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REMEDIAL PROJECT MANAGERS' MEETING

NASA/JET PROPULSION LABORATORY

22 NOVEMBER 1996

ATTENDEES:

Jon Bishop, RWQCB-LA
Charles L. Buril, JPL
Craig Christmann, DTSC
Richard Gebert, DTSC
Debbie Lowe, U.S. EPA
Dan Melchior, Foster Wheeler
Penny Nakashima, DTSC
Stephen Niou, URS
Judith A. Novelly, JPL
B.G. Randolph, Foster Wheeler
Peter Robles, Jr., NASA

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Reported by: Louise K. Mizota, CSR 2818

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PASADENA, CALIFORNIA

22 NOVEMBER 1996

9:09 A.M.

BURIL: Okay. First of all, welcome, of course.
Good to see all of you again.

Just to kind of start things off, Richard,
why don't you let us know, or Penny, if you would,
tell us why Richard is here, and we can go from
there.

NAKASHIMA: Richard Gebert will be the new
project manager for JPL/NASA for the DTSC.

BURIL: Effective?

GEBERT: It was effective now, but there'll be a
transition period, right, for a month or two,
probably.

BURIL: Welcome.

GEBERT: I'm familiar with the site. Thank you
very much.

BURIL: Any time you'd like to get a tour or
anything like that. Penny has been on a tour. I
don't know how many times she's been on a tour, but
it's been a lot.

GEBERT: I'd like to do that.

BURIL: Sure. Maybe at the end of the day we

1 could. Any time you'd like to do so after
2 Thanksgiving would be no problem. Got to throw that
3 caveat in there.

4 ROBLES: Penny, are you still going to be
5 helping and advising or coordinating or anything
6 else?

7 NAKASHIMA: Yes.

8 ROBLES: For continuity.

9 NAKASHIMA: Craig will still be on the project.

10 BURIL: He's got some history. Okay.

11 The agenda appears short, but I think that
12 there's probably some questions that are common, so
13 we'd like to see if you have any on it.

14 LOWE: Would it be helpful for you, Richard, to
15 go around and introduce everyone?

16 GEBERT: Yes.

17 BURIL: Why don't we start, then. I'm Chuck
18 Buril. I work with JPL and am party coordinator for
19 NASA on the site.

20 To give you a little background quickly,
21 NASA actually owns the facility and Cal Tech, whom I
22 work for, operates the facility. And so my capacity
23 here is manager of environmental affairs. And
24 basically, we run the day-to-day aspects of the
25 project on behalf of Peter.

1 ROBLES: Peter Robles. I'm the RPM for NASA, a
2 NASA employee.

3 BISHOP: I'm Jon Bishop with the Regional Board.

4 MELCHIOR: I'm Daniel Melchior. I'm the project
5 manager for Foster Wheeler.

6 RANDOLPH: B. G. Randolph. I'm the OU-2
7 operable unit manager.

8 LOWE: Craig you know.

9 NIOU: Stephen Niou. Technical support to EPA.

10 BURIL: Okay. Great.

11 NOVELLY: I'm Judy Novelly. I work with Chuck.
12 I'm with JPL.

13 BURIL: Judy is the quality assurance officer on
14 the project, and practically my right arm on this
15 matter.

16 BURIL: Debbie or anyone, did you want to add or
17 modify the agenda at the outset here?

18 LOWE: Let me just start with telling you that
19 the agencies got together yesterday to talk both
20 about the response to comments document and to look
21 at the off-base groundwater data and start coming up
22 with some initial conclusions and then kind of
23 brainstorming the groundwater RI and the kinds of
24 things that we want to see in that. So we'd like
25 to --

1 BURIL: That's fine.

2 LOWE: -- talk to you about all of those things.
3 We could start with the response to comments
4 document. That's probably the best place to start.

5 BURIL: Okay.

6 LOWE: The first thing I wanted to say is that I
7 was not expecting a letter to come out from NASA
8 saying "These are our response to comments and with
9 this the documents are final." I thought that we
10 had agreed this was going to come out in some sort
11 of draft format, that we were going to have a week
12 or two to look at it and that we were going to
13 finalize it at this meeting.

14 BURIL: Was that your understanding, Pete?

15 ROBLES: I didn't think so, I thought we had a
16 date when all the comments would be in. That was
17 what was agreed to last time.

18 LOWE: Right. We did give you our comments.
19 You gave us this response to comments on the 13th.
20 I thought we were going to have a chance to look at
21 this before we all considered the document final.
22 I'm sorry if I didn't make that really clear.

23 BURIL: We apologize if we didn't understand
24 correctly either.

25 LOWE: But we talked about this yesterday. We

1 have some minor concerns with revising this. And we
2 came up with a proposal for how to do that.

3 The format that we came up with is an RPM
4 consensus statement that says we've looked at this,
5 we want to acknowledge these last four concerns
6 about the responses in here, and then we're hoping
7 to have all the RPMs sign it and say with signature
8 of this we now consider the addenda final.

9 ROBLES: All right.

10 BURIL: Sounds reasonable. Sure.

11 ROBLES: That sounds reasonable.

12 LOWE: Let's pass this around.

13 BISHOP: I only made four, thinking that was the
14 number.

15 ROBLES: You need more? I can make more.

16 LOWE: Okay.

17 (Discussion held outside the record.)

18 LOWE: Jon also brought a laptop. So if we need
19 to make some changes to this, we can do it right
20 here in this meeting.

21 BURIL: Very good. Okay. Sounds great. Can we
22 take a few minutes and go over this?

23 (Discussion held outside the record.)

24 MELCHIOR: Do we want to go over to Peter's
25 office and chat about this?

1 LOWE: Let's go through it first.

2 BURIL: I think that's reasonable to go through
3 it first and then take a short time to caucus would
4 be a good thing to do.

5 (Discussion held outside the record.)

6 BURIL: I've read it. It's fairly succinct.
7 How do you want to go through it? Just kind of
8 touch it point by point?

9 LOWE: Sure.

10 BURIL: Penny, why don't you talk to us about
11 the first one there. We can go from there.

12 NAKASHIMA: Your response was that you would not
13 use any data that DTSC generated from the sampling.
14 So my concern is that this is -- we're offering to
15 analyze the samples for what is less VOCs and PAHs
16 in order to avoid any dispute delays in the process
17 so that we can go ahead and do this.

18 Our laboratory, which is the one that
19 certifies or makes all the requirements for
20 certification of other laboratories, and so I feel
21 that our laboratory data would be just as valid, if
22 not more valid, than your laboratory. I mean unless
23 you can find something wrong with the QA/QC, of
24 course, then there would be a problem. But
25 otherwise, it's as acceptable as your data is --

1 ROBLES: I think we're missing the point --

2 NAKASHIMA: -- if we're following all the QA/QC
3 procedures.

4 ROBLES: What we would said is that we would not
5 use DTSC's data if it wasn't confirmed by our
6 sampling results. If you take a sample and find
7 something wrong, we back it up with our own
8 analytical data and if it comes up with the same
9 results, we will accept it.

10 It's only when your sampling results
11 differ from our sampling results that we have a
12 problem.

13 CHRISTMANN: One other point on this, when we
14 present the material to our toxicologists, they'll
15 get all the data. And if we have sampling data that
16 says something different than your confirmation
17 samples, that doesn't invalidate our samples. And
18 our toxicologists are going to look at that. And
19 that's why we put the statement about would not be
20 accepted.

21 Because when we submit that to our
22 toxicologists, they'll review it and they'll say
23 "You didn't include this data. We can't accept this
24 risk assessment because there's data here that's not
25 been included." And if our data is valid and has

1 the proper QA/QC backing it up, our toxicologists
2 are going to come back to us with that and we're not
3 going to be able to change that.

4 ROBLES: If our data which is in dispute with
5 yours is valid too and shows that the QA/QCs is the
6 same then we've got a problem.

7 NAKASHIMA: You can talk to your toxicologists
8 about this. It's just like when you take duplicate
9 samples and you have a difference in the analytical
10 results, you can treat it the same way.

11 BURIL: Okay. We need to talk about that.

12 NAKASHIMA: You can average it. If there's
13 really a big difference, a significant difference in
14 the results, then you take the higher one.

15 CHRISTMANN: The other point with this is what
16 we said here is let's go ahead with it because this
17 might not be an issue.

18 ROBLES: Right.

19 CHRISTMANN: It is likely to not be an issue.
20 And if it is an issue down the road, we can deal
21 with it then. But the likelihood is that it's not
22 going to be an issue. In that case, it goes away.

23 ROBLES: But the representation here is
24 incorrect. It's not that we're not going to take
25 your data. It's that if we have differences in the

1 data that you generate and the data that we
2 generate, then we've got a problem.

3 CHRISTMANN: Right.

4 ROBLES: But if it matches, we'll accept it
5 without any problem.

6 NAKASHIMA: No, but I feel that if the data --
7 you should either accept it -- you should accept it
8 whether it shows a detect or a nondetect because --
9 in other words, you're saying you want it both ways.
10 If it's a nondetect you'll take it; if it's a detect
11 you won't take it.

12 ROBLES: No, no.

13 BURIL: No.

14 ROBLES: If our data and your data match and we
15 confirm what you found is true, we have to accept
16 it. There's no argument there. It's when you take
17 it through your system and we take it through our
18 system and there's a difference, and you say there
19 is a problem and we say there isn't a problem, we've
20 got a problem.

21 The government is running the program, not
22 DTSC, and we've got to generate the ROD. Otherwise,
23 why don't you take over the program. I cannot
24 accept your lab or your data unless I back it up
25 with my lab and my data. It's that simple.

1 NAKASHIMA: Then maybe you ought to think about
2 including those analyses in your program.

3 BURIL: Let's talk about this one, Peter. I
4 think it's worthwhile to caucus on. This is
5 obviously the one that's going to carry the most
6 contention.

7 CHRISTMANN: One last point on that. If we're
8 in a public meeting, we present data, we would have
9 to tell the public, yes, we collected samples,
10 showed there was something there, NASA samples said
11 there weren't. The public isn't going to accept
12 that your samples are more valid than our samples.
13 We're not going to be able to stand in front of the
14 public and justify that our samples are invalid.
15 We're not going to do that.

16 LOWE: Maybe one thing we should clarify, that
17 if DTSC samples and they get detections and then
18 NASA resamples, perhaps DTSC should make sure
19 they're taking duplicates of those so if you know
20 there's something that's different between the
21 sampling events or something that's different
22 between the labs. At least it would clarify that in
23 our minds.

24 BURIL: Okay. The second one under Sonic
25 Drilling, I've got no major heartburn to this at

1 all. I don't think there's anything here that's
2 particularly onerous.

3 The 14-days notice, though, that's
4 calendar days. Is that what you're talking about?
5 In other words, I'm looking for consistency with the
6 FFA, which calls for 10-days notice, which is
7 business days. I assume that's the same.

8 LOWE: We can change that to 10 business days to
9 be consistent.

10 BURIL: Okay. That's fine.

11 CHRISTMANN: That's not a problem.

12 BURIL: Then the next one --

13 LOWE: This is related to your response to my
14 comment on page 2 of the response to comments.

15 BURIL: I've got copies of everybody's thing.
16 Does everyone know which comment we're dealing with?
17 Because I've got copies here if we want to pass them
18 out so you can see what we're talking about.

19 GEBERT: Yes.

20 BURIL: This is the one Penny sent out. These
21 are the ones that Debbie sent. And this was our
22 response here.

23 CHRISTMANN: I think this was on the response on
24 page 2, comment 2, part B.

25 BURIL: Does anybody else need a copy for

1 reference?

2 BISHOP: If you have one.

3 MELCHIOR: We have one here.

4 BURIL: Which one is that, Craig?

5 LOWE: It's on page 2.

6 CHRISTMANN: Page 2, comment 2, part B.

7 LOWE: And NASA's response is "By this
8 reference, the sentences listed above should be
9 considered revised to reflect that the RPMs agreed
10 that further analyses of the listed inorganics and
11 SVOCs are not warranted at this time."

12 So this consensus statement changes it
13 just to acknowledge that DTSC is taking samples for
14 SVOCs.

15 BURIL: I see what you're saying. So you're
16 recognizing the fact that DTSC wants to take the
17 samples and do the analysis.

18 CHRISTMANN: Right. We just wanted to clarify.

19 BURIL: That's no problem.

20 LOWE: The last one, I guess we had never gotten
21 this specific about I had said that I wanted PE
22 samples to be a part of NASA's routine quarterly
23 groundwater monitoring program. In my mind that
24 meant doing PE samples every quarter, and in your
25 mind that meant doing it at least once per year.

1 BURIL: Right.

2 LOWE: I was wondering whether you had really
3 thought about what it costs to do a set of PE
4 samples for each.

5 BURIL: No. In all honesty, we just pulled that
6 out of the air. You look no less than once per
7 year. So we at least tag it once a year. I don't
8 have a real strong feeling one way or the other on
9 that one.

10 LOWE: I'm not going to force NASA/JPL to do
11 this every single quarter. I just go on record with
12 a very strong recommendation that you should do it.
13 Because like I've said before in our RPM meetings, I
14 think this is a quick, easy, cheap way to see if
15 your lab is giving you honest data. And, you know,
16 checking once a year may not be often enough.

17 ROBLES: What do the regulators require from
18 their labs? How many times do you check?

19 LOWE: We're recommending for sampling at
20 military facilities that they include a set of PE
21 samples with every sampling event.

22 ROBLES: What do you require your labs to do
23 when you send your samples?

24 MELCHIOR: Fund lead sites.

25 LOWE: I don't know. I can just tell you that

1 the IG did an audit of EPA's oversight of military
2 facilities, and their recommendation out of that was
3 using PE samples in every sampling event.

4 And our office made a decision that those
5 recommendations, because they only looked at
6 military facilities, did not directly apply to the
7 NASA sites. So you guys are not being required to
8 do those same requirements, but I am making it as a
9 strong recommendation. We have caught so many labs
10 doing lab fraud over the last couple years, and this
11 is just a really -- I think it's a pretty cheap,
12 easy way to feel good about your data.

13 MELCHIOR: Which analytes are you most concerned
14 with?

15 LOWE: I would say VOCs.

16 MELCHIOR: VOCs predominantly?

17 LOWE: Yes.

18 MELCHIOR: Could you modify that to say VOC PE
19 samples in lieu of --

20 BURIL: A full-blown suite.

21 MELCHIOR: -- a full-blown suite. I mean, we're
22 tracing organics water chemistry. I don't think we
23 need that as a PE sample.

24 LOWE: Would you do a full suite once a year and
25 then do a VOC every quarter?

1 BURIL: I think that would be workable.

2 ROBLES: I still would like to know what do the
3 regulators require of their own labs? DTSC, how
4 many PE samples do you require? Quarterly?
5 Annually?

6 NAKASHIMA: With every one that we send to the
7 lab.

8 GEBERT: Every sampling event.

9 ROBLES: Every sample that you do, it's a State
10 requirement for your labs?

11 GEBERT: For our labs, right.

12 ROBLES: What does The Water Board require?

13 BISHOP: We don't have a lab.

14 ROBLES: I don't see a problem.

15 BURIL: I don't either, honestly. If we can
16 modify it to restrict the scope of this down to the
17 VOCs down to a more than annual basis and a full
18 suite on an annual basis, I think that would work
19 out well.

20 BISHOP: I'm just curious. When you were
21 looking at this, Deb, you were talking about one set
22 for a quarterly monitoring event?

23 LOWE: Yes.

24 BISHOP: So we're talking about on a quarterly
25 monitoring event you guys are sampling something

1 like 26 wells with multiple screens. So we're
2 talking about somewhere around 150 batches of
3 samples. We're talking about an additional one, so
4 we're talking about less than one percent addition.

5 BURIL: Yes. That's why I have no problem in
6 terms of cost at all.

7 BISHOP: I'm just trying to get in my mind what
8 kind of onerous does this involve.

9 ROBLES: Do a full suite annually with
10 quarterlies on this.

11 BURIL: I'd say we could do that at a minimum.
12 I don't think there's anything wrong with that at
13 all.

14 CHRISTMANN: The other thing you might consider
15 is we've had some of the discrepancies on the SVOCs.
16 You might look at those as well.

17 MELCHIOR: We'll get that in a full suite.

18 BURIL: Yes, we'll get that in a full suite.

19 In fact, we don't have the data ready for
20 you today, unfortunately. We've got some data that
21 came off of, what was it, the July sample?

22 MELCHIOR: Yes.

23 BURIL: That kind of answered some of those
24 questions. We're validating this stuff very
25 carefully to be sure that this stuff they're telling

1 us is the information we need to know.

2 CHRISTMANN: If you've addressed that already,
3 okay. I was going to say if you've still got
4 questions about SVOC analyses you might consider
5 doing that on a quarterly basis as well as the VOCs.

6 BURIL: I would say that we should probably look
7 at this as a living requirement, so to say. If we
8 get into a situation where any constituent begins to
9 show itself as a potential concern, that might be
10 thought to be added to the quarterly and just start
11 at this point and move forward as we see fit. I
12 think that's probably the most prudent thing to do
13 when you start talking about these kinds of things.

14 BISHOP: I just want to make a quick comment
15 that lots of times the issue is not chemicals that
16 suddenly pop out as a concern, but chemicals that
17 are very consistent from sampling event to sampling
18 event is one of the issues with testing your labs.

19 BURIL: Sure. That's a good point, Jon.

20 We'll have to look at the whole suite of
21 analyses and the whole suite of constituents and
22 decide as we go. But I think this is a reasonable
23 starting point. I thank you, Debbie, for pointing
24 that out to us.

25 MELCHIOR: I think there's one minor addition to

1 this, is that someone with JPL needs to coordinate
2 with their EPA chemist as to which analytes they
3 want in the PE samples. I'm just saying if you want
4 PE samples, you really should define what
5 constituents you're most concerned with so that it
6 reflects Jon's comment earlier.

7 BURIL: I understand. I think that's probably
8 something that would be part of the living approach
9 to it. At the current time we're saying basically
10 that the quarterlies would be the VOCs. The annuals
11 would be the entire suite that we're analyzing for
12 at that particular time.

13 MELCHIOR: Right. But the VOC and analytical
14 suite comes back with 24 analytes.

15 BURIL: I see what you mean.

16 MELCHIOR: So to get a PE sample that contains
17 all 24 analytes, it's a monstrous job and it's
18 extremely costly. So we've got to probably narrow
19 it down to a few select analytes so that we can
20 agree upon the analytes. I think it's pretty
21 obvious which ones from the VOC standpoint.

22 CHRISTMANN: Yes. Yes.

23 BURIL: Why don't we just lay those out now if
24 you're comfortable with that. I'll just take a
25 suggestion we talk about carbon tetrachloride, Tric,

1 Perc, 1,2-DCA, which has been out there for a while.
2 Those are the four that come to mind instantly.

3 CHRISTMANN: Have you had TCE?

4 BURIL: TCE. That's fine.

5 CHRISTMANN: Any TCA?

6 BURIL: I have not seen that to date.

7 MELCHIOR: That's always a good one to put in,
8 though. I think if you have four to five analytes
9 that's about the max the lab -- because when they
10 put these together it's not a trivial matter. And
11 their accuracy, it's difficult for them to be
12 credibly accurate when you're adding four to five
13 analytes. With one or two it's pretty easy. You
14 get into whole issues of dilution and how much
15 volume you're actually adding. It's an analytical
16 headache.

17 CHRISTMANN: That's one of the things that our
18 chemists have done in the past, too, when they've
19 done these, is looked at both high level and low
20 level in the same sample to make sure the lab is
21 doing their dilutions properly.

22 MELCHIOR: I might suggest, if those five are
23 the analytes, then we should consider having a
24 separate phone discussion with the group that's
25 going to put the PE sample together and the

1 agencies' chemist so that you're on the same
2 wavelength.

3 BURIL: That's a good idea.

4 LOWE: Sure.

5 BURIL: Sure. That's fine.

6 MELCHIOR: Maybe we can change the text to
7 reflect that so it's clear.

8 BURIL: That seems like a very reasonable
9 approach.

10 ROBLES: Just include PE samples as outlined.

11 BURIL: I think we want to modify it in this
12 statement here.

13 MELCHIOR: In this statement here.

14 BURIL: So that when we sign this thing we all
15 know what we're talking about and there's no
16 question about what we meant at the time.

17 MELCHIOR: Do we need five minutes to talk about
18 the first one?

19 BURIL: I think so. I'd like to pull back for
20 five, ten minutes and talk about that one and then
21 come back and try to finish that one off, because I
22 think the other three are already done. So I don't
23 think there's a problem there.

24 ROBLES: I personally would have no problem
25 signing this if you would add the word in front of

1 "data" on the first line "disputed" data.
2 Everything in that sentence is correct except that
3 "DTSC strongly disagrees with NASA's decision not to
4 include the" disputed "data produced." And that's
5 the key. If it's the same data that we come back
6 with, we have no problem with that.

7 I agree it should be left as an issue to
8 be resolved at a later date. So we can get on with
9 it. That's the only thing I have. I can sign this.
10 I have no problem with it.

11 LOWE: I think it might be clearer to say
12 "decision not to include the data produced by DTSC's
13 lab when it differs from NASA's data."

14 ROBLES: Okay. That's a good point. When it
15 differs.

16 BURIL: Can we take five and talk a little about
17 what we're going to do?

18 ROBLES: Sure.

19 BURIL: Go off the record.

20 (A recess was taken from
21 9:36 A.M. to 10:00 A.M.)

22 BURIL: We went back and talked about this.
23 From a technical perspective we disagree with the
24 need to do this. Our biggest concern really comes
25 down to a potential future concern over which set of

1 data ultimately need to be used. And rather than
2 create a situation where we begin to question
3 laboratory data simply because of different analyses
4 being used, I think we're ready to go ahead and do
5 the analyses with our laboratories and basically
6 look to just having the one set of data to be able
7 to do it.

8 Again, I emphasize that we are not doing
9 this on the technical merits but more on the idea of
10 avoiding problems in the future about which set of
11 data to use.

12 NAKASHIMA: Can you work this into programs and
13 when you start your sampling?

14 BURIL: We'll work it in. We'll work it in.

15 NAKASHIMA: You have the funds for the analyses?

16 BURIL: It will happen.

17 LOWE: So procedurally, should we change what's
18 in the consensus statement to say that?

19 BURIL: I think so. I think where we're at now
20 is to say that I guess NASA has agreed to perform
21 the tests. And I would make the assumption here
22 that DTSC no longer has a need to split sample and
23 do the analyses. I think that whole issue could
24 drop.

25 Would you agree with that?

1 NAKASHIMA: Craig?

2 CHRISTMANN: Had we discussed collecting splits
3 for anything else?

4 BURIL: Never.

5 NAKASHIMA: We did on occasion. We did it once
6 before.

7 BURIL: It's random, I think. Random just as a
8 doublecheck once in a while.

9 CHRISTMANN: Right.

10 BURIL: Given the scenario we're dealing with
11 here, this is a different scenario.

12 CHRISTMANN: Right. In terms of collecting
13 splits, we always have the ability to get splits
14 from you.

15 BURIL: Absolutely. Absolutely.

16 ROBLES: You always have that option.

17 BURIL: But to do it in light of the scenario
18 that's presented here, I don't think it's necessary.

19 CHRISTMANN: No. No. Absolutely not.

20 BURIL: How do we want to change the words to
21 make that happen?

22 LOWE: I would like to see this say exactly what
23 you said, that "NASA disagrees with the technical
24 merits of taking the samples but has agreed to do it
25 in order to avoid disputes over problems with data,"

1 something like that.

2 BURIL: That sounds fine. Sound good to you,
3 Pete?

4 ROBLES: Yes.

5 MELCHIOR: Can I get that, Pete, please? I've
6 got to write it so Jon can read it.

7 MELCHIOR: Go ahead, Debbie. What did you say?
8 You said NASA --

9 LOWE: Chuck's words.

10 BURIL: Something to the effect that NASA
11 disputes the technical merit of taking samples and
12 analyzing for this.

13 LOWE: For SVOCs for MW-22, MW-23.

14 MELCHIOR: Wait a second.

15 LOWE: This is already in there.

16 BURIL: Right.

17 LOWE: And soil sample analyses for PAHs by EPA
18 Method 8310.

19 BURIL: That's the last sentence there.

20 ROBLES: The last sentence in that paragraph.

21 BURIL: However, in order to prevent concerns
22 regarding data in the future, we will agree to do
23 those analyses.

24 MELCHIOR: Provide those analyses, did you say?

25 BURIL: Perform, provide. Whatever.

1 ROBLES: Perform.

2 BURIL: Whatever sounds good.

3 MELCHIOR: Perform.

4 NIOU: Then Debbie's comment number 2 --

5 BURIL: Basically --

6 NIOU: -- will be changed.

7 BURIL: In fact, I think we could almost

8 eliminate --

9 MELCHIOR: Eliminate the first and second

10 paragraph.

11 LOWE: We have rewritten it based on language

12 that Dan adopted.

13 MELCHIOR: Let me read it back to you.

14 "NASA disputes the technical merits of

15 analyzing SVOC samples for MW-22, MW-23 and MW-24

16 and soil samples for PAHs by EPA Method 8310.

17 However, in the future, NASA will perform those

18 analyses."

19 BURIL: In order to avoid concerns regarding

20 data in the future.

21 MELCHIOR: Future data discrepancy.

22 BURIL: There you go. Good.

23 MELCHIOR: All right, Jon.

24 BISHOP: You can continue on while I take my

25 time to type.

1 BURIL: Then I guess, really, we're in a
2 position of looking at comment 2, part B and
3 modifying that.

4 Debbie, you said you modified that already
5 in some fashion?

6 LOWE: To 10 business days? Is that what you're
7 talking about?

8 NIOU: No. The next one.

9 BURIL: The next one after that.

10 ROBLES: Dan, what did you have there?

11 MELCHIOR: The last one?

12 BURIL: Next to the last.

13 MELCHIOR: The next to the last?

14 BURIL: We didn't talk about the next to the
15 last one.

16 ROBLES: I'm sorry.

17 BURIL: Now we're in the position of saying that
18 now we're going to go ahead and conduct these
19 things. I don't know. Is there a need to --

20 NAKASHIMA: It goes away.

21 BURIL: Basically, it goes away.

22 Maybe the point that we need to do is to
23 note that, that it did go away rather than staying
24 mute on it.

25 MELCHIOR: What you're saying is, the first

1 sentence goes away in comment 2, part B of the
2 consensus document?

3 LOWE: Actually, I think the first sentence
4 should be modified to say "NASA's response to EPA's
5 comment is inconsistent with the agreement discussed
6 above. And NASA will be -- "

7 ROBLES: NASA will analyze VOC samples.

8 BURIL: Will perform the analyses indicated
9 above.

10 ROBLES: Right. That's a good point.

11 BURIL: Be consistent throughout.

12 MELCHIOR: Then does the last part of that
13 comment --

14 LOWE: I think that sentence can be modified by
15 changing "DTSC" to NASA.

16 BURIL: No, because it's contradictory.

17 MELCHIOR: SVOCs will be conducted by NASA. So
18 it will say by agreement of the RPMs the sentence is
19 modified to read by this reference the sentences
20 listed above should be considered revised to reflect
21 that the RPMs agreed that further analyses of the
22 listed inorganics and SVOCs will be conducted by
23 NASA.

24 BURIL: Period.

25 ROBLES: Period.

1 MELCHIOR: Do you want JPL taken out of that,
2 Chuck?

3 BURIL: Yes, I do.

4 MELCHIOR: Then we get rid of "however."

5 BURIL: Listed inorganics. Which ones are we
6 talking about?

7 NAKASHIMA: Do you have the addendum with you?
8 Maybe we can look at the exact language.

9 MELCHIOR: Hex chrome and TBT.

10 BURIL: Was it hex chrome and TBT?

11 MELCHIOR: Those were the only inorganics that
12 were still left. Okay, Jon.

13 BURIL: Just leave it in. If we're talking
14 about hex chrome and TBT, we'll do it.

15 MELCHIOR: Then we also have the modification to
16 the last comment, which is what you folks had
17 dictated to me. Debbie read it and modified it just
18 slightly. We added one more sentence.

19 ROBLES: Which was?

20 MELCHIOR: Actually, we added two more
21 sentences. "NASA and agency representatives will
22 agree in writing on the composition of PE samples
23 prior to submittal to the analytical laboratory.
24 The RPMs will meet annually after review of the
25 annual groundwater monitoring report to review and,

1 if appropriate, modify the PE program.

2 ROBLES: That's a good point. Accepted.

3 LOWE: Do you have Word Perfect 6.1?

4 BISHOP: Or 5?

5 BURIL: I have 5.

6 (Discussion held outside the record.)

7 BURIL: Jon, if you can copy that on a disk, I
8 can have my secretary take that down below and get
9 it printed it out and you can finish it out
10 afterward.

11 NAKASHIMA: What version of Word Perfect?

12 BURIL: 6.0. It should be no problem.

13 BISHOP: Great.

14 CHRISTMANN: There's one word you got to stick in
15 there in the part I typed, Jon, that was missing.

16 MELCHIOR: You may have a couple of iterations
17 on this.

18 BURIL: It may need some tweaking. I might even
19 bring the laptop up here. Have her convert it to
20 Word and bring the laptop up here so we can do it.

21 ROBLES: So we can get it signed out today.

22 BURIL: So we can get it signed out today.

23 Sure. I don't see any reason why we won't. No
24 problem.

25 Let's see. Stephen, you had some stuff

1 that you wanted to talk to us about, off-site data.

2 ROBLES: Debbie has something.

3 LOWE: Preface to what Stephen is going to say.

4 BURIL: Please do.

5 LOWE: I think I've got gotten a fair amount of
6 calls from the public or from Lincoln asking me
7 about the results of the off-base well sampling that
8 you've done. I just really felt a need to sit down
9 and look at that, which is why I asked you for the
10 data and which is why I've had Stephen try and map
11 out certain things for me.

12 The agencies met together and we kind of
13 talked about what this means and what kind of
14 conclusions we came up from that.

15 One idea that I want to throw out before
16 we go through this presentation is that it seems to
17 us it would be appropriate to split out the off-site
18 and the on-site now and to really speed up what
19 you're doing for off-site groundwater because we're
20 not drilling any new wells there. And so we almost
21 have all of the data that we're going to have for
22 the RI. And I think there's been a lot of criticism
23 about this process moving slowly and not having any
24 RODs. And also these actions that you've taken,
25 this wellhead treatment, I don't think they've ever

1 been tied up in any CERCLA document --

2 BURIL: No.

3 LOWE: -- either through a removal action or a
4 ROD. Perhaps we could do something in the off-base
5 and call it an interim ROD and then kind of tie it
6 in when the on-base stuff is done also.

7 So I just want to throw that out as a
8 general concept to be thinking about as Stephen goes
9 through this. I think we'll need an overhead.

10 Stephen is going to present how he looked
11 at the data and then Jon's going to talk about some
12 of the conclusions. And then after that we're going
13 to have Craig talking a little bit about things that
14 we want to see in the RI based on this initial look
15 at the data.

16 BURIL: One other aspect I want to throw in here
17 when we start talking about off site is a meeting
18 Judy went to, and I'll ask Judy to speak to it here
19 after Stephen is done.

20 She went to a meeting with the Raymond
21 Basin Management Board. I think it was the
22 Metropolitan Water District and some other place,
23 but I'll let her tell you that before we're done, at
24 the appropriate time.

25 Basically they're coming up with a

1 conjunctive use of water in the Raymond Basin,
2 particularly in the Raymond Basin, which is going to
3 have an extremely dramatic effect on what we do
4 here; extremely dramatic. I don't know how much Jon
5 knows about it, but it certainly came as a surprise
6 to us.

7 ROBLES: It's going to change everything.

8 BURIL: It will change the water flow patterns
9 here unbelievably.

10 LOWE: Okay.

11 NIOU: Some other data I can pass out.

12 This is maximum TCE from '91 to '96. The
13 concentration is in PBB. And we made notice that
14 west of the site, these valley wells, mostly
15 nondetect. Only two showed up a little bit, 4.4 and
16 2.9.

17 Later Jon will make the conclusion. So I
18 just show in the data, original data.

19 Down here I think screen number 1 has 35.
20 Right? And screen number 2 has .5.

21 BURIL: I'll take you at your word. I don't
22 recall.

23 NIOU: I do have --

24 BURIL: That's fine, Stephen. Go ahead.

25 ROBLES: It's no problem. Keep going.

1 NIOU: I do have one.

2 BURIL: I'm sure you're right.

3 NIOU: Back myself up.

4 At this, 24.

5 Otherwise, along this one, very low. 7.9

6 here, screen number 2. This is for MW-3, .6, s2.

7 This is 3, screen number 2 and nondetect.

8 However, when we go across the Arroyo, 15

9 at this Arroyo well, but 2.5, .7, dropping down.

10 BURIL: Where did you get that 15 number from,

11 Stephen?

12 NIOU: 15 number? That one was from the most

13 recent data I got from -- Jon sent to me.

14 BURIL: Because I've never seen a number that

15 high.

16 MELCHIOR: I've never seen that number either.

17 BURIL: This is the first time I've ever seen it

18 go above 5.

19 NIOU: All the numbers --

20 BURIL: I'm sure they're accurate. I'm just

21 surprised it's not 1.5 instead of 15.

22 NIOU: This one is higher.

23 Now look at our own well, 18, 5.5 at

24 screen number 3. Otherwise, nondetect. 17. The

25 top three, nondetect. 8.4 at screen number 4 and 12

1 at screen number 5.

2 Coming to here, City of Pasadena, Windsor
3 Well, 2.8. But number 19 is nondetect all the way.

4 However, TCE, let's get to number 3.

5 That's the number that you saw.

6 And also showing you those numbers what I
7 mention about from that 15.

8 You can see this, it's not only 1 point
9 high. It's kind of always showing something. And
10 these two fluctuating. Data quality very
11 questionable, as you can see, especially through
12 that number 3. And also this Arroyo Well.

13 BISHOP: I would like to make a quick statement.

14 NIOU: Go ahead.

15 BISHOP: The data quality is not necessarily
16 questionable. It depends on if they're pumping or
17 not pumping at the time and prior to sampling.
18 Because you get quite big fluctuations if the well
19 has been sitting and they pump and they sample a
20 non-pumping well. So it's not necessarily that the
21 lab is having inconsistent problems so the sampling
22 is --

23 BURIL: This looks very typical for a well
24 that's been turned on and off frequently.

25 NIOU: I thought it's on for a period of time.

1 But if it's on this time, they never say let the
2 well sit, say, for two weeks and to sample it. Like
3 yesterday pumping, today we make a sample, next time
4 we --

5 BISHOP: But There's no correlation that is
6 likely between that.

7 NIOU: Therefore, the data is that's expected.

8 BURIL: I would expect to see this in a well
9 that's off and on frequently.

10 NIOU: Okay. Then that's better.

11 However, we notice these two do show
12 something. But when we come down to these wells,
13 these are Rubio Canyon and the Los Flores and also
14 our own MW-20. These are all nondetect.

15 Going off, there are two more wells,
16 because it's off the map so I don't show them. They
17 are also nondetect.

18 BURIL: Kinneloa, isn't it?

19 MELCHIOR: The cemetery up there. There's a
20 cemetery association up there.

21 NIOU: There are two up there, also nondetect.

22 Therefore, our main concern is really in
23 this area, in two areas, here and here. Somehow low
24 and high again. But with the 12, basically it
25 connect them together.

1 BURIL: This is data that we've never seen
2 before. In fact, I get the monthly stuff from the
3 City of Pasadena. I've never seen a 15 before.
4 What month was that, Stephen? Do you know?

5 NIOU: It's right on your map. TCE. That's the
6 bottom one. 15, basically I'm choosing the average.

7 MELCHIOR: He's got it all over here.

8 NIOU: I'm choosing the average, the bottom one.

9 BURIL: Which one?

10 MELCHIOR: Just took the average across the --

11 BURIL: But that's not well 19.

12 MELCHIOR: That's the Arroyo Well.

13 BURIL: I'm sorry. I'm sorry.

14 NIOU: That's the Arroyo Well.

15 BURIL: So you're taking an average across?

16 NIOU: Yes.

17 BURIL: You have it marked 15, about 15 in
18 early -- this is going back to --

19 MELCHIOR: 1980.

20 BURIL: This is data that's back in '92, it
21 looks like.

22 BISHOP: The last data point on here is '93.

23 NIOU: '93 data.

24 BURIL: I'm looking at the one just before that,
25 which actually looks like it is the 15 number. But

1 if you're taking it across there -- because the
2 latest data I got from the City of Pasadena shows
3 that it's down --

4 NIOU: Lower.

5 BURIL: Much lower, like an order of magnitude.

6 BISHOP: That's fine. Continue on.

7 BURIL: Yes.

8 NIOU: This is the TCE situation.

9 Next, we move to this one. This one is
10 carbon tet. The same concentration, same period of
11 time. Everything nondetect here. Nondetect here.
12 These two are also nondetect. I don't show ours
13 because you guys already are so familiar with that,
14 more familiar than I am.

15 BURIL: Sure.

16 NIOU: That's why I don't show.

17 But I show these edge in order to see if
18 we can find any connections. .5, nondetect, 1.9,
19 screen number 2. Otherwise, nondetect. MW number
20 3, all nondetect. 12, 2.3 at screen number 2. 7.1
21 at screen number 3. 2.1 at screen number 4.
22 Nondetect above. But this one showing 8.31
23 something, which is also on the mop.

24 BURIL: That is an average, again, across the
25 entire time frame? It appears to be.

1 NIOU: Yes. It appears to be, yes. I just
2 average the whole column of numbers.

3 BURIL: Your data stop in '92, it looks like.
4 Is that correct?

5 NIOU: Yes.

6 BURIL: Okay.

7 NIOU: Then these are lower. .6, nondetect.
8 From the Windsor Well, City of Pasadena .4 Our own
9 well, nondetect everywhere. 19, 17, nondetect
10 everywhere.

11 18, .5 at screen number 3 and 1.8 at
12 screen number 4.

13 But when we go to Lincoln water well show
14 something, 1.5 at number 3, Lincoln Avenue, and 2.4,
15 but still those are not as serious as what's being
16 on site.

17 And all here are nondetect. And those are
18 nondetect.

19 So this is the picture of the carbon tet.

20 BURIL: Let me see if I can characterize one
21 aspect of this. This is kind of a viewpoint of some
22 snapshots in time and some long-term averages in
23 certain wells and other ones are kind of taken at
24 snapshots in time, or what are we looking at?

25 NIOU: Mostly taking average. Sometimes I just

1 want -- I think I'm mostly taking -- except our own.
2 The reason our own I took -- I'm taking the highest
3 number is -- only got two numbers.

4 BURIL: Right.

5 ROBLES: You have here all the way back to '80s
6 and '86. Question: Do you include and consider
7 groundwater flow, dry, wet seasons?

8 NIOU: No, I didn't.

9 ROBLES: Levels of wells?

10 NIOU: No. That's why --

11 ROBLES: So then what are you saying with this
12 data, then?

13 NIOU: Like I said, this is only a screening of
14 data presented here.

15 LOWE: We're just trying to start getting an
16 idea of what's going on in order to focus the RI and
17 come up with some ideas on things like flow, wet
18 year, dry year that we want to make sure we look at.

19 NIOU: This is not the quality of an RI. We'll
20 do whatever you say. Because I have to look at
21 groundwater flow direction, coordinate the water
22 flow and the amount of rainfall, seepage.

23 BISHOP: I think the whole issue is we asked
24 Stephen to take a look at the data in general for
25 our advice because we haven't looked at that and we

1 haven't looked at it in relationship to any
2 information from production wells from the area so
3 that we could get some ideas about what kind of
4 things need to be looked at to make sense of it.
5 Because if we wait until the RI to look at that
6 data, then we're going to be in a position of
7 looking at that data at that point and saying, well,
8 this is the kind of information, this is the way we
9 need to look at this, and that's way late in the
10 process. So we're starting it now. And exactly the
11 same things that you're looking at are what Craig's
12 going to talk about as the things that came of this
13 as how to help answer those questions. So I think
14 that's good. I think we're on the same track.

15 NIOU: The last one is PCE. This is PCE.

16 Notice at west here, nondetect, .5, number
17 3, the Valley Water Company, well number 3,
18 nondetect. However, down here, 32, 81.6 and 63.8,
19 about that.

20 You have those -- two of the sets right
21 here.

22 BURIL: These numbers look familiar for that
23 time frame.

24 NIOU: These are, of course, not very -- like I
25 said, these are very weak data.

1 MELCHIOR: Why is it weak? Why are they weak
2 now but they were strong a few minutes ago?

3 NIOU: We're saying these numbers are not really
4 being analyzed according to the RI standard.

5 MELCHIOR: Oh, okay.

6 NIOU: Only to show here something. How can we
7 interpret that? There's a whole spectrum of
8 analyses needs to be done. Not like me. I'm only
9 getting the big sets of spreadsheet and spread them
10 apart and try to put things together.

11 Then for ours, this one, .7 PCE. This one
12 .5, .7. The highest at our site for PCE is only 2.9
13 found at monitoring well number 16, 2.9. Otherwise,
14 mostly like 13, it's only .9 and .7. The other one
15 showing over 1 is something like 18, screen number
16 3, 2.7. That's here. 2.7.

17 But on-site wells, we don't have much
18 problem with PCE at all.

19 This one shows something. 1 at screen
20 number 1. 2.1 at screen number 2. Screen number 3
21 clean. Number 4, 1.4. And 1.2 screen number 5.

22 Basically, all nondetect except MW-12,
23 1.2. All low numbers.

24 Once we get to this side, these are
25 maximum numbers. Only one hit at 1.1. The second

1 highest number is 4.1, and then all 2.-something.
2 This is 2.6, also maximum number. The next one is
3 2.4. But ours, .5. Nondetect. This another
4 Windsor Well for City of Pasadena, 1.1. Here all
5 low, .5, .2, .7. Only this one is the second
6 highest, other than 16. All nondetect down in this
7 area. This is a general view of the PCE
8 distribution over this area.

9 BURIL: That really tends to mask the temporal
10 changes. You're taking averages in some places. In
11 other places you're taking maximums over a given
12 period of time. But temporal relationship of the
13 concentrations really is masked here. You don't
14 really see that per se.

15 BISHOP: I have a difficulty with that because
16 every time we talk about temporal we only look at
17 two sampling events that were done under the RI. So
18 we don't have any information about temporal events
19 that has been considered to date.

20 BURIL: That may be true, Jon. I can't argue
21 with that. But if we're looking at data that's
22 taken starting back in 1985, average it to 1993 and
23 comparing that to 1994 and 1995, then I'd say we're
24 probably --

25 MELCHIOR: Actually, back to 1980, Chuck.

1 BURIL: That's what I'm saying. We've got long
2 term being compared to short term and trying to draw
3 whatever conclusions you might be trying to draw.
4 They may be --

5 MELCHIOR: It sounds like Jon has got some
6 ideas.

7 BURIL: I'd like to hear it.

8 NIOU: I give you TCE.

9 BISHOP: It doesn't matter. Really, the point
10 is exactly what Chuck was just talking about, is
11 that when we look at the data in the past, in
12 general for the wells in this area in here, we show
13 higher increases in the past.

14 You look back at the earlier data for
15 those wells over there. They're spiked up much
16 higher. And as you were saying, the city Arroyo
17 Well now is down to 1.5 order of magnitude lower.
18 You look back here, it's spiking up, but it's at
19 least an order of magnitude higher than that.

20 Looking at a very gross look, you say what
21 did we have in the past? What we had in the past is
22 we had higher levels in that area and now they're
23 lower.

24 In the area along here, here we've got
25 pretty low levels. We don't have past information

1 on those wells, though we do on a couple of the
2 early monitoring wells, I think MW-4, MW-3. Am I
3 correct? Those were -- excuse me.

4 BURIL: 1 through 7 we should have some fairly
5 good historical data.

6 BISHOP: I just looked back at MW-4 and MW-3
7 when I was thinking about this. Both of those
8 showed higher levels in the past than they're
9 showing now. So I started looking at, well, what
10 could account for that in very gross, general terms.
11 What's different from the late '80s to now?

12 The biggest difference is we had water.
13 We had 7 years starting in, what, '88, '87, 7 years
14 of essential drought that ended in '92, '93 time
15 frame. So during that time frame we had less
16 spreading going on, less water coming through that
17 area of the Arroyo here, likely. We probably had
18 less mounding going on in that area, likely.

19 These are some of the things that Craig is
20 going to talk about, start to look at why, can we
21 quantify any of that information. But right now,
22 looking at it in gross general terms, it's likely
23 with the '92, '93 I think was the first bit wet
24 year. We've had average or above average years
25 pretty much consistently in those last few years in

1 rainfall. So we're likely to have more water.
2 We're likely to have a mounding effect pushing water
3 each way diluting these or reducing the
4 concentration --

5 BURIL: I can see where you're coming to that.

6 BISHOP: -- on either side of that. It also
7 fits with some of the recent flow diagrams that you
8 showed us a couple meetings back which show flow
9 going off of the Arroyo area. It was just --

10 BURIL: Groundwater divide.

11 BISHOP: Groundwater divide. It didn't really
12 go into detail on the east side of the Arroyo
13 because we're looking at the base. But if it's
14 flowing that way it's likely to be flowing the other
15 way also, especially since we have production on
16 that side of the basin over there.

17 Now you look, what could cause the changes
18 in time out here? Well, if we have these wells that
19 we have some past data on reducing due to the --
20 maybe due to the inflow of water, it would be likely
21 that these wells might have been reduced. The City
22 of Pasadena wells over here might be being reduced
23 for the same purpose that we've got more water and
24 we got a groundwater divide now.

25 Now you start looking over here, out in

1 this area over here, and the water -- we have
2 contamination here, but we have lesser contamination
3 in between.

4 What may be occurring is that at the time
5 when this area here was not recharging and we had
6 flow that could have been moving towards the
7 production zones where there's been pumping now gets
8 pushed out and we've got it now out here.

9 Those are the kind of things that we need
10 to look at because if this area has now pushed this
11 over here, these wells are going to continue to stay
12 clean as long as we've got water. Because we've got
13 fresh water. We've got recharge coming here
14 providing us two nice things going on at the same
15 time. One is we're containing any problem that's on
16 JPL now, on JPL. It's not moving across that to the
17 production zones any longer.

18 But any contamination that had moved
19 across earlier is now pushed out and being captured
20 out here that we need to look at.

21 ROBLES: That's assuming it came out of JPL.

22 BISHOP: That's correct.

23 MELCHIOR: Just out of curiosity, looking at
24 those Valley Water Company wells, those are pretty
25 high.

1 (Discussion held outside the record.)

2 MELCHIOR: Just out of curiosity -- I see what
3 you're saying there. The conceptual model makes a
4 lot of sense. I'm looking at those Valley Water
5 Company wells. Those are pretty high. I'm just
6 curious what your thoughts are on where that's
7 coming from.

8 BISHOP: We're switching over to the other side,
9 essentially. We're looking at essentially a
10 different constituent when we look over there.

11 BURIL: I think that's TCE that you're looking
12 at there.

13 BISHOP: Now we're looking at PCE where we saw
14 the high volumes.

15 BURIL: I saw 44.

16 BISHOP: It was 4.4.

17 NIOU: 4.4.

18 BURIL: It looks like 44 on the screen. Okay.

19 BISHOP: When you switch to PCE, you're correct.
20 These values are much higher than we see anywhere
21 else.

22 MELCHIOR: Looking at the Lincoln Avenue well
23 where it says 11.1.

24 BURIL: Nothing even approaches that on site.

25 NIOU: That's only one site.

1 MELCHIOR: I'm trying to look at it from a
2 conceptual standpoint because you've drawn some
3 hydrological conclusions, which are okay if your
4 concept was there was only one source of those
5 contaminants. It's clear to me there's something
6 from the west there that's going on that -- we don't
7 want to --

8 BISHOP: I would agree with you that the
9 information that we're getting here at Valley Water
10 is unlikely coming from JPL.

11 MELCHIOR: Thank you.

12 BISHOP: You've got a different level of
13 contamination. You've got different constituents
14 there. But that same argument, you need to look at
15 all the other wells, too, because when you look back
16 here at TCE and carbon tetrachloride, they're at the
17 Valley Water Company wells. There's a little bit of
18 TCE there, but nothing compared to the levels that
19 you have on site and there's no carbon
20 tetrachloride.

21 BURIL: Correct.

22 MELCHIOR: Right. We recognize that.

23 BISHOP: Okay. What Debbie had talked about
24 earlier is this idea, okay, can we start looking at
25 these and separating them since we're doing --

1 continuing to do some on-site work to make some
2 conclusions about these wells, the information at
3 these wells by putting in a well here. We discussed
4 that. That's part of the on-site work to kind of
5 get an idea, is how much of this effect is affecting
6 from here and here.

7 We recognize that there is something
8 happening up there, at the Valley Water wells up
9 there, the different constituents, PCE as opposed to
10 TCE. Also, when we look at MW-21, we have PCE there
11 on -- we've got .5, .7 on base. We've got 1 and 2
12 down there at MW-21.

13 We look at carbon tetrachloride -- to the
14 TCE, we've got 24, we got 35. We've got at MW-10.
15 So we need to find out what's going on between
16 there. Is this well here being affected in
17 combination from Valley Water and the base? Is it
18 coming directly from the base, or is it coming
19 directly from Valley Water?

20 I think those are important questions.

21 BURIL: Those are questions we'd like to find
22 out, too.

23 BISHOP: We want to find them out also.

24 But it's immaterial to what's going on
25 over here.

1 MELCHIOR: I would disagree with that.

2 BURIL: I would too.

3 MELCHIOR: 100 percent. Because I see your
4 hypothetical mound flattening out. The further you
5 get into the Arroyo --

6 BISHOP: What you're saying is you're thinking
7 the water is coming around, down, and back up this
8 direction.

9 MELCHIOR: No way. Absolutely not. I think
10 what's going on, it's pretty clear. If you look at
11 the water elevation maps, you see the high mounds up
12 here like we all agree that are present. And I see
13 it flattening out dramatically as you get further
14 down into the Arroyo.

15 So I do not believe from what we've seen,
16 and of course we don't have a well there so we can't
17 tell, nor do we need one. But what's probably going
18 on, this mound flattens out and those pumping wells
19 here have a tremendous draw. We've seen the draw
20 right across the Arroyo. We've seen wells go dry on
21 us. 14, we've lost up to 50 feet of head when they
22 pump. So we know there's a tremendous draw across
23 that whole Arroyo.

24 So I would disagree that these wells are
25 isolated from this.

1 BURIL: I would agree as well.

2 BISHOP: When I look at your maps, essentially
3 the hydrogeologic, we don't have it on an overhead,
4 I'm sorry, but when I look at that, what we have is
5 we have a lot of information up here. Right? We
6 skip MW-4 and then we put in MW-5 and MW-10 into the
7 flow regime. And then it cuts off about here on the
8 map.

9 So to me it looks like a mound down to
10 here and no information beyond here from what we've
11 looked at. Now, that may or may not be the case.
12 It may be just because you were looking at on site
13 and you weren't looking at off site.

14 MELCHIOR: Logically, though, it will flatten
15 out. It will flatten out here just based on the
16 configuration.

17 BURIL: That's one other aspect of this I want
18 to point out. That is, not only are we talking
19 about some temporal concerns as far as getting an
20 average and so forth. We all know what those are.

21 But you're also forgetting the third
22 dimension here, and that is depth, about where these
23 things are coming at and at what depths they're
24 coming at. This tends to mask that, again only
25 because we don't have the ability to see it in three

1 dimensions on the board like this. But I'd be
2 curious to see if we're talking about the same
3 intervals in terms of what's on site versus what's
4 off site. Because if we're talking about a major
5 depth discrepancy where these things are coming in
6 at, then I would submit to you that there may be
7 something out there that we don't understand at all
8 or don't have knowledge of being in existence. If
9 we're talking several hundred feet where we've got
10 TCE here and TCE here and this is in close proximity
11 to JPL, I don't know what mechanism in Mother Nature
12 is going to draw it down that far. I don't believe
13 that the pumping wells would do that.

14 BISHOP: Yes, they would. If you're talking
15 about pumping, pulling it across the Arroyo, you can
16 easily pull it down to wherever the zone of the
17 production is.

18 BURIL: Maybe. I guess I would only question it
19 only because if we don't understand the depth part
20 of it --

21 BISHOP: The whole point of this issue is not to
22 make final conclusions about what's going on, it's
23 to --

24 ROBLES: What do we need to look at?

25 BISHOP: If the RI goes ahead and just says,

1 well, in our RI sampling we don't see any
2 contamination in these wells. Nothing off site is
3 our concern.

4 There are all sorts of things going on
5 because the RI only started sampling. It only has
6 two rounds right now. It will add in four more
7 rounds that are all done in the last two years. And
8 we know that there is history here and other
9 information that we need to look at and we need to
10 evaluate that information in respect to things like
11 recharge, wet and dry years, pumping out of the
12 production wells.

13 BURIL: I agree with you 100 percent. If I can
14 paraphrase what I think you're saying is that we
15 need to get a little more history built in outside
16 and inside so that we understand what's going on.
17 The amount of data that we have currently is
18 insufficient for us to really make any conclusions
19 to the point of going to ROD. Is that what I'm
20 hearing?

21 BISHOP: My concern is what I, at least,
22 interpreted from our previous discussions that the
23 RI is going to be based on RI data. And we start
24 looking at the RI data and there's only going to
25 be --

1 BURIL: Okay. I see what you're saying.

2 BISHOP: There's two rounds in '94 and there's
3 nothing until '97, essentially. And there's nothing
4 in the period of time when we had a different flow
5 regime due to different water conditions.

6 MELCHIOR: So what you're asking for is a
7 historical perspective.

8 BISHOP: Looking at the historical information.
9 And looking at things like when we say, okay,
10 Lincoln well 20 has got contamination, City of
11 Pasadena. What zones are they pumping from? Do we
12 have that information? Do we know why that's there?

13 BURIL: I understand where you're coming from.
14 If I can paraphrase your concern that I think I
15 heard in there is that we've given you the
16 impression that we're going to base all of our risk
17 assessment and everything on these two events, and
18 all this other stuff we're going to collect in
19 monitoring and so on is not going to be part of it.
20 Is that what you're thinking?

21 BISHOP: No. My concern is not based primarily
22 on that you're just going to do these two events and
23 anything else you do will be later.

24 My concern is that the reason that JPL was
25 put on the MPL is because of contamination that had

1 impacted the City of Pasadena wells that has shown
2 up as being a problem. And that information needs
3 to be also looked at because of the timing that
4 takes so long for all agencies and all bureaucracies
5 to work. We've had a whole different situation now
6 hydrogeologically than when that happened in 1989,
7 '88. And we need to take that into consideration.

8 ROBLES: I don't have a problem in looking back
9 at the historical stuff. Because from the standpoint
10 of the hydrogeological dynamics of the Raymond Basin
11 it's important for a final remedial solution. Very
12 important.

13 BISHOP: Right.

14 ROBLES: But if we're going to try to find out
15 where our contamination went to from that historical
16 data, you might as well get out a crystal ball.
17 Because it's not only on a large scale, but also on
18 a small scale.

19 BISHOP: I agree with you 100 percent. The
20 reason I'm bringing it up now is that works both
21 ways and we need to recognize that when I said
22 something about this, the first response was, well,
23 we don't know that came from JPL.

24 ROBLES: Right.

25 BISHOP: And you're saying the exact same thing

1 to me, is you can't trace this back, but you can't
2 show that it didn't come from there.

3 ROBLES: That's correct.

4 BISHOP: And we know it's the same suites of
5 contaminants. I don't want to get into an argument
6 did this come from there or not.

7 ROBLES: But it's good to know how that got
8 there in the sense from hydrogeological stuff
9 because we need to have a final remediation solution
10 and we have to include those things.

11 BISHOP: Right. And we need to be concerned if
12 we produce the hydrogeologic conditions that we had
13 for 7 years of drought, are we going to now be
14 pumping water across from the Arroyo into these
15 production wells again, or possibly.

16 MELCHIOR: There's also one other element of
17 this. This was a nice assembly of data that Stephen
18 put together because it got us thinking.

19 One of the other areas we need to look at
20 is the bulk water chemistry, because we do see very
21 distinct water types within the wells, which I think
22 are going to be indicative of the sources of the
23 water. And it may be the only thing, one of the few
24 things that we have that we can actually start to
25 know where the water is coming from, how it's

1 blending and then what the potential contaminants
2 are.

3 BISHOP: Right. I think what my concern would
4 be and what we need to be open about is that there
5 is blending and it isn't a question of we have this
6 water type, this water type and this water type and
7 they're mutually exclusive.

8 BURIL: No.

9 BISHOP: When we get down to this area and we
10 get a flattening of the water table as you're
11 proposing, then it's going to be a mixture of these.
12 What it also means if we have flattening down here
13 is that we may be having a pathway coming from here
14 that if we had this steep movement, we would have a
15 block here like we have here.

16 BURIL: Yes.

17 BISHOP: But if it flattens there, we have
18 movement around.

19 MELCHIOR: Good possibility.

20 BURIL: Which is one of the possibilities, we're
21 trying to address now.

22 BISHOP: Exactly.

23 BURIL: You've got a good point. There's no
24 argument.

25 BURIL: Craig, you had something you wanted to

1 discuss.

2 CHRISTMANN: It's up to Debbie.

3 (Discussion held outside the record.)

4 NOVELLY: I went to a meeting that was put on by
5 the Raymond Basin Management Board called a
6 Conjunctive Use Workshop.

7 And what we found out during that meeting,
8 that was just last Thursday, is that the MWD is
9 negotiating to enter into an agreement with the
10 Raymond Basin Management Board to actually use the
11 basin for storage for MWD water. This agreement
12 isn't final. They're still working on it.

13 But what could happen is they'll be
14 storing up to 75,000 acre-feet of water in the basin
15 for when they need it. Then whenever they need it,
16 they can come back in and take up to, at least right
17 now, 25,000 per year.

18 BURIL: That is way in excess of what they
19 remove now.

20 MELCHIOR: They're talking the whole
21 hydrogeological flow.

22 NOVELLY: Right now they estimate the storage
23 capability of the basin at 250,000 acre-feet. And
24 that's just a guess. 100,000 of that is allocated
25 among the agencies that use the basin. Then they'd

1 have this other 75,000 for the MWD. Once they see
2 how that works, they may increase it for everyone
3 else also.

4 But the way they were talking about doing
5 this, and I'll pass this around. I'm sorry this is
6 not color. I made out one and I didn't have time to
7 copy it. This is what they were showing as their
8 proposed means. They could have up to 10 injection
9 wells put into the basin kind of scattered all over
10 the place. For example, one of them is, they're
11 talking to Lincoln Avenue about rehab on an existing
12 well, the one on Olive and Harriet. They would turn
13 that into a combination extraction and ASR injection
14 well. Then they would also put a second-stage VOC
15 treatment plant on their existing plant.

16 So the way it would work as they're
17 putting it right now is the MWD puts in water. It
18 has to be to the same sorts of quality standards as
19 what they would sell to the agencies normally. And
20 then they can just leave that there until they need
21 it. If they get into a drought situation, they can
22 pull out up to the 25,000 a year and distribute it
23 to anyone they want.

24 LOWE: Where would they put the water?

25 MELCHIOR: Right out here.

1 NOVELLY: In the Arroyo. The Raymond Basin.
2 They're definitely looking at the northern part of
3 the basin, our part of the basin in the Arroyo.

4 LOWE: That would be the only place they would
5 put water, or are they looking at other places?

6 BURIL: No. It's all over the place.

7 NOVELLY: Raymond Basin has a couple different
8 basins. There's an eastern part of the basin, too.
9 But they're not looking at putting water there.
10 They're only looking at putting it in here right
11 next to our site.

12 Now what you can't see on yours are all
13 these purple lines are the proposed lines they would
14 be putting in. The black are the existing. That
15 would tell you which wells they're looking at. Some
16 of these wells would be new. Some of them you can
17 see underneath. There's either a proposed or a
18 conversion of an existing well.

19 ROBLES: Judy, how would they take care of
20 contamination?

21 NOVELLY: All they said about contamination was
22 that they'll look at the groundwater model that they
23 have existing right now to try to get an idea what
24 would happen. They haven't said anything else about
25 it at that meeting. They're mostly concerned with

1 everybody's water rights.

2 BISHOP: On this map, if you look closely,
3 they've got injection and extraction wells going as
4 far over as Eaton Wash, which is pretty far to the
5 east from here.

6 BURIL: It's about two miles.

7 BISHOP: And they have wellhead treatment on
8 one, two, three, looks like three different well
9 sites here, which seems to me that they're looking
10 at the VOC contamination.

11 NOVELLY: They would definitely look at what
12 they're getting out. They didn't talk too much
13 about what they would be doing to how it would move.
14 They're mostly just figuring they'll handle it by
15 wellhead treatment wherever it shows up.

16 And they're talking about having all these
17 different water agencies kind of take turns using
18 the MWD wells to keep them in running condition
19 because they don't just want to install them and let
20 them sit there until they need them. So there would
21 probably be a bit of moving around about which water
22 company is pumping from which location at which
23 time.

24 It doesn't sound like it's anything
25 they're going to consult with us about, at least

1 right now. It would be under the Board. And this
2 would amend the adjudication agreement. They're
3 going to have to do that to put MWD as a member, and
4 then they would sit on the Board and be subject to
5 the Board's decisions also.

6 But it just seemed like such a big impact.

7 MELCHIOR: Yes. Did they talk about an
8 environmental impact?

9 NOVELLY: No. They didn't say a word about
10 environmental impact. I didn't jump into the middle
11 of it because I thought it was just best to get the
12 information. I did let them know I was there. We
13 were invited. But I didn't want to get their
14 meeting off on a different track than what they
15 wanted.

16 The MWD guy had a video that showed how
17 they were going to put all this together. I asked
18 him to send me a copy. I don't have that yet, but
19 when we do, we can show it to you guys.

20 ROBLES: Not only do we have Steve and Jon's
21 concern, but we have this concern.

22 NOVELLY: This is something that they're
23 negotiating right now. As soon as the agreement is
24 signed, they said they could start putting water in
25 the basin in lieu.

1 Do you know what the in lieu method is?
2 I'm familiar with injection and the spreading
3 basins.

4 BISHOP: It's not a technical. It's a legal, in
5 lieu water replenishment. It's in addition.

6 MELCHIOR: Not extracting water here?

7 BISHOP: I can't think of the exact -- it's not
8 like an injection well. It's a legal term on who
9 owns that water and who's got access to it. I can't
10 remember the exact definition.

11 NOVELLY: That would be as soon as the agreement
12 is signed. Then once the agreement is signed they
13 think they can have this system, this is a \$15
14 million system, in about two years. And one of the
15 sources of water that they'll be bringing is, they
16 have an MWD plant that supplies L.A. that uses State
17 project water. Are you familiar with that? And the
18 State project water is significantly lower in total
19 dissolved solids than the Colorado River water,
20 which they normally supply to this area. They would
21 be building a pipeline across to this, probably to
22 near the Bangham well, the Pasadena Bangham well.
23 That will give them the ability to bring in the
24 better quality water from that area.

25 I can get you guys a copy of the letter

1 that they handed out. It gives the basic agreements
2 they're working on. I'll get you that. And I'll
3 try to get you a color copy of this one, too, in the
4 mail so you can see it better.

5 BISHOP: You guys might actually think of this
6 as an opportunity instead of a fly in the ointment
7 because there are all sorts of things going on,
8 could be going on to utilize and reduce the cost to
9 NASA of any groundwater treatment. Because of
10 conjunctive use they can pump a lot more water and
11 they're going to need to do treatment on that water.
12 There may be some opportunities here, not just
13 problems.

14 So yes, it's going to complicate the
15 hydrogeology tremendously to have 75,000 acre-feet a
16 year coming in and out of the basin. At least my
17 impression is most times when MWD does this, they
18 have a drought contingency, but it's also a dry year
19 usage. So they can put water in during the winter
20 and then pull it out during the summer when there's
21 none available from the delta to use.

22 NOVELLY: Yes, whenever they need it.

23 BISHOP: It fluctuates the basin on a yearly
24 basis.

25 NOVELLY: I think they're doing this in the

1 Chino area. They've got one in Chino and they have
2 one up off to the west of us also. In those basins
3 they're saying it works out very well for them.

4 BURIL: Okay.

5 BISHOP: There's one proposed in San Gabriel
6 that's close to being completed. That's why I was
7 saying that actually worked out for the group of
8 PRPs that were responsible, chosen responsible for
9 the contamination. They got a cost savings by
10 joining with MW -- it actually wasn't Metropolitan
11 directly. It was a group of water districts that
12 were putting it together, but joining with them to
13 provide the joint benefit of water supply and of
14 treatment.

15 NOVELLY: Do you get involved in these
16 agreements, though?

17 BISHOP: We don't get directly involved in the
18 agreement in Baldwin Park. EPA has been directly
19 involved in that one. It just happened because of
20 the way our agreement with them was.

21 BURIL: Fascinating.

22 BISHOP: Judy, did they say who is actually
23 working on this for Metropolitan and the Raymond
24 Basin?

25 NOVELLY: Yes, I have a sign-in sheet with their

1 names. And there's a list of the guys that did the
2 presentation. Robert Harding was the one that did
3 the video. Who else represented MWD? Chuck Smith,
4 Norm Flette, Robert Harding, Paul Teigen and Anatole
5 Flanagan. Those were the ones that were at the
6 meeting.

7 BISHOP: I was wondering if -- they must have
8 put together a groundwater model for this to look at
9 the water flow.

10 NOVELLY: They're using the CH2M Hill model.
11 They were talking to them about switching to mod
12 flow.

13 BISHOP: So CH2M Hill did the modeling of the
14 basin?

15 NOVELLY: So far.

16 BURIL: In fact, we have the data that they used
17 to generate that model. We're using that to
18 calibrate our own model.

19 NOVELLY: They had a Rich Atwater there. He was
20 from Bookman Edmonton, and he sort of looked over
21 the model that he used to consult with the Board on
22 how that would work.

23 BURIL: Okay. Well, there is another, depending
24 upon your viewpoint, concern or opportunity to
25 excel. I don't know.

1 ROBLES: Challenge.

2 BISHOP: It's going to be both.

3 BURIL: I think we're up to the project schedule
4 part of this. We're still getting it Xeroxed
5 because we wanted to have it in color for you folks.
6 Why don't we take a break for lunch and come back,
7 unless there's something else we want to discuss on
8 this.

9 CHRISTMANN: I want to discuss this first.

10 LOWE: How long do you think it will take?

11 BURIL: Why don't you go ahead. We're early for
12 lunch.

13 (Discussion held outside the record.)

14 LOWE: Based on our conceptual look at this,
15 on-base and off-base groundwater, we came up with
16 some specific things that we want to make sure are
17 included in the RI.

18 We also looked through a lot of the old
19 maps that have been done and had some ideas on how
20 they should be improved for the RI. We just wanted
21 to present that.

22 BISHOP: It's a lot of things we just discussed.

23 MELCHIOR: So some of it's rehash.

24 BISHOP: Yes. It comes out of what we were --
25 it kind of follows the same thing. When Stephen

1 gave us his presentation. We started looking at
2 what kind of different scenarios we could see and
3 then came to what kind of information we would need
4 to evaluate those scenarios. And that's the kind of
5 stuff. So we're trying to give you exactly the same
6 thing that we went through yesterday with the
7 agencies.

8 MELCHIOR: Chuck, do you have the black and
9 white copies of the schedule?

10 BURIL: No. We don't have those yet. We should
11 be getting these any second.

12 MELCHIOR: Do you want to jump to number 3, the
13 current status of the project? We could probably
14 cover that.

15 BURIL: This will take just a few moments,
16 actually.

17 Apparently where we're at is getting all
18 the contractual stuff finalized. You could see on
19 the schedule a little better than what I can
20 describe. Basically, we got about halfway through
21 the subcontractor contractual requirements
22 milestones, if you will.

23 We currently have bid specs developed and
24 ready to go out for drilling and the laboratory
25 work.

1 MELCHIOR: We actually have those -- we have the
2 drilling bids back.

3 BURIL: Okay. That's right. I had forgotten
4 about that. So we have the bids back.

5 MELCHIOR: And the laboratory.

6 BURIL: And the lab. So we've got those back in
7 house and are preparing to do the full review that's
8 required of those.

9 LOWE: What lab have you decided to use?

10 MELCHIOR: We have not opened the packages yet.
11 We just got them in.

12 BURIL: So we're at that milestone, if you will,
13 of getting the contracts set up for all the
14 subcontracting work.

15 We've completed two rounds of sampling now
16 under the monitoring program. We're just getting
17 back the information and breakdown on the first
18 go-round. And, in fact, we'll probably be sending
19 that out to you in the next couple weeks or so, I
20 would guess. I can't give you an exact date because
21 I have to wait for it to get the review. This is
22 the first long-term monitoring report. We should be
23 getting that out to you here in the next few weeks.

24 Beyond that, basically, we're on the
25 monitoring train as it is. We've completed, as I

1 say, the draft of the first report. We've just
2 finished the second round. The third round is
3 scheduled for January, isn't it, B.G.? Do you
4 remember?

5 MELCHIOR: January, February.

6 RANDOLPH: Starts, yes.

7 BURIL: So we're moving ahead. We have not
8 waited to keep things on track as far as discussions
9 that we've had. But we've moved ahead and we
10 anticipate that things will, hopefully, get on
11 schedule here without any problem.

12 Now that we have this, why don't we --

13 CHRISTMANN: As Jon said, a lot of this is a
14 rehash of what he just talked about and came out of
15 our discussions yesterday after looking over
16 Stephen's data.

17 MELCHIOR: These are the things you're looking
18 for in the groundwater RI report?

19 CHRISTMANN: Right. These are general and some
20 specific ideas we had of things what we wanted to
21 see included in that just to make sure up front that
22 we indicated these to you so we're on the same page.

23 The first one, with respect to the water
24 supply wells, all of those things that Jon was
25 discussing, recent and historic chemical data for

1 those production wells, construction data for those
2 wells in order to know what we're looking at in
3 terms of screen lengths and depths.

4 LOWE: Do you have any problem getting chemical
5 data from the nearby production wells?

6 BURIL: Pasadena supplies it to us regularly.
7 Lincoln Avenue, because of our negotiation status
8 with them, has been a little forthcoming with the
9 data, although I'm sure if we ask for it we could
10 get it. We've had a longstanding agreement with the
11 City of Pasadena that they would just supply it to
12 us.

13 As far as pumping and so forth, we have
14 not asked for that on a regular basis so we don't
15 have it, but I don't anticipate there would be a
16 problem, with the exception perhaps of Lincoln
17 Avenue because of our negotiation status.

18 LOWE: What about the wells that were a little
19 further out?

20 BURIL: We've never asked.

21 We have gotten data in the past from
22 Kinneloa, Rubio Canyon and Las Flores supplied
23 through the Raymond Basin Management Board. In
24 fact, that's the bulk of what you got, Stephen.
25 Didn't we send him that? We should have sent you

1 something at one point.

2 LOWE: You sent it to me and I sent it to
3 Stephen.

4 BURIL: That's where we got it from, was from
5 our request, it must be a couple of years old now,
6 that we sent over to them and they basically gave us
7 a data dump of everything they had.

8 LOWE: Jon had also gotten some data directly
9 from DHS, but I guess they don't keep their database
10 completely up to date in the most recent stuff.
11 Some of the wells were like '93.

12 BISHOP: A lot of those were off-site wells.
13 Because I gave all of my stuff to Stephen. That's
14 why some of this dates back to '93, '92. DHS, if
15 you've dealt with them, they don't validate their
16 data directly. They do a weird batch thing way down
17 the line.

18 ROBLES: Just a couple comments on this. First
19 of all, is this all inclusive? Is there more?

20 CHRISTMANN: These were just talking points for
21 today, just general things that we had come up with
22 yesterday.

23 ROBLES: I'm not asking don't give me more. All
24 I'm asking, is there more that we can get? Is there
25 more definitive information? This is just a

1 brainstorm, but is there more?

2 CHRISTMANN: Certainly DTSC has guidance
3 documents. I'm doing hydrogeologic investigation.

4 MELCHIOR: We have some other things we're going
5 to include as well.

6 ROBLES: That's what I was just asking. Is
7 there other information that would help us in the
8 RI?

9 MELCHIOR: Oh, yes.

10 ROBLES: Beyond the scope of this.

11 BURIL: We have a good portion of this already.

12 MELCHIOR: We have some bulk water chemistry
13 things we need to include.

14 ROBLES: Depth analysis, seasonal flow.

15 MELCHIOR: The only thing I saw here that was
16 troublesome was if wellhead treatment was selected
17 as a remedy we'll need to do specific sampling of
18 the production wells.

19 I don't want to say it's virtually
20 impossible, but there's a real challenge to that.

21 BURIL: At a minimum, interrupting the water
22 supply.

23 MELCHIOR: It's not only a technical challenge,
24 but there are some legal issues.

25 ROBLES: Political issues.

1 BURIL: Those mix together.

2 CHRISTMANN: Again, it's an issue that needs to
3 be considered. If wellhead treatment is going to be
4 put on the system, somebody is going to have to
5 figure out what part of the screen you're going to
6 want to pull water from to maximize --

7 MELCHIOR: The way these wells were constructed,
8 the pumps are set and it's hundreds of dollars to
9 remove them.

10 BISHOP: There are other choices. We have found
11 in San Gabriel it's usually cheaper and it's usually
12 to -- the PRPs have found it more expeditious to go
13 in and do depth sampling than to drill a multiport
14 well next to a production well to determine what's
15 the best way to pull from that.

16 But that's not to say at this point this
17 is what you're going to do. This is way off in the
18 future. One of the things we're trying to do is
19 tell what we're thinking in our heads about
20 different information needs that might show up in
21 the future.

22 ROBLES: Second comment: Can we get all this
23 data?

24 BURIL: That was my next question. Some of this
25 stuff is going to be very challenging, not the least

1 of which is depth specific.

2 ROBLES: I like what Steve has done with these.
3 The thing is, as we go further back in time, the
4 flow regimes and the amounts of water levels and so
5 on, I don't know if those data exist or where they
6 can be found. This out here in the back end may be
7 superfluous if we can't support the data to find
8 that. This is just a data point without the other
9 things. My concern is if we're going to use it,
10 which I think we should, can we get this data.

11 BISHOP: We don't know that at this moment.

12 ROBLES: We need to make that as a point that we
13 to seek and see where we can and say if we don't
14 have it we need to come to a consensus and say we
15 can't use it because we don't have all the total
16 information. What information we get, we will use.

17 BURIL: Jon, just a quick question, going back
18 to the individual depth data. Have people in San
19 Gabriel actually restricted the depths that they
20 withdraw from in production wells?

21 BISHOP: They're looking to do that on the El
22 Monte Well Number 5 to go in and actually seal off
23 part of the production zone to maximize the --
24 because you're producing a huge volume of water that
25 now has a very dilute chemistry to it. If you can

1 just maximize where you're pulling that from, you're
2 not spending so much money on carbon.

3 BURIL: In terms of production, is that
4 impacting the purveyor's ability to meet his demand?
5 Are there wells that have to be drilled in addition
6 to that?

7 BURIL: At least in this situation that well has
8 been shut down because it was contaminated. This
9 actually helps them, their ability to meet demand.

10 I'm not necessarily saying that that's
11 going to be required at all.

12 BURIL: No, I understand. I was just curious
13 because I can see a production concern on the part
14 of the water purveyor and a contaminant removal
15 efficiency concern on the part of a PRP and a
16 regulator. Those two may be divergent goals.

17 BISHOP: Lots of times they are. There are all
18 sorts of ways to approach that. If you have
19 multiple zones that show contamination, it's
20 probably not worth trying to design a system to just
21 pull that out. If you've got one very hot zone, it
22 may be worth trying to look at some sort of other
23 scheme than just putting a wellhead treatment on an
24 existing plant and letting it pump from all the
25 zones to deal with that. Those are the kind of

1 issues that you might want to look at.

2 We discussed this yesterday. My feeling
3 is it might be too early to talk about water
4 treatment. We haven't even looked at the RI yet.
5 But the consensus was that if that came up, this
6 might be needed.

7 BURIL: This is a good future spec.

8 ROBLES: The third comment that I have. In my
9 opinion, we need to all sit down together as RPMs
10 and decide what is the minimum level of information
11 that we need to bring these data points into final
12 solution. If that criteria is not met, then, these
13 data points cannot be brought in. But if we do have
14 a minimum level that we're all comfortable with and
15 say, we don't have all the universe that we want,
16 but this is the minimum that we can accept, all of
17 us together come into a consensus, we can accept
18 that and bring that data point in as a point for
19 decisionmaking. That's very important. We need to
20 start thinking about that now. I don't want to
21 settle it now, but we need to start thinking about
22 that. We need to set up a comfort level, a criteria
23 that we all can accept.

24 BISHOP: I think we need to also start seeing
25 what's available.

1 ROBLES: That's the first thing.

2 BISHOP: If we don't have pumping information
3 from a nearby well then we won't use that
4 information. If it turns out the only pumping
5 information we have is from 1995 and after, we may
6 have to revise that opinion. We don't want to
7 restrict it down so that we don't have any
8 information, but we also want to be comfortable that
9 we understand what that information means as best as
10 we can. I totally agree.

11 ROBLES: I'm looking at that criteria or the
12 standard as a guidance, not as a fast rule. Because
13 we may need to do it on a case-by-case basis. As
14 you say, Jon, we have a well, we got to bring it in,
15 we know it's that close. We just have to figure out
16 how we can do that.

17 We need some type of guidance because I
18 don't want the contractors to be trying to find all
19 this information that may not be there and then try
20 to get all these data points. We need to streamline
21 this. It's very costly and we need to start looking
22 at it. I don't want to miss something, but I don't
23 want them chasing something that's not going to be
24 there.

25 BURIL: Wouldn't be of value.

1 BISHOP: At least the Water Board is more than
2 happy, if there's any problems people are having
3 getting data from other agencies or other people,
4 like the Raymond Basin, to add our voice into the
5 process to say we need this information, please
6 supply it; if you're uncomfortable supplying it to
7 JPL directly, supply it to us. Whatever. That kind
8 of thing.

9 BURIL: I think thus far we haven't encountered
10 a situation where we have been told no because
11 you're JPL. I appreciate the offer of support,
12 though.

13 ROBLES: I think this is a good start. I think
14 this is very important.

15 I've got to go through. There may be more
16 information that we want.

17 CHRISTMANN: Oh, absolutely.

18 ROBLES: I think this is a good start. Maybe we
19 need to go back and add our stuff to it and then
20 send it out to you guys and see if we can -- even
21 brainstorm. I'd like to have a whole laundry list
22 and then we can scale it back to what we think is
23 important. But I'm not familiar -- hydrogeology is
24 space science to me.

25 (Discussion held outside the record.)

1 LOWE: We were going through these one by one.

2 Do you want to continue, Craig?

3 CHRISTMANN: I don't know if we need to.

4 MELCHIOR: I don't see anything here that's --

5 BURIL: I think it's good to have the list. I
6 understand the contour maps and the kinds of things
7 that you might want there, and the cross-sections.
8 Most of these are self-explanatory.

9 CHRISTMANN: Some of the comments on the contour
10 maps are some of the older maps and some of the
11 older reports, there were questions about. That's
12 where some of the items on that came from.

13 MELCHIOR: One of the things we're going to do
14 internally is when we start to generate the RI,
15 we're going to basically story board the RI with JPL
16 in multi-day sessions so we're all clear what
17 cross-sections they are going to be expecting, which
18 contour maps, which time frames so everything is
19 agreed upon up front.

20 LOWE: Is it possible to include us in some of
21 those story board days?

22 MELCHIOR: Don't look to me.

23 BURIL: Once we get something in our own minds
24 set up, I would say absolutely, because I think it
25 would be useful for you to see what we think is

1 important so that when the report comes out there is
2 no question that we've covered all the bases.

3 ROBLES: Also I would recommend if there's new
4 technology or something out there, this is where I
5 have no problem with new methodology or something
6 out there. We need to try to see if that has some
7 bearing, a new way of looking at water flows, well
8 depths, whatever. Like I said, this is a black art
9 to me.

10 CHRISTMANN: One of the things, actually --

11 MELCHIOR: We do have things we'll be talking
12 about with you guys.

13 CHRISTMANN: You were discussing bulk water
14 chemistry. We've had people do some work with
15 isotope ratios. If you're looking at mixing
16 different water bodies, it's worked well in some
17 cases.

18 MELCHIOR: I'm very familiar with it.

19 CHRISTMANN: That's something that would be
20 applicable here.

21 ROBLES: I'm open to suggestions because it's so
22 complex here. These I view as tools. The more
23 tools I have in my toolbox, the better I'm able to
24 handle a situation.

25 MELCHIOR: The bulk water chemistry is like a

1 saw and hammer. They're basics. And the things
2 you're talking about is like the sophisticated -- we
3 can do it. It's a matter of whether we need to and
4 at what time. I think we're getting to the -- in
5 the next six to nine months we'll be at a point
6 where we'll be able to look at whether the hammer
7 and saw is appropriate, whether we need to look at
8 something else.

9 BISHOP: I appreciate your comments, Peter,
10 because I've been in many of these situations where
11 we didn't say that we wanted a cross-section across
12 this section and so the RI doesn't have it, even
13 though we all know that that would have been a
14 really good piece of information but because we
15 didn't mention it early on, it doesn't get included
16 or a contour map that shows this contaminant because
17 we forgot to mention that.

18 It really becomes a cumbersome process to
19 review the RI. We really want to just try and look
20 at the data generally and then start looking at what
21 tools we need to understand it so we can move to the
22 right direction.

23 BURIL: I think all of us have, in essence, the
24 same focus and the same goal in mind, and that is to
25 finally get to a point where we know what it is we

1 have to do to remediate the site, whatever that is.
2 I think as long as we all recognize it, that's the
3 common goal. There's no question about generating
4 data to support that.

5 The schedules aren't here yet. The
6 cafeteria is open. My suggestion is we break for
7 lunch and come back and we can talk schedule.

8 (At the hour of 11:20 A.M.
9 a recess was taken until
10 12:30 P.M. of the same day.)

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AFTERNOON SESSION

12:30 P.M.

BURIL: Let's continue on, then. The last thing we have on the agenda is talk a little bit about the program schedule.

I handed out this thing to you. Now, I apologize. I promised you a summary sheet and I didn't give it to you because I forgot to get it before I left for New Orleans. But we can get that to you. No problem.

But I wanted to tell you what happened with this and how we set it up. If you remember the old schedule, we had a lot of things in there about contractual stuff and so on. We got about halfway through all of that before we had to pull the plug on it and say, wait a minute, we don't know what we're doing so we really can't go to bid.

So where we're at right now is we've got basically about half of that done, which is reflected in here. Everything before the subcontractor contracts implementation blocks that you see here, the major tasks, everything that happened before that is done. This is about where we're starting now all the rest of our work.

1 Virtually everything else stayed exactly
2 the same as the April -- I forget what date it was,
3 but the one we gave to you last time around. All
4 the time frames are the same. All the sequencing is
5 the same, with the exception of looking at the first
6 RI event and the second RI event. Those changed.

7 MELCHIOR: What page?

8 ROBLES: What page?

9 BURIL: Page 2 you can see where that starts at.
10 Those slid back a quarter, approximately, so that
11 now the first RI event is going to occur on the
12 fourth long-term sampling event, which occurs next
13 July.

14 And then the second one --

15 MELCHIOR: And the reason for that is so we
16 don't collect two sets of samples within weeks of
17 each other.

18 BURIL: That's right.

19 MELCHIOR: It was really a two- to three-week
20 window that the quarterly event was going to occur
21 at this time and the RI event was two to three weeks
22 later. So instead of doing two sets of data within
23 a two- to three-week period, we just tried to make
24 it so that we wouldn't have to collect two sets of
25 samples.

1 BURIL: If you look at the predecessors, the
2 PRED column there, you notice that the predecessor
3 for starting the field work on the fourth long-term
4 event is line 26, and that's completing the field
5 work for the new well construction.

6 LOWE: So this is going to be your first
7 sampling event for the new wells?

8 MELCHIOR: That's correct.

9 BURIL: That's correct.

10 MELCHIOR: And that will coincide with the
11 quarterly monitoring event.

12 LOWE: So this also means that you're not going
13 to think about taking wells off of the quarterly
14 program until after the second RI event has been
15 completed?

16 BURIL: Yes.

17 MELCHIOR: That's correct.

18 LOWE: So you'll have six quarters of --

19 BURIL: At least.

20 LOWE: -- all wells with two quarters of the new
21 wells.

22 MELCHIOR: That's correct.

23 BURIL: That's correct.

24 And then virtually everything else is the
25 same as far as sequencing and timing and so forth.

1 MELCHIOR: There are some slight time
2 differences because of holidays.

3 BURIL: Right. We did take into account
4 holidays. We took Christmas Day out of this as a
5 working day. We took 4th of July out of this as a
6 working day. That's built in.

7 LOWE: In terms of if you had a draft document
8 and a draft-final document and under the FFA you
9 have 60 calendar days, to revise that you took out
10 Christmas as one of those 60 calendar days?

11 BURIL: I don't think we have that overlap. But
12 the computer would have done that if -- now that you
13 ask, the computer would have done that.

14 ROBLES: That's a good point. She has a good
15 point.

16 BURIL: She does. I had not even thought of
17 that.

18 LOWE: I think that when a document is due on a
19 holiday or a weekend that you push to the next
20 working day. But generally you don't take a holiday
21 out and say, oh, we're not counting that as a
22 working day or a calendar day.

23 BURIL: You're right. That is a good
24 distinction to make. I'm just looking here at what
25 we've got.

1 ROBLES: You need to do a sanity check on that.

2 BURIL: Yes, we'll do a sanity check. If you
3 would do the same, in case we missed something. I
4 just completely glossed over that. You're right. I
5 figure I'm going to take Christmas off, I don't
6 care.

7 LOWE: It's a 60-day requirement.

8 BURIL: I don't think we have that problem, but
9 let's all, if you could, doublecheck with me and
10 verify that.

11 LOWE: I went through this very quickly and I
12 pulled out all of the draft dates for when the RI,
13 FS, proposed plan and ROD would be submitted. I
14 think it would be useful to all of the other RPMs if
15 I wrote that on the board. It's hard to get an idea
16 of what's going on with a 36-page color thing.

17 BURIL: That's correct. I'll agree.

18 LOWE: I'll do this really quickly because you
19 see a date on the color.

20 BURIL: We will. That gives everyone a
21 perspective of what we're talking about. In
22 essence, two years until draft ROD and OUs 1 and 3
23 from today, and a little less than that on OU-2.

24 Now, we aren't looking for consensus on
25 this schedule now because you haven't had a chance

1 to review it. But if you have anything that jumps
2 up in your mind immediately, we'd appreciate hearing
3 it. Otherwise, this may be the subject of another
4 RPM face-to-face if need be, or telecon, or whatever
5 else to discuss it.

6 LOWE: Did you have any thoughts about the
7 concept I threw out this morning of splitting up
8 OU-1 and OU-3 knowing we're not drilling any new
9 wells off the facility and coming up with, say, an
10 interim ROD, which would then get tied into the
11 overall groundwater ROD once we've figured out
12 what's on site?

13 BURIL: You know, my immediate reaction is to
14 say I'm not sure yet, only because some of the
15 information that we hope to gather from the new
16 wells is going to really help us understand better
17 the influence off site has on on site, and vice
18 versa.

19 So my own perspective is to say it's
20 probably too early to say that we're going to pull
21 them apart until after we get a little more
22 information on that. I don't think we're in a
23 position of having the program affected dramatically
24 in terms of the process by not doing that right now
25 only because -- well, like I said, I just don't

1 think we're going to get into a position of finding
2 that. Splitting them will be not possible at some
3 later date if we find we can move faster with one
4 than the other and split at the time we understand
5 the full ramifications of the data that we have. I
6 don't see the need for it.

7 MELCHIOR: Can I ask a question whether it's the
8 ROD you're interested in, the interim ROD, or an
9 interim response action. Are you concerned with
10 responding to a concern that's out in OU-3, or are
11 you concerned with just a document, the ROD being a
12 document, the interim ROD, if you will. I'm trying
13 to understand which is of more concern.

14 BISHOP: Well, I think just from my concern is
15 that we're looking at three years before we get a
16 draft ROD. Right? 1999?

17 BURIL: I'm sorry. This is 1996 still. I'm
18 thinking fiscal '97 is my problem.

19 BISHOP: Right. Most of that time is taken up
20 to do all the field work associated with 1 and 2.

21 So if we can do the work on 3, we're
22 talking maybe about cutting that down in half.

23 MELCHIOR: I see.

24 BISHOP: And that would allow all of us to say,
25 here, yes, we have to do this other work in 1 and 2,

1 but we didn't need to do that on 3 so we moved
2 forward on 3.

3 The other suggestion to think about is, is
4 it possible to revise what our view of what OU-3 is
5 so we all I think agree there needs to be a look at
6 that area near MW-21 as part of interaction from
7 Valley Water and on base. Can we do some
8 investigation in our heads or existing data to see
9 if we can split this stuff on the east side of the
10 Arroyo?

11 MELCHIOR: From the west side of the Arroyo?

12 BISHOP: Just in terms of doing this interim
13 ROD. Do we need all the information from on base to
14 just evaluate that off-base stuff on the east side
15 of the Arroyo?

16 MELCHIOR: That's a good question. That's
17 something we ought to sit and talk about.

18 ROBLES: That's a very good question.

19 BURIL: It is a very good question. I think
20 it's a valid point.

21 ROBLES: What do you guys think about an interim
22 ROD?

23 MELCHIOR: I think I'd rather chat with you off
24 line before.

25 LOWE: The interim ROD could acknowledge that

1 there might be some aspects of this ROD that might
2 change once you put in these extra deep wells on
3 site. That may change your perception of what's
4 going on off site. It may change the remedy.
5 That's why I was suggesting an interim ROD as a way
6 of doing something now and trying to close off that
7 OU but acknowledging that there might be something
8 that will change.

9 BURIL: Let me ask you something. In an interim
10 ROD scenario, do we basically go through all the
11 steps that we normally do in terms of public
12 participation and meetings and so forth to establish
13 that as the interim ROD? Or is there a process
14 that's somewhat different than the, quote, final
15 ROD?

16 LOWE: You go through all the same steps.

17 BISHOP: The major difference is what you're
18 basing your cleanup on. Because an interim ROD
19 you're not saying this will be the final remedy.
20 You're not sure if it will or not. So you're not
21 necessarily meeting all the ARARS in an interim ROD.
22 You're meeting -- you're addressing a problem that
23 you know needs to be addressed.

24 And you're doing other work, which in this
25 case would be the on-site work, which may change

1 that in the future.

2 ROBLES: But you still have public
3 participation.

4 BISHOP: Yes, you do.

5 ROBLES: You're never going to get away from
6 that. You've got to have that in there.

7 BISHOP: Yes.

8 LOWE: That's correct.

9 BURIL: I just wanted to verify that there
10 wasn't a short-cut process to an interim ROD.

11 MELCHIOR: With an interim ROD do you go
12 through a feasibility study as well on a proposed
13 plan as well?

14 BISHOP: Yes, you do.

15 MELCHIOR: All right.

16 ROBLES: The whole idea is you're not focusing
17 in on the preferred. You're just trying to get some
18 closure on some issues.

19 I guess, Debbie, you want to see some
20 progress.

21 LOWE: Yes. I think there's pressure from a lot
22 of different places to have progress, probably from
23 your office --

24 ROBLES: I agree.

25 LOWE: -- from my management, from the public.

1 I mean, I think it's really hard for the public to
2 understand why -- you know, we've done a lot of work
3 here so far, but it's still going to be three years
4 before we have a draft ROD. It would be nice to
5 have a couple things that we could say we recognize
6 these are serious concerns and we're trying to move
7 them forward. And the two things that spring out to
8 me as being able to accelerate is the off-facility
9 contamination on the other side of the Arroyo, and
10 then the SVU system that we talked about.

11 BURIL: I guess the distinction I'm hearing is
12 to the east of the Arroyo. The Arroyo and eastward.

13 ROBLES: You just tossed something in there.

14 BURIL: I know. I'll get to that in a second.
15 I just wanted to distinguish one other thing here.

16 That is that the idea of the eastern part
17 of the Arroyo versus the western part, which I'll
18 term Pasadena water service wells versus Valley
19 Water service wells and things that we're seeing
20 there.

21 In dealing with those, are we saying that
22 what we're looking at now is essentially no further
23 need for investigation on either one of those areas,
24 that you're saying basically that you think we could
25 go to this interim ROD recognizing the shortcomings,

1 whatever they are, as far as the data and whatever
2 information comes from OU-1 wells that might
3 influence that, that that's good enough? I guess
4 this is what I'm trying to understand, the
5 distinction.

6 BISHOP: On the eastern side of the Arroyo, my
7 first look at it is we may be able to move forward
8 with the RI since we're not collecting any new data
9 out there, we're not doing any new work out there,
10 whereas when we get to the western side, we're
11 putting in on-base wells that are going to look at
12 the western portion of off site. So we're not doing
13 anything to look any farther on the eastern side,
14 but we are waiting almost two years to start the --

15 BURIL: I see.

16 MELCHIOR: Would you include the quarterly
17 monitoring? Would you finish your quarterly
18 monitoring before you started the interim ROD
19 process?

20 BISHOP: To be honest with you, I think the
21 timing on this project is we're going to have four
22 quarters of sampling even if we decided right now to
23 move forward with the RI before we got anywhere near
24 a draft. So it's not really an issue. I would say
25 if we could say that tomorrow we could start running

1 it, we might need to look at that. But that's not
2 been my experience.

3 BURIL: So your thought would be, then, that the
4 interim ROD would address interim measures as
5 identified for the eastern portion of the Arroyo,
6 eastern being that and beyond, while we await data
7 from the new wells to finish the last portion on the
8 western part of the OU-3.

9 BISHOP: That's correct.

10 BURIL: I wasn't quite sure. I had an inkling
11 there for a minute that you wanted another OU
12 potential.

13 BISHOP: No.

14 BURIL: That was my mistake. Good. I'm glad to
15 hear that.

16 BISHOP: I that's why I think Debbie is correct
17 in her assumption of saying an interim ROD. Because
18 otherwise we're looking at how do you split up the
19 OU to finalize because we have off-base issues on
20 the west side also that we're looking at. But if
21 you make it an interim, which may well be a final
22 conclusion for that area, or may not, but could well
23 be.

24 MELCHIOR: One of the suggestions I might make,
25 to me the process is a little muddy as to the steps

1 that go into an interim ROD. Maybe for the next RPM
2 meeting the agencies --

3 ROBLES: Briefing on the process of the interim
4 ROD.

5 MELCHIOR: Maybe the agencies could put together
6 a 15-minute, half-hour type presentation of the
7 steps that are involved with an interim ROD, how
8 that relates to the FFA.

9 ROBLES: What kind of things you want to see.

10 BURIL: What kind of things you want to see in
11 there, what kind of things you don't want to see in
12 it.

13 MELCHIOR: So that way Chuck and Peter can
14 conceptualize the process and how that relates to
15 the project itself.

16 BURIL: We'll talk about it in concept prior to
17 that time, of course.

18 MELCHIOR: Right.

19 BURIL: I can see some benefits to it, but I can
20 also see a couple of pitfalls. I may be jumping at
21 phantoms so --

22 MELCHIOR: Maybe in the middle of January when
23 we get together again.

24 LOWE: Or sooner.

25 BURIL: That's fine. I've got no problem in

1 getting together sooner. I think that we need to
2 look at this schedule as it stands to identify
3 whether or not this is going to be working well
4 enough for the final documents, if you will, all the
5 way across the project. If we want to add to the
6 idea of an interim ROD and interject it somehow into
7 the schedule, I think that would be --

8 MELCHIOR: That's another issue.

9 BURIL: -- that's another issue that we'll have
10 to build into this in some fashion. I don't know
11 what it would take. I guess that's part of my
12 problem.

13 LOWE: It's possible that today or soon after we
14 could say, okay, OU-1 and OU-2, these are the
15 schedules, we're going forward with that, and OU-3,
16 we're still looking at ways to accelerate it.

17 BURIL: Okay. I don't have a major concern in
18 breaking it apart like that, at least at this
19 juncture. But I think it's worth having you folks
20 look at it first before making that decision.

21 LOWE: Right.

22 BISHOP: The only concern I have is that if what
23 you're saying is really the amount of time for each
24 task and the sequencing of the tasks does not
25 change, they just move back essentially from what we

1 went through for the two days in April, then we can
2 go through it, but we're not going to identify
3 anything that is going to change. You've already
4 said this is the most --

5 BURIL: With the exception of the holidays.

6 BISHOP: With the exception of removing days
7 from the year. Some years only have 364 years. But
8 besides that.

9 BURIL: Let me ask the agencies, then, to do
10 this for us. If you could take a look at this as it
11 stands, let us know if you see anything that is a
12 concern, recognizing we basically took things from
13 the last schedule and just scooted it back, moved a
14 few things around as we described. I think maybe at
15 our next regular telecon, which -- where is that
16 supposed to be? It's not a week from Thanksgiving,
17 is it? Or isn't it?

18 NOVELLY: Should be the first week of December.

19 (Discussion held outside the record.)

20 ROBLES: The 19th?

21 LOWE: Sure. Anybody else around on the 19th?

22 BURIL: Not for very much longer, no.

23 MELCHIOR: You're talking about December or
24 January?

25 BURIL: December.

1 LOWE: Are you available on December 19th for a
2 conference call?

3 GEBERT: Possibly.

4 BURIL: I'll ask Laurann to give everybody a
5 call since it appears the 5th is not going to work
6 for everybody. Generally I get wrapped around the
7 axle pretty tightly the end of the calendar year just
8 to get enough things done so I can take Christmas
9 holiday off.

10 So let me see what we can do in setting
11 something up sometime during the week of -- what is
12 that? The 14th?

13 LOWE: 16th.

14 BURIL: 16th. Okay.

15 LOWE: Should we also set up a place holder day
16 in January while everybody is here to flesh out this
17 idea of an interim ROD?

18 BURIL: I think we could start talking about it
19 on the next telecon, but I'd say we'd want a couple
20 of weeks, at least, after the holidays to start
21 talking about it.

22 ROBLES: 7th, 8th or 9th, Tuesday, Wednesday or
23 Thursday of the first full week? January 1st is the
24 first Wednesday. This is the second week. It's the
25 first full week, the second week of January.

1 BURIL: I'm looking at the week of the 12th in
2 January. I won't be back until --

3 BISHOP: I think we're looking for January to be
4 a face-to-face.

5 BURIL: Are we?

6 LOWE: Yes.

7 BURIL: Maybe we should establish that.

8 LOWE: Yes.

9 BURIL: We should establish that. I thought you
10 were talking telephone.

11 LOWE: No.

12 ROBLES: Face to face.

13 BURIL: Let me offer to do both, then. Let's
14 get a date in mid January for a face-to-face and a
15 telecon date in December. That's the week of the
16 16th and the week of the --

17 LOWE: Are you leaving, Peter?

18 ROBLES: I have another meeting.

19 LOWE: I guess what the consensus statement will
20 have --

21 ROBLES: I'm just going to be across the street.
22 Judy is going to come over and I will sign it. Not
23 a problem.

24 LOWE: Or we could just have the three of us
25 sign it and then you can sign it and mail us copies

1 later.

2 ROBLES: Okay. I'm just going to be across the
3 street talking historical landmark.

4 LOWE: Okay.

5 (Robles leaves the conference room.)

6 (Discussion held outside the record.)

7 LOWE: So are we going to pick a date? Or
8 aren't we?

9 BURIL: Basically, what I was offering is to
10 have Laurann give everybody a call and just kind of
11 coordinate it. I don't think Richard has his whole
12 schedule set up yet.

13 GEBERT: January I'm free, as far as I know, at
14 any time.

15 NOVELLY: Why don't you pick a couple dates.

16 BURIL: I'll pick a few dates and then we can
17 verify it as a final date.

18 MELCHIOR: How about the 15th and 16th?

19 BURIL: For?

20 MELCHIOR: January.

21 BURIL: January. I've got no problem with that.
22 So January 15th and 16th as a face-to-face. Where
23 do we want our faces to be that time of year?

24 LOWE: One other thing I'd like to do at that
25 meeting is if JPL could start looking into the types

1 of water supply data that you can get your hands on.

2 BURIL: Okay.

3 LOWE: And just start giving us an idea of --

4 BURIL: What's available?

5 LOWE: -- what's available. Do they keep
6 pumping data? How far back do they keep it?

7 BURIL: Actually, we have some of those answers
8 available to us now. I don't know what they are,
9 off the top of my head. But, sure, we can look that
10 up.

11 BISHOP: I might give you a suggestion. It's
12 likely that when they did the model for the basin
13 for this conjunctive use that they had to do
14 historic head matching and so on.

15 MELCHIOR: They did.

16 BISHOP: They might have some of that pumping
17 data already gathered and put together.

18 MELCHIOR: We've actually sat with CH2M Hill
19 when we were assembling this database to make sure
20 there were no discrepancies and to understand the
21 pedigree of the data they had in that database.
22 That's been done. It's just a matter of
23 resurrecting it. But there are some other things
24 that -- I don't believe we went back to check well
25 records. And spreading basin information is pretty

1 difficult to obtain. So there are some
2 discrepancies that we've had problems with. So we
3 will provide that for you hopefully in January.

4 BURIL: Okay.

5 LOWE: Do you guys want to caucus about the
6 schedule for a few minutes?

7 BISHOP: Okay.

8 LOWE: Give us like 10 minutes.

9 BURIL: Sure. No problem.

10 (Discussion held outside the record
11 from 12:57 P.M. to 1:13 P.M.)

12 BURIL: Tell us what your comments are and we
13 can go from there.

14 (Discussion held outside the record.)

15 BURIL: Okay. Go head.

16 LOWE: We've kind of talked about the schedule,
17 and we would like a chance to look at it.

18 BURIL: Sure.

19 LOWE: So we're not going to approve the
20 schedule today.

21 BURIL: That's fine.

22 LOWE: But our general feeling is all you've
23 really done here is slid some of the dates back
24 because we were trying to resolve some of these
25 issues on the addenda, that likely we will be

1 approving the schedule for OU-1 and OU-2.

2 BURIL: Okay.

3 LOWE: We're hoping to do that on the conference
4 call in December and not hold us up until January
5 because I'm anxious to get the schedule finalized.

6 BURIL: As are we.

7 LOWE: With the exception of OU-3.

8 BURIL: Dealing with the potential for interim
9 ROD and that kind of thing brought into it.

10 LOWE: And accelerating it. And I think that
11 should be one of our main topics for our January
12 in-person meeting.

13 BURIL: That's fine. I think that's an
14 excellent idea. That was painless.

15 We'll have the consensus statement in here
16 in a couple minutes.

17 We've got a couple of minor things to kind
18 of finish off to round out the meeting. I think Dan
19 is probably going to stand up and bid us adieu.

20 MELCHIOR: Say good-bye.

21 (Discussion held outside the record.)

22 (Melchior leaves the conference room.)

23 BURIL: I have here copies of the last RPM
24 meeting minutes.

25 NOVELLY: She gave you both copies.

1 BURIL: Technically we're supposed to approve
2 these so they can be placed in the repository. Did
3 anybody have comments about the last RPM meeting
4 minutes? I have copies if you want to take a quick
5 glance at them for whatever reason. If not, I'm
6 going to assume that they are approved as written
7 and can be placed in the repository immediately.
8 Consensus on that one?

9 LOWE: Sure.

10 BISHOP: Sure.

11 BURIL: Great. We'll do that. Good.

12 On action items. Thank you, Judy.

13 We were going to sign off on the RPM
14 consensus statement. It's in front of you right
15 now. So if you'd like, go ahead and take a look at
16 it.

17 (Discussion held outside the record.)

18 BURIL: Let's go back on the record.

19 Just a quick review of the action items
20 that we have and then we can call it done.

21 First action, we'll all sign off on the
22 RPM consensus statement. Jon is finishing his and
23 we will get Peter's signature on it this afternoon.

24 Then we have NASA/JPL and Foster Wheeler
25 will meet regarding the agencies' recommendations to

1 add to that list that Craig made up and went through
2 for the information. We're going to talk about what
3 other things we might want to come up with.

4 We will be sending copies of the materials
5 from the Raymond Basin Management Board conjunctive
6 use to all of you. You have the one sheet, but
7 we're going to get, I think, maybe a color sheet,
8 maybe some other information to you.

9 The agencies will prepare approximately a
10 15-minute presentation on what you'd expect to see
11 in an interim ROD, what you don't expect to see, et
12 cetera.

13 LOWE: The time frame for that is the January
14 meeting.

15 BURIL: January face-to-face.

16 LOWE: If we have some information we may be
17 providing that during the conference call.

18 BURIL: That's fine.

19 Speaking of the conference call, the next
20 thing for us would be to schedule it during the week
21 of the 12th, I think it is.

22 NOVELLY: December 16th.

23 BURIL: During the week of December 16th. But
24 sometime during that week. That's to talk about
25 anything that you might find in the schedule that we

1 need to be concerned with and need to bring to our
2 attention.

3 We'll be meeting in January, and currently
4 we have it set for the 15th and 16th, to discuss
5 anything final on the schedule, as well as the issue
6 of interim ROD. And also at that time we're going
7 to be trying to give you ideas of the water supply
8 data that we have available from the production
9 folks.

10 Lastly, we're going to remind Peter about
11 the City of Pasadena agreement.

12 Is there anything else we need to bring up
13 before we say thanks a lot?

14 BISHOP: I just wanted to check. The first
15 long-term quarterly sampling report would be coming
16 sometime in December. Is that correct?

17 BURIL: That's my goal. In fact, I can't see
18 why it wouldn't be. I've already reviewed it. It's
19 in legal review right now.

20 BISHOP: So we could have a short presentation
21 on that in January?

22 BURIL: I think that's reasonable.

23 (Mr. Robles returns to
24 the conference room.)

25 BURIL: We were just ready to adjourn.

1 Does anybody else have anything further
2 they want to add?

3 Okay. Well, have a good Thanksgiving and
4 a Merry Christmas everybody. I won't see any of you
5 probably until after that.

6 Penny, it's been a pleasure working with
7 you over the years. We'll miss you and certainly
8 thank you for all the help you've been over the
9 course of the time that you've been with us. We'll
10 keep you informed.

11 There it is. Done, folks.

12 If we do pull off a barbecue at the end of
13 this thing, we'll give you a call.

14 (The proceedings adjourned at 1:34 P.M.)

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