with it is that you've got, then, all
3 your money invested in the capital infrastructure for that
4 treatment system that you can go ahead and select without
5 DHS approval for reinjection, but however many millions you
6 spend on that -- you know, you're de facto selecting that
7 as your final treatment system. So obviously, you should
8 have their input, even though you don't need it.

9 MR. AMIDEI: Yeah. I agree.

10 MR. SORSHER: Not only that, if you are going to use a
11 new well as a -- further down the road, it becomes a source
12 of drinking water, we're going to want to review the design
13 of the construction of that well.

14 MR. AMIDEI: Okay.

15 MR. SORSHER: Which is not a big deal but --

16 MR. AMIDEI: Currently, we plan on using the existing
17 wells.

18 And, as a matter of fact, one of the things we
19 want to talk about is what the results of the sam -- the
20 inspection of those wells via video and spin logging,
21 et cetera.

22 But from a procurement standpoint, what I'm
23 hearing is that when we go through our initial evaluations
24 with the Navy contract, once we -- the panel goes through
25 that initial step, we can give a presentation to the RPMs

1 and DHS about the what's and why's of what we're selecting
2 and what the proposals were.

3 Does that sound like a reasonable progression?

4 MR. RIPPERDA: Kind of. We, at EPA, and I'm sure the
5 state agencies have the same problem of preselecting a
6 remedy before you go through the public process. You know,
7 we hate to, like, "Oh, no." It's like, "Hold up. Go
8 slow." You can't do what you want to do, but, you know,
9 public involvement is important.

10 And by selecting this treatment system for
11 injection, you're going to have millions invested, so then
12 when you go to do your treatment system for your water
13 purveying, you know, the obvious assumption is that you're
14 just going to use that same treatment system.

15 But you're going to have to go through the full
16 FS at that point. And if, for some reason, let's say you
17 pick bio -- there's nothing wrong with bio -- but let's say
18 you pick bio and either DHS or, you know, a huge community
19 outcry, or one of the regulators doesn't like it, it's
20 like, well, tough. You spent ten million on
21 infrastructure, go out and spend another ten million to do
22 ion exchange.

23 MR. AMIDEI: What do you -- what are you suggesting
24 the solution might be?

25 MR. SORSHER: For starters, I don't even know if this

1 is the right forum to, you know, be discussing all this.
2 I'm just wondering if we ought to have, like, kind of a
3 focused meeting to just keep Mark, myself, Muhammad in the
4 loop, and --

5 MR. RIPPERDA: Mike.

6 MR. SORSHER: And Mike while this thing is evolving.
7 So, you know, if we could give you whatever feedback is
8 appropriate to help guide this in the direction that it's
9 ultimately going to be successful.

10 I'm kind of feeling we're kind of out of the loop
11 as far as these guys going ahead and doing their thing.

12 MS. VECCHIO: Ultimately, we're not going to say you
13 shall use this type of treatment. What we will look at is
14 what the capabilities of the treatment processes are,
15 whether or not they're conditionally accepted. And also,
16 based upon some of the other treatment facilities that we
17 have up and running, whether or not other treatment is
18 provided.

19 For example, if you use the ISEP system, that you
20 have, you know, acid treatments and pH adjustment, yada,
21 yada, yada, all of the necessary treatment processes which
22 are going to produce the water, that it's going to go out in the
23 distribution system and not cause any other problems. So
24 ultimately, we're not going to say to you, you shall use
25 these treatment processes.

1 MR. AMIDEI: Okay.

2 MS. VECCHIO: You can come to us and say, "This is
3 what our proposal is." And we look to see if it is
4 conditionally accepted. If it is not conditionally
5 accepted and you are bound and determined to use this
6 treatment process, then there may be a pilot study or a
7 demo study that will be required, which appears to be what
8 you seem to be heading towards by the fact that you want to
9 install this treatment, you want to have it up and running,
10 and you want to inject for a certain period of time to
11 basically demonstrate that you have the capability of
12 removing to the levels that we require.

13 MR. AMIDEI: Actually, the -- one of the requirements
14 in the Request for Proposal will be that whatever treatment
15 technology is proposed must be conditionally accepted. So
16 that's an underlying foundation period.

17 MS. VECCHIO: Yeah. Right now --

18 MR. SORSHER: (Inaudible) already on our list.

19 MS. VECCHIO: -- there are very few conditionally
20 accepted treatments for perchlorate.

21 MR. AMIDEI: That's correct.

22 MS. VECCHIO: But there are several pilot studies
23 occurring right now out at Castaic Lake. Castaic Lake
24 Water Agency is sort of the umbrella water company that is
25 sponsoring it for a number of the water utilities out in

1 the Santa Clarita area. So they are looking at some other
2 technologies that also may be accepted. But the more
3 likely scenario is not until early -- early to mid next
4 year where we know the acceptance of these technologies.

5 MR. AMIDEI: Okay. It's not -- I'm not going to go
6 buy something that is en route to conditional acceptance.

7 MR. RIPPERDA: It's kind of irrelevant to this maybe,
8 but just for our information, what are those technologies
9 that Castaic Lake is looking at?

10 MS. VECCHIO: Well, they're looking at different types
11 of biologically active G.A.C., a fixed bed G.A.C. They're
12 looking at some throw-away resins. They're looking at some
13 fixed bed resins. (Inaudible.) So there's four different
14 types.

15 Heather, am I right on that (inaudible)? Is
16 there another one?

17 MS. COLLINS: (Inaudible.)

18 MS. VECCHIO: (Inaudible.)

19 MS. COLLINS: You have could different --

20 MS. VECCHIO: There are two different reactors that
21 we're chasing. There is a fixed bed, and then there's
22 the --

23 MS. COLLINS: Fluidized bed.

24 MS. VECCHIO: -- fluidized bed. And then there's
25 throw-away resin, and then there's a fixed bed resin.

1 So the one -- the one that is -- the fluidized
2 bed one is similar to the one that is used up at Rancho
3 Cordova, except they're using a different food source for
4 the bacteria. So that's the only difference for that one.
5 So that was already conditionally accepted. So there are
6 three other ones that they are looking at. But we already
7 have some fixed beds, and we also have some throw-away
8 beds, I think, for perchlorate out there.

9 MR. AMIDEI: Ion exchange.

10 MS. VECCHIO: Yeah. They are all the ion exchange;
11 right.

12 MR. AMIDEI: Okay.

13 MR. RIPPERDA: So back to your question of what should
14 you do? This is some CERCLA legal borderline mumbo jumbo,
15 but EPA and the State regulators always have a problem
16 when -- it's usually DOD, but now NASA's acting just like
17 DOD -- does what's called a removal action where you can
18 select a treatment system with very little regulator or
19 public involvement and where that has a fairly high capital
20 cost.

21 And when you go to the final remedy selection,
22 you've done what's call preselected your remedy because the
23 cost of doing something different is going to be millions
24 of dollars; the cost of continuing what you're doing is
25 essentially zero. And so, you know, therefore, it's just

1 like ipso facto, if you pick what you've already
2 selected.

3 So we'll have to talk about this some more. You
4 know, we've been pushing you to get something in place,
5 start treating, control the plume, but if you've been doing
6 it all along -- you're a little bit caught by things beyond
7 your control. You haven't been on the process long enough.
8 But -- and you guys should have been doing a feasibility
9 study, you know, having your contractors evaluate all these
10 techniques, you know, selecting a technique before you
11 award a contract.

12 MR. AMIDEI: Uh-huh.

13 MR. RIPPERDA: So NASA essentially has kind of screwed
14 up by not doing your feasibility study, not selecting the
15 technology before you're suddenly rushing out to award a
16 contract for evaluating the different (inaudible).

17 MR. AMIDEI: Well, you also understand the federal
18 procurement process when you -- if I were to select a
19 technology --

20 MR. RIPPERDA: Uh-huh.

21 MR. AMIDEI: -- I have to have some sort of basis for
22 that selection.

23 MR. RIPPERDA: DOD does it all the time. And it's
24 like there's hundreds, if not thousands, of water treatment
25 systems on hazardous waste sites all over the country that

1 the federal government has done through a procurement
2 system following the normal rules, so I don't feel that
3 sorry for you here because --

4 MR. AMIDEI: Okay.

5 MR. RIPPERDA: -- DOD and other -- DOE do it all over
6 the place. So it's possible.

7 You're right. I don't know the permit system so
8 I don't know how they do it. I just know that they do it.

9 MR. SORSHER: Okay. Where there's a will, there's a
10 way.

11 MR. RIPPERDA: Yeah.

12 MR. AMIDEI: I mean, I'm certain we'll end up with a
13 treatment train, not multiple ones.

14 MR. RIPPERDA: Yeah.

15 MR. AMIDEI: What it's starting to sound like is I
16 need to give you a full briefing to -- focused audience
17 call the RPMs and you on exactly what we're up to, and how
18 about the week after next?

19 MR. RIPPERDA: Probably fine with me.

20 MR. AMIDEI: Sound like good timing? Like the sooner,
21 the better, so we can get on with it?

22 MS. VECCHIO: What's the date?

23 MR. AMIDEI: All right.

24 MS. VECCHIO: The week after next, is that
25 Thanksgiving week?

1 MS. GATES No. That's the 19th.

2 MR. AMIDEI: The week of the 17th. What year is this?

3 MR. SORSHER: 2003.

4 MR. RIPPERDA: Just as long as it's not on Wednesday.

5 MR. SORSHER: Revolution-anniversary for someone.

6 MR. RIPPERDA: So Thursday, the 20th?

7 MR. AMIDEI: Thursday, the 20th.

8 MR. RIPPERDA: Or Tuesday the 18th or Thursday the
9 20th. And even though the --

10 MR. AMIDEI: I'll set up where and when.

11 MR. RIPPERDA: Yeah. And I would always want to
12 invite any of the water purveyors or any of the Raymond
13 Basin people to (inaudible), talk about the nuts and bolts
14 of the CERCLA process and the DHS process. And if any
15 water purveyor or Raymond Basin representatives that want
16 to be there, I would you suggest, you know, it's an open
17 meeting.

18 MR. AMIDEI: Okay.

19 MS. VECCHIO: Is it possible to hold the meeting here,
20 because this is really convenient parking (inaudible) --

21 MR. ZAMPIELLO: Is there anything on that calendar for
22 Foothill?

23 UNIDENTIFIED SPEAKER: Just the 19th.

24 UNIDENTIFIED SPEAKER: There's nothing.

25 UNIDENTIFIED SPEAKER: That's a Thursday?

1 UNIDENTIFIED SPEAKER: Thursday. Then we should be
2 okay.

3 MS. VECCHIO: Thank you, Tony.

4 MR. AMIDEI: I'll set it up.

5 MS. ARTEAGA: So what, then, happens to your RFP
6 going out on the 18th?

7 MR. AMIDEI: The RFP's not going out on the 18th.
8 It's called the synopsis. It's a -- it gives the array of
9 vendors, whoever they might be, a notice that there's an
10 RFP coming up. That's all it is.

11 MS. GATES: It's just a summary of what we're planning
12 to do.

13 MR. AMIDEI: I mean, actually, until award, you always
14 have the opportunity to just say "Ah, nah. Forget the
15 whole thing." So that's why I felt comfortable going out
16 this way, is that you could always just say no. And I
17 think it's a reasonable way to go out. But I can certainly
18 explain it in more detail on the 20th.

19 MS. VECCHIO: Have you selected vendors already to
20 make this known to or --

21 MR. AMIDEI: No.

22 MS. VECCHIO: You just put it out there?

23 MR. AMIDEI: Just put it out there.

24 MS. VECCHIO: And you just hope that somebody will
25 pick it up?

1 MR. AMIDEI: They will pick it up.

2 MS. GATES: They always do.

3 MS. VECCHIO: What do they do, surf the net or
4 something?

5 MR. AMIDEI: No. It goes out in a specific place.
6 That's what's the Commerce Business Daily.

7 MS. VECCHIO: Oh, okay.

8 MR. AMIDEI: And the Commerce Business Daily has
9 categories of contracts that the federal government is
10 wanting to let. Everything from "build me a building" to
11 "launch me a rocket."

12 It's -- you know, so if you're a vendor of
13 extendable launch vehicles, you go look for pay loads that
14 we want to launch. So it's a broad scope, and everybody --
15 everybody knows where to look; right?

16 MR. HAYWARD: David, that website again?

17 MS. GATES: How about I send you guys a link when the
18 synopsis goes out which you guys (inaudible) --

19 MR. AMIDEI: Yeah. I couldn't tell you what the
20 website for CBD. I'm not a vendor.

21 MR. SORSHER: Maybe we can discuss that synopsis at
22 the meeting.

23 MR. AMIDEI: Sure.

24 MR. SORSHER: Just one of the agenda items, I guess.

25 MR. AMIDEI: Okay. Yeah. It will be focused on OU-3

1 procurement activities.

2 MR. TAKARA: For clarification, is this
3 step of going off with an RFP and reviewing the different
4 vendors prior to awarding any contract a necessary step to
5 develop a feasibility study, or is that step of the
6 feasibility study not going to be done or --

7 MR. AMIDEI: It'll be done. The feasibility study
8 comes -- when you look at the removal action and the CERCLA
9 process is something that can be done like right away to
10 contain a plume or provide some relief to reduce the risk
11 somewhere without having to understand the huge -- every
12 bit of the big picture. It's "Wow, we can do something
13 fast right now, right here. Let's go do it." And that's
14 what that's for.

15 What Mark is referring to is the fact that this
16 removal action is actually relatively large compared to a
17 quick and dirty, "Gee, we have some sludge here. Let's get
18 rid of sludge."

19 So -- and that's where the image of preselection
20 of the final remedy comes into play.

21 MR. RIPPERDA: Yeah. That's exactly it. So they're
22 still going to do the feasibility study, and I'm not going
23 to stop them from doing this removal. I'm just pointing
24 out that they're circumventing the normal process in a --
25 you know, in a legal loophole that sometimes DOD components

1 have used for nefarious purposes.

2 And, you know, NASA has no bad motives here, but
3 it's still a potential abuse, so we want to, you know,
4 point that out to them, make sure that this January,
5 February public meeting, you know, is detailed and
6 comprehensive as possible. Looks at different types of
7 water treatment systems, points out the advantages and
8 disadvantages of each so that, you know, early on, the
9 public knows everything that's going on.

10 So because they're doing this in a slightly
11 non -- nonfavored way, they're going to have to work harder
12 on the other avenues.

13 MR. AMIDEI: Other avenues?

14 MR. RIPPERDA: Like, you know, public involvement.
15 Just like more information, you know, better response.

16 MR. AMIDEI: Okay.

17 MR. ZAIDI: It's basically covered into (inaudible)
18 remedial action to immediately address the immediate
19 water quality.

20 MR. RIPPERDA: Right. More legal mumbo jumbo. Under
21 the law, there's timed critical removal actions, non-timed
22 critical removal actions, interim remedial actions, and
23 final remedial actions. And this is one of the two types
24 of removal actions. It's not an interim remedial action.

25 If anybody wants to know more about that, we can

1 talk about it later.

2 And one last thing: Gary brought up the point of
3 the new RPM coming in, what about institutional knowledge
4 and past communication.

5 Kind of agree with David. There's no way to
6 ensure 100 percent download of everything that
7 Richard Zuromski, Chuck, and David have known from being
8 RPMs on the site over the years.

9 So it's kind of incumbent on all of us, whatever
10 thing -- for DHS, or for EPA, for Pasadena, Raymond Basin,
11 the State regulators, you know, we need to make sure that
12 new RPM knows everything that's important to each one of us
13 and not just assume that, you know, he knows that a
14 treatment system should go to nondetect or that he's got to
15 meet, you know, State drinking water standards or that
16 there's a basin plan. You know, so it's kind of our job to
17 make sure the new RPM knows everything.

18 MR. ZAIDI: And also, I think the notes that are being
19 taken at this time, legally, they can be transmitted to the
20 new RPM also.

21 MR. RIPPERDA: Oh, yeah. The new RPM --

22 MR. ZAIDI: (Inaudible) all the meeting.

23 MR. RIPPERDA: -- is going to read meeting minutes and
24 go through files and talk to David, but you can't assume
25 that he's picked one little thing -- like, you know, the

1 one hugely important thing that was covered in two minutes,
2 like, you know, treat to nondetect. So some things that's
3 important to one of the agencies, you know, we have to
4 reiterate that and ad nauseam them.

5 MS. VECCHIO: We'll come in with a big sign that says
6 "treat to nondetect."

7 MR. PALMER: David, this meeting on the 20th
8 originally focused on the OU-3 procurement process and the
9 opportunity for the input from the regulators on the steps
10 and what you're going to be doing in that process; is that
11 correct?

12 MR. AMIDEI: Yes. Highly focused.

13 Thanks, Cody, for turning that down.

14 Did you see me sweating over here, or what?

15 MR. PALMER: It wasn't from the temperature you were
16 sweating.

17 MR. AMIDEI: Seventy-four makes me sweat.

18 Okay. We'll cover the procurement on the 20th,
19 then.

20 Sampling of the wells in the Monk Hill area.

21 Basically, what we found was that -- well, back up.

22 What we tried to do was use a low-flow sampling
23 technique to try and correlate samples that were taken in
24 production wells, that -- wells that are designed to
25 produce, period. See if we could take vertical

1 stratification of the chemicals involved using this
2 low-flow technique and correlate them to the wells that are
3 nearby that are designed to take -- for sampling wells, so
4 they're designed to take discreet vertical samples.

5 Sounds like a neat deal, except it didn't work.
6 The condition of the wells were basically -- flow across
7 the screens was too low to achieve any type of decent
8 results whatsoever. That was in any of the wells.

9 We looked at video and spinner logs, and the
10 video logs showed combination of the incrustation and
11 biological activity on the well screens, which you might
12 expect after years of inactivity.

13 So we're currently -- that great effort gone.
14 We're currently developing a plan, and we'll provide it to
15 the City in accordance with our agreement to drill a well
16 near -- actually, in the Sunset well complex, to look at
17 that, in that area so that -- it looks like it will be a
18 thousand footer, five-ish sampling zones. And that
19 paperwork will go to the City. It's actually due tomorrow,
20 but it might be Monday.

21 MR. TAKARA: When you're saying the plan?

22 MR. AMIDEI: The PSP-2003-2.

23 MR. TAKARA: All right.

24 MR. AMIDEI: What did I do, stop sweating?

25 MR. ZAMPIELLO: (Inaudible.) Half of them are

1 freezing and half of the are burning up.

2 MR. PALMER: David, I'm just curious on this testing
3 program because of the condition of the
4 Pasadena well due to activity, you have this
5 problem.

6 Is there any thought of going further east or
7 further west in looking at other wells over here in
8 La Canada or (inaudible)?

9 MR. AMIDEI: We don't have -- we don't have the wells
10 to correlate, the sampling wells that are designed
11 specifically. And that's to validate the technique, you
12 had to have that calibra- -- yeah, the monitor well as a
13 calibration point.

14 MR. PALMER: I see.

15 MR. AMIDEI: And in the Monk Hill area, of course, we
16 got that. Out and about there's nothing to correlate it to.

17 MR. PALMER: (Inaudible) there are Monk Hill wells
18 further to the east and further to the west.

19 MR. AMIDEI: We did Arroyo, 52, Casitas, and Atlanta.

20 MR. FIELDS: Casitas was plugged.

21 MR. AMIDEI: Plugged as (inaudible).

22 MR. FIELDS: (Inaudible) apparently.

23 MR. AMIDEI: So we did try four wells. One of them --
24 well, we got the equipment past the static water level in
25 three wells, and they all showed the same. So we decided

1 that -- to extend that to the Sunset wells wouldn't be --
2 there's nothing to calibrate it to, so we're just going to
3 propose to the City that we punch a well in there. And
4 like I said, a thousand footer with five zones.

5 MR. HAYWARD: David, could you clarify for everyone
6 the proximity of the Sunset well site to the Arroyo and to
7 the Monk Hill --

8 MR. AMIDEI: Okay.

9 MR. HAYWARD: -- as to the geographical --

10 MR. AMIDEI: Sunset wells are on the other side of 210
11 by a fair piece down the Arroyo.

12 Is that a good way to describe it? I don't --

13 MR. TAKARA: Yeah. Well, the Sunset -- we have five
14 wells in this one region that discharges into the Sunset
15 reservoir. That's how it got its name. It's about a mile
16 and a half -- two miles southeast of this location. And
17 it's located on -- let's see. What road? -- Sunset and
18 Mountain.

19 MR. HAYWARD: Okay. So it's relatively downtown
20 Pasadena?

21 MR. TAKARA: Yeah.

22 MR. HAYWARD: Yeah. Very close.

23 MR. TAKARA: (Inaudible) of there.

24 MR. PALMER: That was my question, when you have a
25 well at Lincoln Avenue that is 2,000 feet from the facility

1 and a well over here that's 2,000 feet away (inaudible), if
2 those couldn't be -- would those be more beneficial, add
3 some value (inaudible) --

4 MR. AMIDEI: 2,000 feet's a long way to do the
5 correlation from a vertical stratification standpoint.

6 MR. HAYWARD: Are we trying to -- are we trying to
7 establish a movement within the aquifer as to that
8 particular selection of that monitoring well?

9 I mean, I'm visualizing Sunset and Mountain.
10 That is right next to your yard --

11 MR. TAKARA: Our main yard, that's right.

12 MR. HAYWARD: So I'm trying to visualize the origin of
13 the plume and then follow it, and that general direction,
14 trying to establish a direction in which you're heading.

15 Have we established that already, or is it that
16 something that you know and we don't know?

17 MR. AMIDEI: No. No. This is an agreement between us
18 and the City to look at that particular area. It's really
19 quite simple as that.

20 MR. HAYWARD: Okay.

21 MR. AMIDEI: We're also looking at expanding the
22 groundwater monitoring network and that's a discussion that
23 I want to have with the RPMs, to see what that direction
24 and thinking might do.

25 But this is solely between us and the City. It's

1 not -- it will give us data. Everybody is welcome to the
2 data. No doubt about that. It's just something that we
3 agreed to do in exchange for access to some of their lands.

4 MR. HAYWARD: Do you have any projection as to if the
5 Sunset -- proposed Sunset well does not give you the data
6 that you expect, have you -- do you have any idea as to
7 where the next sampling well might be located? Have we
8 gone that far?

9 MR. AMIDEI: We're -- the two are relatively
10 independent. I don't have expectations right now for the
11 data associated with the Sunset well.

12 The other aspect of placing additional well or
13 wells to enhance the groundwater monitoring network is
14 something I want to discuss the placement of with the RPMs
15 and have that. So that the two are relatively independent,
16 in my mind.

17 MR. RIPPERDA: Ron and you both have kind of the same
18 question about just, you know, regional perchlorate plume
19 delineation. And I, at least, after initially -- like your
20 very localized wells, just at JPL, don't encompass the
21 perchlorate that is found elsewhere.

22 And JPL, not, you know, NASA has always floated all
23 kinds of arguments. And I have been kind of letting that
24 regional plume delineation go because we've having enough
25 trouble just getting the OU-1 and -3 immediate problem

1 taken care of.

2 Given all the troubles we're having with just the
3 stuff that has to be done now, I was kind of back-burning
4 the regional plume delineation.

5 So this thing with Pasadena to do the Sunset
6 well, you know, it's something that Pasadena's been asking
7 for a long time. NASA's been saying no. And now, because
8 of land access trading agreements, they're getting their
9 well.

10 But once we get some actual decisions and
11 movement on OUs-1 and -3, then we'll start -- this is what
12 I would like to do. You know, the other regulators or you
13 guys are free to ask for anything that you want. But, you
14 know, from my point of view, I will let OU-1 and -3 get
15 finalized, and I'll start to look at regional plume
16 delineation.

17 MR. HAYWARD: But what I'm thinking, Mark, is that
18 this new proposed well at the Sunset site won't be
19 encompassed into OU-3. That's what I'm thinking. It
20 wouldn't be an additional operating unit.

21 MR. AMIDEI: Oh, no. No. No.

22 MR. RIPPERDA: Right. But it's not -- NASA is not
23 right now embarking on a system of installing wells and
24 upgrading, downgrading cost gradient. This is a single
25 well they're putting in for Pasadena, and it technically

1 could be part of OU-3. But I guess earlier, when I was
2 saying OU-3, I'm talking about the treatment system in the
3 Arroyo.

4 So if I want to get something finalized with the
5 Arroyo treatment system before I start chasing the edges
6 of, you know, parts per billion perchlorate plume because
7 NASA has -- I don't mean to beat you up too much -- but
8 NASA's had trouble doing one thing, so I don't want to try
9 to make them do two.

10 MR. PALMER: We've expressed many times, a hundred
11 percent with you, Mark, that we want to make sure that that
12 doesn't get too far in the back burner; that --

13 MR. RIPPERDA: Yeah.

14 MR. PALMER: -- it's kept on everybody's mind.

15 In fact, the comments submitted by DHS on the
16 source water assessment addressed that or called that out
17 also. We at some point -- and I agree, let's get going
18 here. But we want to make sure we keep in mind the
19 potential for east, west as well as south movement of the
20 plume at some point. But I sure don't want to (inaudible)
21 but don't put it too far on the back burner. Make sure it
22 comes (inaudible) --

23 MR. RIPPERDA: That's a good point. When the new NASA
24 RPM comes in, that's one of your jobs --

25 MR. PALMER: You got it.

1 MR. RIPPERDA: -- is to beat on him about regional
2 wells.

3 MR. ZAMPIELLO: And part of our baseline study, we're
4 identifying the data gaps, so that's where we'll --

5 MR. ZAIDI: I agree with Mark. I think that should be
6 the first priority, OU-1 and OU-3.

7 MR. RIPPERDA: But also --

8 MR. ZAIDI: There should be a delineation so that we
9 can separate the sources that are owned by NASA, JPL, and
10 other sources. There may be other sources also.

11 So it has to be -- the plume extent has to be
12 delineated, and the impact by NASA has to be separated from
13 others. There may be several plumes emerging here. There
14 may be other sources that we are not aware of or that we
15 have not considered.

16 MR. RIPPERDA: Yeah. Well, we're not going to get
17 anything decided on that front in Dave's brief tenure left
18 here, but, you know, that should be an early topic for
19 discussion with the new RPM, whoever that might be.

20 You know, we all know that there's perchlorate up
21 gradient, down gradient, whether it's from NWD injection or
22 from early days of CalTech, JPL doing rocket testing in the
23 hills. Either that's got to be part of -- NASA has got to
24 make its case, you know, cohesive scientific way for
25 everybody to evaluate and then identify the data gaps.

1 Probably move on from that.

2 MR. AMIDEI: Okay. What else do you want to know
3 about OU-3?

4 MR. SORSHER: Was it around the beginning -- earlier
5 this year, there was that water sampling event that I think
6 (inaudible) CH2M Hill coordinated?

7 I've never seen the data results from that.

8 MR. AMIDEI: I'm at a loss.

9 MS. GATES: For the raw water quality, is that the one
10 you're talking about?

11 MR. SORSHER: Yeah.

12 MS. GATES: I'm not sure.

13 Aren't you going to use the more recent data
14 rather than that sampling effort for the raw water? Or are
15 you using that sampling data?

16 MR. FIELDS: That one, the sample effort by CH2M Hill
17 was the thing called the comprehensive monitoring event
18 that we got your input on constituents. And that was conducted
19 last -- maybe a year ago.

20 MS. GATES: Right.

21 MR. FIELDS: And that data has been received as being
22 evaluated and is intended to be incorporated into both the
23 source water and the raw water quality.

24 MR. SORSHER: So I'm going to see it pretty soon?

25 MS. GATES: Uh-huh.

1 MR. SORSHER: Okay.

2 MR. FIELDS: That's the intent. There's a lot of
3 things we need to look at with regard to that data, just as
4 far as QA/QC --

5 MR. SORSHER: Okay. Is there any -- anything jump
6 up -- out at you on that, that I ought to know about?

7 MS. GATES: Nothing new and exciting, if that's what
8 you mean.

9 MR. AMIDEI: You're asking is there new constituents
10 that were detected?

11 MR. SORSHER: Possibly, yes.

12 MS. GATES: No. Not that I'm aware of.

13 MR. SORSHER: Okay.

14 MS. GATES: Just Q.A., Q.C. stuff that we're going
15 through right now.

16 MR. GATES: Right.

17 MR. RIPPERDA: I don't want to stick my nose into
18 DHS's document train, but it just strikes me as a little
19 odd that CH2M Hill took this data close to a year ago. DHS
20 has a draft of the source water assessment, and it doesn't
21 have that data in it.

22 MR. SORSHER: Well, this source water assessment is
23 really kind of a misnomer. It's actually more of a source
24 water vulnerability assessment. And yeah, it's good if --
25 as much data as you have on that, but this is also going

1 to -- as Keith mentioned, they're also using this in the
2 raw water characterization.

3 MR. RIPPERDA: (Inaudible.) And that's great. But it
4 just strikes me as a little odd that NASA's contractors --
5 I guess it's just pick on NASA day -- for data that was
6 collected a year ago and a draft is about to leave your
7 hands and go to NASA for the raw water quality assessment,
8 and the data hasn't been put into that report yet, just
9 strikes me as odd.

10 So I guess my suggestion would be to you to check
11 on your contractor to check on CH2M Hill. If CH2M Hill has
12 that much trouble with Q.A., Q.C. --

13 MR. SORSHER: Well, I don't know if it went through
14 the full CERCLA Q.A., Q.C. ringer, which I know can take a
15 year. I just thought it would be good if, at least, I got
16 a little preview peek at it, just even without it being
17 incorporated in the report, you know. There's nothing that
18 says you guys can't send me data to look at.

19 MR. AMIDEI: But I won't send you un-Q.A., Q.C. data.

20 MR. SORSHER: All right.

21 MR. AMIDEI: I'll leave it at that.

22 MS. VECCHIO: And we always have to keep in mind that
23 it's just a snapshot in time. It's just the water
24 quality at that time, that sampling date.

25 MR. ZAIDI: If it's -- if it's comprehensive, it

1 should have some baseline kind of use, if it's around in
2 the whole area. If many wells were used to determine the
3 quality at that particular time, it may serve as a
4 baseline.

5 MR. RIPPERDA: Yeah. David must be sitting on some --
6 he's got a little smile on his face, like there's something
7 going on here that he doesn't want to share so --

8 MR. AMIDEI: No. No. Well, I've already shared it.
9 I won't -- I won't give you non-Q.A., Q.C. data.

10 MR. RIPPERDA: Okay.

11 MR. AMIDEI: And that's -- why would I --

12 MR. RIPPERDA: No. That's --

13 MR. AMIDEI: -- do anything different than that?

14 MR. RIPPERDA: So then I'll just reiterate my -- a
15 year is a long time to Q.A., Q.C. data, and given all the
16 other delays that have happened over the years, I would
17 just like to start seeing faster turnaround, more inclusion
18 of data, more frequent updates of -- other sites manage to
19 do quarterly reports of groundwater monitoring and get the
20 reports out in the next quarter under the full CERCLA Q.A.,
21 Q.C.

22 So that's enough on this. I'll stop harping.

23 MR. AMIDEI: Thank you.

24 MS. GATES: Just in a sense to kind of defend him,
25 which normally I wouldn't jump in, but I feel like I kind

1 of need to because you guys are beating up on NASA.

2 MR. RIPPERDA: Uh-huh.

3 MS. GATES: There was a special sampling effort that
4 was done just for the raw water quality characterization --

5 MR. RIPPERDA: Yeah.

6 MS. GATES: The quarterly sampling was still being
7 done, and the quarterly sampling is on the website that I
8 sent out to everybody. So that does come out on the
9 website and has not been held up.

10 This sampling effort is -- we had a whole bunch
11 of constituents that DHS and everyone wanted to see
12 specifically for this effort, and it was done in December,
13 January. And it's been Q.A.'d and Q.C.'d, and we're
14 working on that to put it into this report.

15 And we were trying to get through the source
16 water assessment first to make sure that we had included
17 everything that they would want to see before we put it out
18 in the raw water quality report.

19 So we're just trying to cover the bases to make
20 sure that we don't have to do things three or four times
21 because, if we miss something, then before we put it in
22 that report, we want to make sure that we had it and that
23 we did it.

24 So I understand and it seems like it's a delay,
25 but I thought we were doing what we were supposed to be

1 doing. So if it's anybody's fault, then it's my fault.

2 MR. AMIDEI: I think what Mark's saying is we're doing
3 what we are supposed to be doing but do it faster.

4 MS. GATES: That would be my (inaudible) --

5 MR. AMIDEI: Okay.

6 MR. PALMER: David, are you going to have a 97-005
7 policy public hearing on this?

8 MR. AMIDEI: DHS will.

9 MR. PALMER: DHS will.

10 Just to give us some time frame here, is that in
11 the January, February time frame of next year?

12 MR. AMIDEI: Oh, no. No. No.

13 MS. VECCHIO: January, February.

14 MR. SORSHER: When you say "public hearing," it's part
15 of our permitting process, and that would be later on
16 towards the -- after the draft permit is completed, and we
17 have got a draft to present to the public along with the
18 97-005 document. When that's completed.

19 I think what we're talking here is a public
20 meeting in January, February to try to educate the public,
21 get some feedback, see if there's any big issues with the
22 public, to gauge opposition or what the issues might be
23 that we need to address early on, not what -- as opposed to
24 getting a surprise at the eleventh hour.

25 MR. AMIDEI: You're right. And to answer your

1 question, we're talking a year-ish.

2 MR. PALMER: Which means that any implementation is a
3 year plus-ish from now; is that correct?

4 I'm talking about for OU-3 -- just trying to get
5 a time frame here. A year from now for the 97-005,
6 ballparking; is that correct?

7 And then when you would actually be able to begin
8 pumping wet water?

9 MR. AMIDEI: Well, pumping wet water --

10 MR. PALMER: Under the 005 portion of the wet water.

11 MR. AMIDEI: That's end of next year.

12 MR. PALMER: Okay.

13 MR. AMIDEI: Unless problems occur.

14 MR. SORSHER: You've got to go through -- you know,
15 we've got to finish the 97-005 document. They've got to
16 settle on a treatment, equipment, and contractor and
17 construction. We'll have to finish our permit, our draft
18 permit, go through the public hearing process, and all
19 that. So at least a year, if not more.

20 MR. AMIDEI: I would say a year-ish.

21 On the other hand, the reinjection portion of
22 pumping wet water could happen earlier. As a matter of
23 fact, it's a benefit to have it happen earlier so that we
24 can demonstrate the treatment system effectiveness, which
25 is an additional requirement.

1 MR. SORSHER: Yeah. That will segue as well.

2 Of course, you will have to work with Muhammad as
3 far as substantive requirements for his reinjection.

4 MR. AMIDEI: Absolutely. And that, I see the letter
5 over there (inaudible).

6 MR. SORSHER: That is the big reinjection, not the
7 OU-1 reinjection. The OU-3 reinjection which is going to
8 be a larger quantity.

9 MR. AMIDEI: It's a larger quantity. That's correct.
10 Same quality requirements, however.

11 MR. SORSHER: Okay.

12 MR. AMIDEI: What else on OU-3?

13 I thought you said we were ahead of schedule.

14 MR. RIPPERDA: We still are. Like five minutes ahead
15 of schedule.

16 MR. ZAIDI: Actually, I want to bring up something
17 that can be considered.

18 When we would be injecting close to Raymond Basin
19 on the west side of the site, has there been any tracer
20 study to see the groundwater flow the velocity so we
21 can see how (inaudible) --

22 MR. AMIDEI: Tracer studies or -- I've not done tracer
23 studies, but there's monitored wells in the area where you
24 can get head values, et cetera.

25 There's ground water flow maps in that area; is

1 that correct?

2 MR. FIELDS: Yes. There are ground water levels.

3 MR. RIPPERDA: Back when Chuck was the RPM, the
4 original R.I. had huge chapter on cation ratios and
5 probable water sources that was quite good. So regional
6 flow patterns, in the immediate vicinity of JPL, I think
7 are pretty well known.

8 MR. ZAIDI: Regional flow, I am aware of that.

9 But when we inject the treatment water in there,
10 there may be some mounding, and that mounding might
11 locally disturb the gradient, and because the change in
12 gradient locally, it will be good to see the (inaudibly) --
13 if you inject the tracer also when doing the injection, to
14 see where the water is going. It's not affecting up
15 gradient, the up gradient direction where previously it was
16 here, the Raymond Basin well is here. Here we are
17 injecting things and becomes higher, and it starts feeding
18 into and affecting other wells --

19 MR. AMIDEI: What you're saying is, when we begin the
20 injections, to conduct an experiment --

21 MR. ZAIDI: Yeah.

22 MR. AMIDEI: -- when we inject the tracer?

23 MR. ZAIDI: I think it would be a good to see what
24 would be the impact of that injection on the surrounding
25 wells.

1 MR. AMIDEI: Sound like reasonable?

2 MS. GATES: Uh-huh.

3 MR. AMIDEI: Okay.

4 MR. ZAIDI: So we include any adverse affects on all
5 these wells.

6 MS. GATES: I definitely think that was the intention
7 in the plan, was to test the injection wells before
8 utilizing them. Absolutely.

9 MR. HAYWARD: One final question. One final for me.
10 I'll go back to OU-1. But OU-1 and OU-3, maybe
11 Muhammad and Mark has the input on this.

12 When I first heard the flow of max of 500
13 gallons per minute, I started thinking in terms of, okay,
14 if that's the on-site treatment process, 500 gallons a
15 minute -- I know it's 24/7 -- but do we actually consider
16 that to be an effective on-site treatment program; in other
17 words, how many generations will we be going at 500 gallons
18 per minute before --

19 MR. RIPPERDA: The 500 gallon per minute system is a
20 treatability study, so it's designed to be at -- it's not
21 designed to actually remediate the problem itself. It's to
22 put the technology on-site, get your wells running, see if
23 that water with that contaminant on-site under those
24 conditions can be treated and reinjected. And then, once
25 that's proven itself, then you can go up to full scale.

1 MR. HAYWARD: I see.

2 MR. RIPPERDA: So yeah, we're not expecting to
3 remediate the whole site at 3- to 500 gallons a minute.

4 MR. AMIDEI: Dave, you get to start (inaudible).

5 MR. SORSHER: Speaking of this public meeting in the
6 January-February time frame, I think that would also be a
7 good agenda item to talk about some of the details and
8 planning when we meet on the November 20th --

9 MR. AMIDEI: Okay.

10 MR. SORSHER: Because public meetings, as you know,
11 they just don't happen. There's a lot of planning and
12 logistics and preparation that goes into that.

13 MR. AMIDEI: This is turning into an all-day affair.

14 MR. RIPPERDA: And I was going -- that's a great
15 point. I was going to suggest that, you know, now you
16 should pretty much be picking your day, or at least within
17 a week or two, and you need to be getting your mailing list
18 together --

19 MR. AMIDEI: Yeah. That's all happening.

20 MR. RIPPERDA: -- and, you know, whatever the fact
21 sheet is that's going out, you know, we should -- that fact
22 sheet needs to go out several weeks ahead of time, so we
23 should be seeing a draft of that fact sheet, you know,
24 relatively soon. By the end of November, we should see a
25 draft fact sheet.

1 MR. AMIDEI: Okay. You guys want to see a draft fact
2 sheet?

3 MR. RIPPERDA: Yeah.

4 MR. SORSHER: You know, you're probably going to want
5 to make some presentations on it, and who's going to say
6 what, you know.

7 MR. AMIDEI: Yeah. That's all being handled.

8 MR. SORSHER: And if we're talking about, you know,
9 including the 97-005 in our ultimate plan for the
10 water, we're going to be very involved with that.

11 MR. AMIDEI: Okay.

12 MR. RIPPERDA: Now we're behind schedule, but this --
13 we do have a half an hour for other items.

14 MR. AMIDEI: This is other; right?

15 MR. RIPPERDA: Yeah. This is now other.

16 So sounds like you already -- you know what
17 you're doing, you know, public meeting is happening.
18 You've got fact sheet (inaudible) --

19 MR. AMIDEI: You don't know what we're doing.

20 MR. RIPPERDA: But we don't know what you're doing.

21 MR. AMIDEI: Okay.

22 MR. RIPPERDA: So since I don't know what you're
23 doing, I'll go ahead and make some suggestions.

24 I think DHS should have a speaking part, so give
25 them -- I don't know how much time DHS wants, but they

1 should give their take on the 97-005 process and the
2 actual, you know, requirements to purvey treated water. So
3 that should come from them rather than you.

4 One of the regulators should have a little bit of
5 time to give overview of the regulatory process, as well as
6 NASA talking about the various things you're going to talk
7 about.

8 MR. AMIDEI: Okay.

9 MR. RIPPERDA: And if the City of Pas- -- I would --
10 the City should probably talk, but that's up to you guys.

11 MR. AMIDEI: We're working together already.

12 Okay. I can do this, if I can actually hand it
13 off.

14 MS. VECCHIO: Can I ask a deadly question?

15 MR. AMIDEI: Sure. Depends on whose death you're
16 talking about.

17 MR. BURIL: I'm getting out of the way.

18 MS. VECCHIO: I guess my ultimate concern is that the
19 plume is moving. The plume is definitely moving. Lincoln
20 Avenue Water Company has been affected by the plume.

21 MR. AMIDEI: Uh-huh.

22 MS. VECCHIO: We're seeing it now in Las Flores, in
23 their wells. And there are other companies down the road,
24 like Rubio Canyon.

25 And I guess my ultimate concern is that I am

1 hoping that NASA is dealing with each one of these entities
2 to work with them to clean up. I know that there has been
3 some work done with Lincoln Avenue.

4 Has any work been done with Las Flores to date?

5 MS. GATES: I don't believe so.

6 MS. VECCHIO: Is there any intention to do so?

7 MR. AMIDEI: Certainly we'd be happy to talk to
8 Las Flores, but I -- I don't know what their situation is.

9 MS. VECCHIO: Well, they've got VOCs showing up in
10 their wells that there's no other conceivable way of VOCs
11 showing up in their wells except for the plume that has
12 migrated off-site --

13 MR. AMIDEI: Okay.

14 MS. VECCHIO: -- through Lincoln Avenue onto
15 Las Flores.

16 MR. PALMER: there getting hits of perchlorates also.

17 MR. AMIDEI: Okay. I have to look at data.

18 MR. ZAMPIELLO: Occasional carbon tet.

19 MR. PALMER: Do you know if they have carbon?

20 MR. AMIDEI: Give me data. You guys have -- where can
21 I get the data?

22 MR. ZAMPIELLO: You have the database. If there's
23 (inaudible), if there are any gaps, I'll contact
24 Las Flores. I'm sure probably Vera has (inaudible) --

25 MR. AMIDEI: Okay.

1 MS. VECCHIO: Actually -- is that Joe? That's --.

2 MS. COLLINS: I have Rubio, Las Flores, and Lincoln
3 (inaudible). That's my vested interest in why I am here.

4 MR. AMIDEI: Okay. We'll look at their data from the
5 database and see what we see.

6 MR. PALMER: Is Valley and Monk Hill
7 irrigation on that database also?

8 MR. ZAMPIELLO: Yes.

9 MR. PALMER: (Inaudible) That's what I was talking
10 about earlier, the same concern of wells on the east and
11 west.

12 MR. AMIDEI: Okay.

13 MR. PALMER: David, this public hearing in January-
14 February, that you're talking about, is that a combined --

15 MR. SORSHER: Meeting.

16 MR. RIPPERDA: Public information meeting.

17 MR. PALMER: Pardon me. That's what I said. You
18 didn't hear me.

19 Is that a combined for the OU-3, 97-005, and the
20 OU-1?

21 I think you're talking about two separate
22 meetings.

23 MR. AMIDEI: It's -- the one in a couple of months
24 is -- three months is an information meeting associated
25 with JPL's OU-1, and I'm sure OU-2 will come up as well,

1 and OU-3.

2 MR. PALMER: All combined.

3 MR. AMIDEI: With respect to it's different than the
4 required DHS sponsored meeting associated with the City's
5 permit to purvey. Water supply permit.

6 What is the actual name? I don't know.

7 MR. SORSHER: It's permit amendment to treat and use
8 the water.

9 MR. AMIDEI: Okay. So there's -- we've been talking
10 about two meetings, two different years, probably.

11 MR. SORSHER: And that will be a hearing.

12 MR. AMIDEI: Right.

13 MR. HAYWARD: David, just a little bit more
14 clarification. We've established the two different
15 meetings. The January meeting, the public meeting, as
16 we're referring to it today, would that follow the strict
17 guidelines that were established by CERCLA?

18 Because, if so, then maybe that would conflict
19 with what Mark would like to see happen at that meeting in
20 January.

21 MR. AMIDEI: Strict guidelines of CERCLA?

22 MR. RIPPERDA: The format of a CERCLA driven meeting
23 is pretty loose. There's not a requirement in the law or
24 our guidance on exactly how you have to hold the meeting.
25 Just the requirement that you hold the meeting, and there

1 be public chance to comment --

2 MR. HAYWARD: Because, at the last CERCLA required
3 meeting held by the (inaudible) -- the public meeting held
4 two years ago, two and a half years ago, Elliot Junior High
5 School --

6 MR. RIPPERDA: Yeah.

7 MR. HAYWARD: -- the panel representing on the lab
8 side of NASA literally did not answer any questions.

9 We had a stenographer there recording the
10 questions and any comments or answers they wanted to give
11 to any questions. It's addressed six months, a year later
12 in the form of a printed report.

13 MR. RIPPERDA: Yeah.

14 MR. HAYWARD: So is that where we're headed again?

15 MR. RIPPERDA: I think for this -- and that's why I
16 want to see the fact sheet. You know, I want to look at the
17 agenda, and I actually want to -- it was great that you say
18 let's talk about the whole format of the meeting on
19 November 20, because what I would like to see is more just
20 an informal, information sharing and answering questions.

21 NASA, at the meeting you're talking about, you
22 know, Peter Robles didn't want to get into -- I don't --
23 well, he wanted it that way.

24 For this time, I would like NASA to essentially
25 stand up there and say, you know, there's contaminants, you

1 know, from NASA in the groundwater. You know, we're doing
2 this SVE system to get it out of the soil so it doesn't
3 percolate down into the groundwater. We're doing this
4 treatment system on site to, like, hit the hot source area.
5 And we'd like to put a treatment system in the Arroyo, and
6 just like tell people what's going on, and then have a
7 question-and-answer period.

8 So it's not a formal public comment submittal
9 thing. I would like to see it be a, you know, question and
10 answer, and if NASA doesn't -- or its contractors or us
11 don't know the answer, we take it in writing and then get
12 back to the people.

13 So I'm hoping that this meeting is much more
14 informal.

15 MR. AMIDEI: That's the exact intent. I think you
16 just said -- I think what you just -- have you read the
17 agenda yet, because that's what it sounds like.

18 MR. ZAIDI: At this November 20th meeting, are we
19 going to discuss also the different technologies and their
20 effectiveness (inaudible), feasibility study kind of thing
21 (inaudible)?

22 MR. RIPPERDA: No. We just asked them, the poor guy,
23 to hold the meeting so --

24 MR. AMIDEI: We can talk about anything you want to.
25 It sounds to me like we ought to reserve the room for the

1 day. And that's --

2 MR. ZAIDI: It's just that we've kind of --

3 MR. AMIDEI: Do you want a technology comparison?

4 MR. ZAIDI: Yeah.

5 MR. AMIDEI: We can talk about the pros and cons
6 (inaudible) --

7 MR. RIPPERDA: I think that's actually a great idea
8 because Muhammad is new since -- we talked about all the
9 technologies a year ago, but that's when David was on the
10 site. Now, Michael is new, so when you throw around a
11 fluidized bed versus a packed bed, and, you know, they
12 might not really know what you're talking about, what kind
13 of discharge effluent you have from different types of
14 resins.

15 MR. AMIDEI: Okay.

16 MR. ZAIDI: My experience -- I was aiming at some kind
17 of previous experiences or case studies that --

18 MR. AMIDEI: Okay.

19 MR. ZAIDI: -- in which all these technologies have
20 proven to be effective. Like Vera was pointing out
21 Santa Clarita, Castaic.

22 So if that -- those kind of case studies are
23 available, maybe they can summarize -- they can be
24 summarized that this was the influent concentration, this
25 fluidized bed reactor was used, and that was the -- these

1 were the actual data that came out, the effluent --

2 MR. AMIDEI: We can put together something on that
3 order very easily.

4 And one of the first things we can utilize is the
5 on-site pilot studies that have been utilized on OU-1, so
6 it's local. And then, for the larger systems, there's not
7 that many of them, so we can certainly put together what
8 other places are utilizing and perhaps why.

9 MR. ZAIDI: Yeah. We can include the local study also
10 in addition to other sites.

11 MR. AMIDEI: Sure. Okay.

12 MR. ZAIDI: Considering what kind of technologies we're
13 dealing with there.

14 MR. AMIDEI: Okay.

15 MR. ZAIDI: Because there may be some technologic
16 differences between this site and other sites.

17 MR. AMIDEI: Okay. Sounds like this 20th meeting is
18 going to encompass OU-3 procurement, which is a big deal,
19 public meeting planning, and probably not in this order,
20 but technology discussions. As a matter of fact,
21 technology discussions ought to come first. Okay.

22 MR. ZAIDI: That way, any questions raised can be
23 covered.

24 MR. AMIDEI: Okay. Actually, one of the -- I
25 encourage you to stay for this afternoon session. I don't

1 know if you can or if you can't. But one of the producers
2 of the fluidized bed study, which is Bill Guarini, who has
3 been involved in fluidized bed bio treatment of perchlorate
4 since its inception, if you want to put it, is going to be
5 giving a presentation about the basics of fluidized bed
6 treatment that was requested by Foothill. So you're
7 welcome to stay for that.

8 MR. ZAIDI: I'm extremely busy -- I can't
9 stay.

10 MR. AMIDEI: Okay.

11 MR. ZAIDI: I'm extremely busy in the office. I have
12 to go back.

13 MR. AMIDEI: Okay.

14 MR. ZAIDI: But if you can send me the presentation --

15 MR. AMIDEI: We can send you the charts.

16 MR. ZAIDI: That will be great.

17 MR. AMIDEI: Okay. Actually, anybody is welcome to
18 stay, if you want.

19 MR. ZAIDI: I wish I could.

20 MR. AMIDEI: Bio Tech 101.

21 MR. HAYWARD: You don't have an agenda for that
22 meeting, David, do you?

23 MR. AMIDEI: Tomorrow? I mean for --

24 MR. HAYWARD: For this afternoon.

25 MR. AMIDEI: For this afternoon --

1 MR. HAYWARD: This is just a handout -- mail out that
2 we received, but there is no actual agenda, just open
3 discussion. That's what we --

4 MR. AMIDEI: Well, the agenda is really twofold: One
5 is that, since I'm assuming that the purveyors of the area
6 are going to be here, I was going to give them a quickie
7 little update on what we're doing at JPL about -- and from
8 with -- with respect to remediation. And then Bill was
9 going to give them a presentation on the basics of the
10 bio-treatment system and how that technology works on
11 perchlorate. So that's kind of -- there's the agenda. And
12 then --

13 MR. ZAMPIELLO: Questions and answers.

14 MR. AMIDEI: Yeah. The reason Bill is here, I can
15 tell you some of the basics, but don't ask me any
16 questions.

17 Bill, you're welcome to put any questions to him
18 that you want.

19 MR. HAYWARD: Okay.

20 MR. GUARINI: Somebody yell at me.

21 MR. AMIDEI: Okay. Any other "other" items?

22 MR. SORSHER: What is the situation with your
23 replacement?

24 MR. AMIDEI: Good question.

25 I'm going home tonight.

1 MR. BURIL: Is that as a result of this meeting?

2 MR. AMIDEI: No, it's not that.

3 We've gone through the candidates on the
4 certified list that applied for the position, made a
5 tentative selection. It's going through the H.R. process
6 now to do that. There's two people that really floated to
7 the top pretty high. And we really evaluated the choice
8 more based on how to bolster any slight weaknesses that we
9 could see.

10 So the time frame, I don't have quite yet. I'm
11 hoping by Christmas. I used to be hoping by Thanksgiving.
12 They have another -- actually, there's two hires that we
13 need to talk about, since you're interested in the public
14 meeting planning, et cetera.

15 There's also going to be a permanent outreach
16 manager associated with this. It's going to be a NASA
17 employee that is responsible for just that. That person
18 has been selected and the anticipated start date there is
19 December the 1st. So that's actually going to happen a
20 little more quickly than my replacement.

21 I think it's going to be -- from what I've seen
22 from these two individuals, it's going to be a very strong
23 team that's going to take off on their own.

24 MR. RIPPERDA: Is there any chance that, even though
25 that person's not hired yet, that they're close enough that

1 they just come to the November 20 meeting?

2 MR. AMIDEI: Which person?

3 MR. RIPPERDA: Well, both. You know, what I was
4 thinking of the one who's actually been hired.

5 MR. AMIDEI: The answer is "yes" and "no." One's not
6 local, one is local. So hopefully that -- I think that's a
7 great idea.

8 The public meeting planning currently is being
9 done by one of my associates at headquarters who is
10 division director of department of -- it has a weird name.
11 Anyway, she's been doing that from afar.

12 MR. RIPPERDA: How's it going, Chuck? Do you know?

13 MR. BURIL: No.

14 MR. RIPPERDA: Is it being coordinated with the JPL?

15 MR. AMIDEI: It's being coordinated with JPL public
16 affairs; that's correct. And coordinated is about as
17 strong as I can make it. That (inaudible) all the
18 contractual hookups. That's where it sits.

19 It is being coordinated very significantly with
20 the City and with Bob and Lincoln. So those are the two
21 biggest impacts that have been identified before today.

22 MR. RIPPERDA: Okay. So since we're going to talk
23 about the public meeting on November 20th, you know, we had
24 huge problems -- Keith -- I can ask Keith how's it going
25 too, since you did it once already, but it sounds like

1 you're not involved this time. But there were huge mailing
2 list problems and people -- and we ended up having a third
3 one because the first two, the word didn't get out.

4 So if you can just give us an overview of who
5 you're sending things to, how you're sending it, that would
6 be great.

7 MR. AMIDEI: I can tell that you there's multiple
8 pathways that we're utilizing.

9 MR. RIPPERDA: Okay. So just tell us what those
10 pathways are on November 20th.

11 MR. AMIDEI: Okay. Piece of cake. I'll get Trish
12 here to tell you.

13 MR. RIPPERDA: Great.

14 MR. AMIDEI: And maybe the new person as well. That
15 will be a good time to introduce them.

16 MR. RIPPERDA: Okay.

17 MR. TAKARA: David, I have a comment.

18 Is there any way for that November 20th meeting
19 to have, as the first agenda item, the public meeting
20 planning? I think it would be a good idea to have Ann
21 Urgman there --

22 MR. AMIDEI: Okay.

23 MR. TAKARA: -- just to be part of the planning
24 process.

25 MR. AMIDEI: So we want to have a public meeting

1 planning technology discussion and then procurement
2 discussion?

3 MR. TAKARA: And that way, after the meeting -- the
4 public meeting issue is done, anyone involved in public --
5 well, outreach, can choose to leave.

6 MR. AMIDEI: Okay.

7 MR. TAKARA: Great.

8 MR. AMIDEI: No problem there. All that took was a
9 stroke of the pen.

10 MR. TAKARA: That is fine.

11 MR. PALMER: David, are both of these new hires
12 intended to be -- not necessarily will be -- but intended
13 to be the permanent --

14 MR. AMIDEI: Yes.

15 MR. PALMER: -- through the process --

16 MR. AMIDEI: Yes.

17 MR. PALMER: -- the process --

18 MR. AMIDEI: Absolutely. No more interims. You can
19 get rid of me, and then whoosh.

20 Okay. Any other "others others"? Cool.

21 The next RPM meeting, telecon scheduled
22 December the 4th, January the 8th, and then the next
23 in-person February the 5th. That might -- February the 5th
24 might actually coincide with pretty close to the public
25 meeting. So tentative dates.

1 Any big sweats? Okay.

2 Now, we're ahead of schedule.

3 Okay. Well, I guess from an RPM standpoint,
4 hopefully we'll see you one more time.

5 Thank you all.

6 (At 11:49 a.m. the proceedings were adjourned.)

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