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ORIGINAL

PUBLIC HEARING

TOWN OF ACTON BOARD OF HEALTH

ACTON TOWN HALL

472 Main Street, Acton, Mass.

Monday, December 9, 2002, 7:34 p.m.

Board of Health

William McInnis, Chairman

Mark Conoby, Vice Chairman

Robert Oliveri, Member

Douglas Halley, Health Director

Reporter: David A. Arsenault, RPR

Farmer Arsenault Brock LLC, Boston, MA

(617) 728-4404

1 PRESENT:

2 Jack Guswa, Ph.D., LSP, GeoTrans, Inc.

3 Anne Sheehan, GeoTrans, Inc.

4

5 Maryellen C. Johns, W.R. Grace,

6 Sr. Project Engineer

7

8 Dan Keefe, DEP

9 Sarah White, EPA

10

11 PRESENT:

12 Anderson & Kreiger, LLP

13 Stephen D. Anderson, Esq.

14 The Bulfinch Building

15 43 Thorndike Street

16 Cambridge, Massachusetts 02141

17 617-252-6575

18 for the Town of Acton

19

20 Marked document exhibits returned to Stephen

21 Anderson, Esq. Marked poster exhibits retained by

22 Douglas Halley.

23

24

1 PROCEEDINGS - 7:34 p.m.

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3 MR. McINNIS: I'd like to call the
4 meeting to order. The first item of business is
5 not particularly exciting. I would like to ask our
6 health director to enter into the record some items
7 we received since the last meeting.

8 MR. HALLEY: The first document is a
9 document we received from EPA, which has some
10 information about other communities that have
11 regulated the installation of wells, from a
12 moratorium to design criteria. The second document
13 is a document that we received from ACES about how
14 other communities are regulating wells. They have
15 created a lot of charts to indicate what all those
16 other communities are doing.

17 The third document is a document from
18 GeoTrans which specifies the new information on
19 Lisa Lane and Bellantoni Drive. The fourth
20 document is an email that we received from DEP
21 regarding their response to what authority they
22 have on private wells. The fourth document is an
23 informational document about private wells in
24 Atlanta and what the CDC found in those private

1 wells and what actions were taken. The last
2 document is a document from Bob Eisengrein, as
3 president of ACES, highly recommending that the
4 Board implement a moratorium.

5 MR. McINNIS: Thank you, Doug. I
6 understand that I need to push to talk on the
7 microphone. Can everyone hear me without a
8 microphone? If you can't hear me, tell me and
9 we'll use the microphones.

10 What I have in mind for an agenda
11 tonight is that I would like to cover any new
12 information received since the last hearing and
13 enter it into the record as well as have an
14 opportunity for the Board members to ask questions
15 about the information. There are two items that
16 I'm aware of. One was a well report submitted by
17 GeoTrans through W. R. Grace, I believe, or perhaps
18 directly. The other is Mary Michelman from ACES
19 says she would like to present some information on
20 other towns' well regulations. Is there anyone
21 else who would like to present any new information
22 tonight?

23 With that, if it would be acceptable,
24 I would like members from GeoTrans to describe the

1 well report and give us a summary of it.

2 MR. GUSWA: I'm Jack Guswa from
3 GeoTrans. I'm going to try to move everything
4 closer and speak loudly. Hopefully that will be
5 adequate. As a little bit of history, this map is
6 the region of contaminated groundwater emanating
7 from the W. R. Grace site. The different colors
8 represent different concentrations of
9 contamination, the highest concentration of
10 vinylidene chloride detected regardless of depth,
11 in some cases they are shallow, in some cases they
12 are deeper. We had two private wells that are
13 located within the region of contaminated
14 groundwater, the one at Lisa Lane and one at
15 Bellantoni Drive.

16 We have recently completed and
17 submitted a report that describes the
18 investigations that we did on each of those two
19 private wells, which are deep bedrock wells used
20 for irrigation purposes in the spring and in the
21 summer. These are blowups of what's in the report.

22 The private well -- the evaluation of
23 the private wells was done specifically to identify
24 water-bearing zones, water-bearing fractures

1 contained within the wellbore for the purposes of
2 then installing a type of groundwater sampler
3 called a diffusive bag sampler so we can try to
4 understand the distribution of contamination in the
5 groundwater and perhaps with that information
6 figure out where we should go next.

7 The chart on the left is for 5
8 Bellantoni Drive. The one on the right is One Lisa
9 Lane. I'll describe them separately.

10 There are several different types of
11 evaluations that we did in these boreholes. These
12 are traditional and some more recent state-
13 of-the-art type logging that was done. One of the
14 types of logs that we had done was called a caliber
15 log. That's shown by this red line. The purpose
16 of a caliber log is to really tell us how wide the
17 diameter of the wellbore is as you go down into the
18 ground. One of the advantages in a fractured rock
19 is that when the well diameter appears to be large
20 that's an indication that there are fractures
21 intersecting the wellbore giving it an enlargement,
22 and it might be those are zones where you would
23 have greater inflow or outflow from the wellbore.
24 The caliber log gives us the geometry of the

1 wellbore and looking for areas where it appears to
2 be larger.

3 If we follow this red line, right
4 here we are inside the casing, a 6-inch diameter
5 casing. So there was no variation in the caliber
6 log. We drop below the casing. We start to see
7 the squiggly pattern which reflects the variation
8 in the borehole layer. We see zones of enlargement
9 at a depth of 220 feet and also around 270 and 290
10 feet. It doesn't tell us anything in and of itself
11 except those are potential zones to think of flow
12 or more preferential flow through fractures.

13 Another type of log that was run was
14 a fluid resistivity. In this case we are looking
15 for the ability of the water itself to transmit
16 resistance to electricity, and in some cases
17 extreme variations would indicate greater inflows
18 or outflows of the wellbore. In this case the
19 fluid resistivity log was noninformative for the
20 purpose of identifying possible inflow zones or
21 higher-yielding fractures.

22 We also did a temperature log. The
23 idea there again looking for what would be
24 considered to be anomalies unusual patterns in the

1 temperature. What you would expect is the
2 temperature would decrease as you went deeper into
3 the ground. As you went further deeper, you might
4 see a temperature increase. This zone up here
5 represents the daily changes in temperature of the
6 ground surface. This is more reflective of the
7 earth's temperature, the deeper earth's
8 temperature. The increase in temperature
9 represents what is called a geothermal gradient and
10 it tends to increase as you go deeper. From this
11 temperature log, nothing unusual is seen in this
12 wellbore.

13 We also did some acoustic televiewer
14 logs. In this we are trying to visually look for
15 fractures in the wellbore, the angle of dip of
16 those fractures where they intersect the wellbore
17 as well as the direction. These red dots, red
18 tadpoles is the term used in the geophysical
19 report, represent fractures identified from the
20 televiewer logs. They appear to be relatively open
21 and, therefore, could transmit water. The tail of
22 the tadpole represents the direction of the dip;
23 the location on this portion of the graph here, the
24 angle of the dip. So these are relatively -- on

1 the left-hand side these are relatively
2 shallow-dipping fractures; on the right-hand side,
3 steeply dipping fractures. What this tells us is
4 there were quite a few fractures identified and
5 maybe about half to 60 percent appear to be open
6 fractures, that is, they could transmit water and
7 the other 40 percent or so appear to be tight and
8 would not be able to transmit water. Nothing
9 particularly revealing or alarming on that data.

10 The last two tests were borehole flow
11 analyses. You do it under two conditions. You
12 do -- you're looking for vertical flow in the
13 wellbore, water movement up and down the wellbore.
14 You do it under two conditions. One, without a
15 pump, you are looking at the ambient or natural
16 flow condition in the borehole. The second, you
17 put a pump in the well and you pump water out of
18 the well, and you look at the vertical flow in the
19 wellbore to see how that varies vertically along
20 the wellbore. The idea being if we have -- this
21 pump when it was pumping it was pumping about .3
22 gallons a minute. We were pumping water out at .3
23 gallons a minute and water has to be coming into
24 the wellbore somewhere so the sum is equal to .3

1 gallons a minute. We can look at that vertical
2 flow and see where that water is coming into the
3 wellbore.

4 For Bellantoni Drive what the ambient
5 condition told us was that there was very little
6 vertical flow in the wellbore. It means there's
7 very little vertical flow. Second, if there is
8 flow through the wellbore, then it must be
9 horizontal; so there's no vertical component. Or
10 three, the fractures aren't very water-yielding at
11 all and, therefore, there's very little flow in the
12 wellbore and that flow which is there would be
13 horizontal.

14 The pumping condition evaluation --
15 let me explain this graph for those who see the
16 reports. These circles here represent flow meter
17 measurements where the meter was not able to detect
18 any flow. The detection was about .02 gallons a
19 minute. There were two areas where there was very
20 small flow, apparent flow measured, just a little
21 bit above the actual detection limit of the
22 machine. So it's a detectable number but it's not
23 very high. It was less than a tenth of a gallon a
24 minute.

1 Under the pumping condition analysis
2 where the pump is sitting inside the well casing --
3 the pump was sitting somewhere in here, and pulling
4 water out at .3 gallons a minute -- what we notice
5 is that at the bottom of the wellbore, we start to
6 see inflow or vertical flow upward. The blue lines
7 going to the right indicate upward flow. From a
8 depth of about 275 feet, which is the deepest
9 location, approximately deepest location, we took
10 the measurement to a depth of about 260 feet. Over
11 that 15-foot interval there was a net vertical
12 upward flow of about .25, maybe .2 gallons a
13 minute. We were pumping somewhere around .2, .3
14 gallons a minute out of the wellbore. For the rest
15 of the borehole it looks like it might have dropped
16 off a bit. Excuse me, let me back up for a second.

17 At the depth of about 265 to 280 feet
18 we are having most of the water that we are pumping
19 out is flowing into the wellbore. The water is
20 entering the wellbore at the bottom of the hole.
21 And as we move upward, there was very little
22 change, a slight decrease followed by slight
23 increase in flow rate, which means there is little
24 contribution of water to the well above the depth

1 of 265 feet. In this case the primary water
2 production zone of the well at 5 Bellantoni Drive
3 is actually in the lower 15 feet or so of the
4 wellbore. There may be some minor variations of
5 inflow or outflow further up the wellbore, but the
6 majority of the flow comes in at the bottom of the
7 well.

8 MR. McINNIS: Sorry. Just to
9 understand, that's the natural static condition or
10 the pumped condition?

11 MR. GUSWA: The pumped condition. On
12 the left-hand side of the chart, these circles, the
13 purplish things, that was the ambient, nonpumping
14 condition. On the right-hand side are these aqua
15 or light blue rectangles. That's the pumped
16 condition.

17 MR. McINNIS: Thank you.

18 MR. CONOBY: So you found the well
19 was cased to about 120 feet. Most of the flow was
20 in the bottom 15 or 20 feet of the well for
21 production?

22 MR. GUSWA: Yes. What we ended up
23 doing for the well on Bellantoni Drive was take all
24 this information, the caliber log, the flow log,

1 the acoustic televiewer logs, and selected five
2 locations for which to install these diffusive bag
3 samplers, or passive bag samplers for VOC analysis.
4 We targeted those areas where there was an
5 indication where there was a fractured zone, where
6 there was water inflow, where there might be water
7 outflow, and then filled in the gaps where some of
8 the spacing was, like a hundred feet or so, we put
9 some in between there to detect if there were any
10 vertical stratification in the wellbore.

11 We did the same suite of borehole
12 logs on the well on Lisa Lane that we did for
13 Bellantoni Drive. We noticed here the fluid
14 resistivity didn't tell us much. The temperature
15 log didn't tell us much in terms of water-yielding
16 zones. The caliber log detected a pretty large
17 fractured area around the depth of 160 feet. And
18 then some more fracturing, around 230 and 240-foot
19 depths. Under the -- the televiewer logs looking
20 at the fractures, probably gave the similar results
21 that we saw for the Bellantoni Drive well, which is
22 about half the fractures are closed, a fair number
23 of fractures, half of them closed, half are open,
24 some are steeply dipping, some are shallow dipping.

1 The flow meter results were slightly
2 different for this well. Under the ambient flow
3 condition, there was no measurable vertical flow in
4 the wellbore -- actually, the Lisa Lane well is
5 about a hundred feet deeper than the Bellantoni
6 Drive well. There was no noticeable vertical flow
7 up until a depth of about 220 feet. So we took a
8 measurement at the 242-foot depth. There was no
9 noticeable vertical flow. And then at a depth of
10 about 220 feet under the ambient, meaning no
11 induced pumping condition, we actually got
12 detectable vertical flow measurements in the
13 wellbore, vertical upward flow. There was
14 continual vertical upward flow, not much of a
15 change, from what we measured, the 210 to 220-foot
16 depth, with then water flowing out of the wellbore
17 at a depth of around 70 feet.

18 That pattern was replicated under the
19 pumping condition. Now we have a pump sitting in
20 the wellbore inside the casing pulling water out at
21 .2, .3 gallons a minute. We have a little bit of
22 vertical flow in the wellbore coming in from the
23 bottom. And then that didn't change from a depth
24 of about 330 feet until we got to the 220-foot

1 depth We had crossed over what the caliber log
2 said was probably a fractured area. We got a
3 rather dramatic increase in pumping almost to about
4 .3 gallons a minute, and that stayed relatively
5 constant to the top of the borehole.

6 The results of these analyses
7 indicate that we have some inflow at close to the
8 bottom of the wellbore. The vast majority of the
9 water enters the wellbore at a depth of around 230
10 feet, probably this depth. Then following similar
11 logic that we did for the Bellantoni Drive well, we
12 installed here -- because it is a deeper well --
13 seven diffusive bag samplers. These are stuck on
14 here to show you the approximate locations of the
15 samplers for VOC analysis, targeting the areas
16 where there was some indication of fracturing, some
17 indication of flow. We are trying to see if
18 there's any vertical variation in water quality in
19 the wellbore.

20 This cross-section you saw at the
21 last meeting where we had shown the cross-section
22 we had drawn of this northeastern portion of the
23 contamination. We superimposed the Lisa Lane well
24 and the Bellantoni Drive well. They actually do

1 not lie on the cross-section but they projected to
2 the cross-section so we can see their relative
3 depths to the other wells in the area. What we saw
4 from the seven samples on the Lisa Lane and the
5 five in the Bellantoni well, there are relatively
6 low concentrations of VDC in those wells throughout
7 the entire sampling interval, throughout the
8 wellbore. Within the Bellantoni Drive well the
9 concentrations were about 4 to 5 parts per billion
10 and within Lisa Lane well about 16 parts per
11 billion.

12 There are two interpretations for
13 this. The one that I think is the most likely is
14 that because the inflows for both of these wells
15 are at the bottom of the well, that under pumping
16 conditions when they were used for irrigation, they
17 are inducing the contamination in this area to be
18 pulled down in the fractured rock to enter into the
19 wellbore at the bottom or close to the bottom and
20 then flow up the wellbore toward the pump. So that
21 the pumping of these irrigation wells has in fact
22 caused vertical migration of contamination deeper
23 into the rock and is manifested in these
24 concentrations that we saw with the diffusive bag

1 samplers. That's what I think is the most likely.
2 Although, at this point we couldn't rule out the
3 possibility that the contamination is actually
4 deeper than has been mapped based on the other
5 wells, but one would not expect such a uniform
6 concentration over such a great depth if in fact it
7 were not due to the pumping. But I can't say with
8 100 percent certainty which is the correct answer
9 at this point.

10 MR. CONOBY: How could you determine
11 which is the right answer? Do you have any
12 thoughts?

13 MR. GUSWA: Well, if we converted
14 these to monitoring wells and didn't pump them and
15 let them sit, and I couldn't tell you the exact
16 time frame, but over time there should be some
17 flushing out, if you will. So if the contamination
18 was drawn downward in response to the pumping of
19 these wells, over time we should see that the lower
20 wells would actually clean up and the upper wells
21 would probably increase in concentration, or may.

22 MR. CONOBY: Could you also not test
23 it by putting other well cuplets not adjacent but
24 in the immediate vicinity to determine at those

1 depths that you've seen the similar-type
2 concentrations not in the well-pumping effect?

3 MR. GUSWA: Well, in theory that's
4 correct. But the difficulty is with these wells
5 pumping, we are not sure where the contamination
6 was drawn from to come into this well. We don't
7 know if this is something local to the wellbore or
8 whether this pumping actually was contamination
9 that was several hundred feet away to migrate down
10 along some, not hypothetical, but some unmapable
11 fracture network to get down actually into the
12 deeper portions of the well.

13 MR. CONOBY: You could determine a
14 cone of influence of that well from the pumping
15 data from pumps that you retrieved from the well,
16 couldn't you?

17 MR. GUSWA: In fracture rock,
18 probably not, not with any reasonable basis of
19 monitoring. You couldn't put enough wells in to
20 decide that you actually had the fracture network
21 characterized well enough so that you could map the
22 cone of depression of that well. If it were on
23 unconsolidated deposits, yes, but in the fractured
24 rock it's not likely that you could actually define

1 the zone of contribution of each of these wells,
2 the zone of influence for each of these wells.

3 So where we stand is that
4 contamination has been detected in each of these
5 wells to the bottom and to the locations where we
6 know there is inflow into these wells.

7 MR. McINNIS: Would this be a
8 reasonable time to ask a question?

9 MR. GUSWA: Yes.

10 MR. McINNIS: Would you mind putting
11 the Lisa Lane chart, the log, I think you called
12 it, back up. This is my naive understanding of how
13 wells work. I believe what that is telling me is
14 that water is flowing in at the bottom and then
15 exiting at the top.

16 MR. GUSWA: That's correct.

17 MR. McINNIS: It's assumed that the
18 contamination is toward the top, above the bedrock,
19 I believe, and the clean water would be below
20 bedrock at depth.

21 MR. GUSWA: Yes.

22 MR. McINNIS: My question is, I
23 believe I read the report and you said you pumped a
24 certain number of gallons out of these wells before

1 you started these measurements, you purged it?

2 MR. GUSWA: No, in the Lisa Lane
3 well, that well was sampled early on. That's what
4 led to -- when we first got down to the Lisa Lane
5 well, the owner pumped the well overnight at
6 several gallons a minute, and then a sample was
7 taken. The concentration was 16 parts per billion.

8 MR. McINNIS: Before you did this
9 sampling at depth, didn't you pump the well, when
10 you made those measurements?

11 MR. GUSWA: The samplers went in
12 after the geophysical surveys were done. The
13 pumping was done in advance of putting the samplers
14 in. We let it sit. We put the samplers in without
15 any additional pumping.

16 MR. McINNIS: If the clean water is
17 coming in at the bottom and exiting where the
18 contaminated water is at the top and yet you're
19 finding uniform contamination throughout the
20 wellbore, just logically to me, it seems if you
21 have an upward flushing in this well of clean
22 water, the only explanation that I can understand
23 of why you get uniform contamination throughout the
24 well is that the water coming in at the bottom is

1 also contaminated.

2 MR. GUSWA: The water is
3 contaminated.

4 MR. McINNIS: That's coming in at the
5 bottom.

6 MR. GUSWA: As a matter of fact, for
7 this well, the Lisa Lane well, what all these
8 measurements probably reflect is the concentration
9 that's at the bottom of the wellbore and don't in
10 fact reflect the concentrations that are adjacent
11 to the wellbore shallower because the wellbore is
12 up and out. These passive samplers, since there is
13 no pumping, they only detect what's in the wellbore
14 and the flow in the wellbore under ambient
15 conditions is in and then up.

16 MR. McINNIS: Okay. Now I think I
17 understand what you said about long-term exposure.
18 You're saying that it's possible that the
19 lower-level water, for lack of a better
20 terminology, has become contaminated through
21 operation of this well.

22 MR. GUSWA: Yes.

23 MR. McINNIS: And that there's a pool
24 of contaminated water surrounding the bottom of the

1 wellboring, essentially.

2 MR. GUSWA: There's some zone where
3 the contamination has been pulled down. The width
4 of that, I don't know.

5 MR. McINNIS: The other
6 interpretation is that natural fractures in the
7 rock between Lisa Lane and the Grace property have
8 already made both layers of water contaminated.

9 MR. GUSWA: Yes, that this bottom
10 here would be drawn down. What we can say with any
11 real certainty is that the concentration is 16,
12 this reflects the concentration in the ground, is
13 16. Anything up here probably reflects that lower
14 depth.

15 MR. McINNIS: This isn't necessarily
16 related to an issue of a well moratorium, just
17 curiosity. If you're looking at cleanup,
18 remediation for this site, wouldn't it be important
19 to understand whether that lower-level water is
20 contaminated or just locally contaminated around
21 the Lisa Lane well water?

22 MR. GUSWA: That's one of the things
23 we hope to accomplish, if we can, if the owners are
24 amenable, converting these to monitoring wells.

1 MR. CONOBY: You said in your
2 memorandum if arrangements can be made with the
3 property owners to convert them to monitoring
4 wells. What's the status now? Do we know?

5 MS. JOHNS: I'd say it is premature
6 to be asking that. Both property owners have
7 received the report. I have said that I will
8 follow up this week after they have a chance to
9 read the letter itself.

10 MR. CONOBY: So the answer is it is
11 not resolved and it is ongoing. Thank you.

12 MR. McINNIS: We have a similar
13 situation at Bellantoni Drive except there's very
14 little natural flow in the well?

15 MR. GUSWA: Under ambient or natural
16 conditions we don't see any real measurable
17 vertical flow in the wellbore.

18 MR. McINNIS: Yet you still have
19 uniform concentration. Now, would the explanation
20 be the same as to why you get the uniform
21 concentration?

22 MR. GUSWA: Yes, in the sense that
23 the inflow for pumping conditions, whether for our
24 testing or pumping for the irrigation, the inflow

1 for this well is actually at the bottom of the
2 wellbore. So for the water to get down there, it
3 would be pulled down under vertical gradients --
4 the same two interpretations apply. You can't rule
5 out either one with this information. When this
6 well was pumped for irrigation, it would have
7 pulled contamination down to come into the wellbore
8 at the bottom depth and then it stays there.
9 Gradually it dissipates, but under our pumping it
10 comes in at the bottom. The similar 4 parts per
11 billion reflects the contamination that's actually
12 at the bottom, the depth at the bottom of the
13 Bellantoni well.

14 MR. McINNIS: This is a difficult
15 question because I understand Mr. Golden is not
16 here tonight. He said at the last meeting that the
17 cleanup standard that would be used for these wells
18 was the drinking water standard, which was seven
19 parts per billion, I believe. Would it be your
20 interpretation based on the data for Bellantoni
21 Drive that this well could be put back in service
22 as an irrigation well?

23 MR. GUSWA: Well, it's not something
24 that I recommend be done. I don't know what EPA's

1 position on that matter would be. I think the
2 other concern about Bellantoni is that while this
3 was five, there were wells nearby that had several
4 hundred parts per billion. I can't answer,
5 quantify these. Lisa Lane has been in operation
6 for several years. Bellantoni has been in
7 operation just part of this year, 2002. So how
8 long and how much pumping has to occur for these
9 cones of influence to spread and cause higher
10 concentrations to move toward them, I don't think
11 we know enough to say. There are high
12 concentrations nearby in the fractured rock.

13 MR. CONOBY: So you're expecting, by
14 that discussion, there to be higher concentration
15 pockets in certain areas of the bedrock?

16 MR. GUSWA: Yeah. The other wells
17 that we have in the area show that to be, certainly
18 the shallow rock has higher concentrations. We've
19 had concentrations of a couple hundred parts per
20 billion in the shallow rock nearby.

21 MR. CONOBY: Are there any plans for
22 additional monitoring wells in the vicinity of
23 these private wells for future analysis and data
24 collection?

1 MR. GUSWA: There are plans for
2 future data collection. We are looking at trying
3 to evaluate the effects of the School Street
4 wellfield and its zone of influence and its effect
5 on water levels in the unconsolidated deposits and
6 in the bedrock that's nearby. That will be used,
7 then, to come up with a conceptual remedy design.
8 And then based on that, there will probably be some
9 predesign data collection to support remedy
10 selection. It's not that specific at this point
11 what those additional data collection things would
12 be.

13 MR. CONOBY: So there's no plans at
14 this time to put additional monitoring wells, but
15 they could be installed as future developments in
16 the analysis are occurring?

17 MR. GUSWA: Yes.

18 MR. CONOBY: Getting back to the
19 well, you're proposing to use them as a monitoring
20 well, I believe in your memorandum of December 4th.
21 The question is you talk about putting sand in the
22 annular space. Wouldn't that allow a significant
23 amount of transport?

24 MR. GUSWA: We are going to put PVC

1 pipe in between. We will put sand opposite the
2 screen or open interval of the PVC pipe. There
3 will be bentonite or gravel between the sandbags.

4 MR. CONOBY: You just said sand. I
5 was concerned you weren't going to seal between,
6 with the bentonite clay, the intervals.

7 MR. GUSWA: The intent is to create
8 an impermeable zone in the wellbore between the PVC
9 pipe.

10 MR. McINNIS: Your report ends with
11 recommendations. Would you mind just covering
12 those.

13 MR. GUSWA: We would like to convert
14 these two wells into three well monitoring
15 clusters. We are basically targeting -- this is
16 the Bellantoni well, the Lisa Lane well. These are
17 shallow wells, upper water-producing zones, and
18 then progressively deeper wellbores opposite the
19 major water-producing zones.

20 MR. CONOBY: Has EPA had any comments
21 on this report to date?

22 MR. GUSWA: Not to us yet.

23 MR. CONOBY: Do you anticipate they
24 will?

1 MR. GUSWA: They have always given us
2 comments on our reports. I don't expect it to be
3 any different.

4 MR. CONOBY: Fair enough.

5 MR. McINNIS: Any other questions?

6 MR. CONOBY: Do you expect to
7 resample these wells?

8 MR. GUSWA: Not in this
9 configuration. The long, open interval confounds
10 interpretation of the analysis. We don't have any
11 definite plans at this point to resample these
12 wells.

13 MR. McINNIS: Does anyone in the
14 audience wish to ask a question?

15 MR. McINNIS: Mary Michelman.

16 MS. MICHELMAN: I was just wondering,
17 these are the first wells that I've seen that are
18 that deep. I don't know if that's true or not.
19 Did it seem important to know whether or not you
20 have other monitoring wells that go as deep as
21 these do? In the past when you put additional
22 wells in and you discovered contamination there,
23 before it was mapped as no contamination because
24 you hadn't looked there. I was wondering, have you

1 had other monitoring wells that go as deep as these
2 and found no contamination or could it be that this
3 is an area that we haven't looked at before?

4 MR. GUSWA: The more recent wells put
5 in in the last couple of years were done in a
6 protocol that basically we sampled as we went.
7 When we got the consecutive nondetects, we
8 terminated the wellbore. So AR 31 and a series to
9 the south. There were no other similar monitoring
10 wells between here. We are trying to take
11 advantage of these deep wells and convert them into
12 monitoring wells.

13 MS. MICHELMAN: They would be the
14 first that go that deep.

15 MR. GUSWA: Yes.

16 MS. MICHELMAN: So you can't know
17 definitively whether there was contamination
18 already at that depth before these wells went in.

19 MR. GUSWA: I think that's what I
20 said earlier.

21 MS. MICHELMAN: I just wanted to be
22 sure. I wanted to know if there were other wells
23 in the area.

24 MR. GUSWA: I can tell you there are

1 no other wells deep into the rock anywhere here.

2 MS. MICHELMAN: So the deepest well
3 in that area was 100 feet?

4 MR. GUSWA: Other than these two?

5 MS. MICHELMAN: Yes.

6 MR. GUSWA: I don't know.

7 MS. MICHELMAN: I was wondering how
8 you mapped the bottom for that plume.

9 MR. GUSWA: It's in part model, but
10 also the factual basis, limited as it is, are
11 patterns at AR 31 where we are closer to the Fort
12 Pond Brook wellfield, and down at the flowdown pit
13 where you have nondetect. Everything else that you
14 can see ends in the plume of contamination.

15 MR. CONOBY: A follow-up question.
16 You said these are the only monitoring wells or
17 irrigation wells that you know of within the site
18 that have not been installed by either you or the
19 water district?

20 MR. GUSWA: There are several other
21 wells nearby on the south. Up on the northeast
22 these are the only ones we are aware of. Mary's
23 question was looking at wells that were hundreds of
24 feet into the rock.

1 MR. CONOBY: The other monitoring
2 wells installed, they are not to that depth except
3 AR 31?

4 MR. GUSWA: Well, there are several
5 others like AR 31 in this area on the toe, if you
6 will, of the contamination. Nothing back under the
7 residential property, at BOC Gases here.

8 MR. CONOBY: The new wells you are
9 sampling at depth as you are drilling the wells?

10 MR. GUSWA: Yes.

11 MR. CONOBY: And then going and
12 looking for two samples before you stop as far as
13 determining depth?

14 MR. GUSWA: There's a protocol in the
15 rock, drill 20 feet, take a sample, do a field GC
16 analysis, depending on the results of that we go
17 deeper.

18 MR. CONOBY: These are split spoon
19 samples, you are doing analysis of the soils?

20 MR. GUSWA: These are rock core.
21 Then we take a water sample, run it through a field
22 GC to see whether we keep drilling and go deeper.
23 There have to be consecutive concentrations less
24 than a certain value and then we can stop.

1 MR. CONOBY: How many other wells are
2 there like that in the toe area near these wells?

3 MR. GUSWA: Five or six,
4 approximately.

5 MR. CONOBY: You found both of these
6 wells, irrigation wells based on the survey you
7 sent out?

8 MS. SHEEHAN: Lisa Lane we identified
9 from the survey. Bellantoni --

10 MR. McINNIS: Could you identify
11 yourself.

12 MS. SHEEHAN: Anne Sheehan. Lisa
13 Lane we identified from the private well survey
14 when we sent the mailing.

15 MR. CONOBY: When did you send that
16 mailing?

17 MS. SHEEHAN: It was done in two
18 phases, one in November of 2001. The second phase
19 was January of 2002. Bellantoni was installed
20 after we sent out that mailing and it came to our
21 attention later on.

22 MR. CONOBY: What was in that survey?
23 It was just asking if you had a well?

24 MS. SHEEHAN: It was a letter asking

1 if you had a private well and asking for basic
2 information on whether it was still being used, how
3 deep it was, if you had examples collected.

4 MR. CONOBY: You didn't notify them
5 that there might be contamination below at that
6 time?

7 MS. SHEEHAN: It basically said it
8 was in conjunction with the W. R. Grace site.
9 There was a letter explaining.

10 MS. JOHNS: There was a letter
11 describing what GeoTrans was doing as far as
12 remedial investigation for the Grace property.

13 MR. CONOBY: I'm curious. One of the
14 wells was installed. And presumably the homeowner
15 should have received that letter, yet they still
16 installed it not realizing there was contamination
17 below their site even though you knew it and had
18 concerns about the installation of that well.

19 MR. GUSWA: That appears to be the
20 case.

21 MR. HALLEY: To clarify that, the
22 letters were sent out to people 500 feet from the
23 contaminant zone. It included that.

24 MR. OLIVERI: How long have you been

1 monitoring the wells?

2 MR. GUSWA: I would imagine that the
3 first ones were probably in the late '70s.

4 MR. OLIVERI: You identified the
5 plume in the '70s?

6 MS. SHEEHAN: The plume for the
7 northeast was not mapped until 1999.

8 MR. OLIVERI: But there have been
9 some wells, obviously, prior to the monitoring
10 wells?

11 MS. SHEEHAN: At the site, yes. The
12 first wells were in 1978.

13 MR. OLIVERI: How long do you modify
14 before -- how long do you monitor before you modify
15 or have a CAP, corrective action plan and do we
16 have one? I don't know if you're the right person
17 to ask this.

18 MR. GUSWA: I'll try. We are in the
19 process of completing the RI/FS. The FS is the
20 document that basically selects the remedy for
21 review by the public before it gets finalized. We
22 are in the process of completing that FS. We've
23 started the FS. We are just about done the
24 remedial investigation. We have a few more data

1 collection things to do. Then we complete the FS.
2 And that's probably 2004, the FS gets completed.
3 That leads to a more formal remedy selection. EPA
4 will issue their record of decision based on
5 feasibility study and public comments.

6 Now, the soil, there have been
7 remedies implemented at the site already.

8 MR. CONOBY: Certain areas of the
9 site, but not the area we are discussing tonight.

10 MR. GUSWA: Not this area to the
11 northeast that we are discussing today.

12 MR. McINNIS: I have no further
13 questions.

14 MR. CONOBY: One follow-up question.
15 The contamination as identified in that plume map,
16 has that since 1999 changed at all or is that the
17 same extent of contamination as shown there?

18 MR. GUSWA: It's been modified. This
19 represents to June 2002. This is a slight
20 modification from something that is shown in 2001,
21 November 2001, based on sampling that was available
22 after that meeting. We just completed within the
23 last four to six weeks a sitewide, several hundred
24 well sampling event. We will be revising this type

1 of mapping with information from that more recent
2 sampling.

3 MR. CONOBY: You are providing
4 updates as you have additional data?

5 MR. GUSWA: Yes.

6 MR. CONOBY: Has the data indicated
7 over the last three years that that particular area
8 of contamination is expanding or migrating or is it
9 stationary?

10 MR. GUSWA: From my perspective the
11 data indicates that we are basically seeing a
12 reduction in concentration out here to the
13 northeast. I want to qualify that in the sense
14 that we have basically spent the last two, two and
15 a half years defining the extent of the
16 contamination. So when I made that statement, it
17 was based on certain wells that there were data for
18 in 1978 or 1980. We look at the concentrations
19 now. They are lower than five years or ten years
20 ago. It's only been with the data collection
21 that's gone on over the last few years that we were
22 able to characterize or map what's going on at the
23 site.

24 MR. CONOBY: I don't know if the

1 monitoring showed the contamination aerial map as
2 expanding. You've asked for a moratorium a certain
3 distance from it. That's why I'm asking if you see
4 that expanding or not.

5 MR. GUSWA: The belief now is that
6 this contamination is either discharging to Fort
7 Pond Brook or it is captured by extraction wells at
8 the School Street wellfield, where that water is
9 then treated.

10 MR. CONOBY: The underground plume is
11 migrating if it's going toward those other
12 receptors.

13 MR. GUSWA: It is continuing to move,
14 yes, but it is discharging here. We don't see it
15 expanding in area.

16 MR. CONOBY: Have you put any wells
17 on the other side of those receptors, or do you
18 plan to, to make sure that the hypothesis is
19 accurate?

20 MR. GUSWA: We have some wells that
21 went in out here (indicating) that show that
22 there's no easterly or northerly expansion of the
23 wells. We don't have anything north of Fort Pond
24 Brook. Every indication is that groundwater from

1 the north goes down toward and discharges up to
2 Fort Pond Brook and discharges from the south to
3 Fort Pond Brook. The view of this, in the absence
4 of extraction over here, this is a natural
5 discharge boundary for this contamination.

6 MR. CONOBY: Why should that be
7 different than the Assabet River?

8 MR. GUSWA: It's not different from
9 the Assabet River.

10 MR. CONOBY: Okay. But you do have
11 wells on those extreme points that have shown that
12 the contamination is not, the plume has not reached
13 that area yet. You don't expect it to?

14 MR. GUSWA: I'm sorry. You're
15 talking about the Assabet now?

16 MR. CONOBY: No.

17 MR. GUSWA: We have wells --

18 MS. SHEEHAN: Can I answer? We put a
19 well in here.

20 MR. CONOBY: Which is by Lawsbrook?

21 MS. SHEEHAN: North of the Scribner
22 well, on the section line right here. We put a
23 well in in this neighborhood here and another one
24 over here. And both of these are bedrock wells.

1 They show groundwater flow in this direction. The
2 plume can't migrate in this direction. Groundwater
3 is flowing toward the wellfield and the brook.

4 MR. CONOBY: At what depth?

5 MS. SHEEHAN: Both of these clusters
6 have two bedrock wells, shallow bedrock, and then
7 another maybe a hundred feet deeper into rock. All
8 of them are clean.

9 MR. CONOBY: But you don't have any
10 other wells at the 2 to 300-foot depth like these
11 to show contamination to determine what the
12 groundwater flow to a potentially different aquifer
13 would be?

14 MS. SHEEHAN: It should be the same.
15 The groundwater would flow in the same direction.

16 MR. McINNIS: All set? We have
17 someone standing who wants to ask a question.

18 MS. MICHELMAN: I wondered, Mark, if
19 you were trying to get at, you asked if there were
20 any wells beyond those receptors, referring to the
21 Christopherson well there. I was wondering if you
22 were asking that because there are some public
23 soccer fields just beyond Christopherson and I
24 wonder if that was your concern about have we

1 looked for it in that area?

2 MR. CONOBY: The question is directed
3 toward me. My concern was ensuring that the plume
4 is mapped as far as the boundaries to determine
5 what the potential health impacts would be. I
6 think that's what the professionals from GeoTrans
7 were trying to respond to.

8 MS. MICHELMAN: I want to direct this
9 at Jack. I think I know the answer, that there are
10 not currently any wells beyond Christopherson in
11 that direction.

12 MR. GUSWA: That's correct.

13 MS. MICHELMAN: Is there any
14 intention of putting any wells beyond what you
15 think is the receptor at Christopherson?

16 MR. GUSWA: No.

17 MR. CONOBY: That was the question I
18 asked. You believe there is no potential for it to
19 go beyond there?

20 MR. GUSWA: The discharge would be in
21 Fort Pond Brook. The reason it goes beyond it is
22 because Christopherson pulls it. When it stops
23 pumping, it discharges back to Fort Pond Brook.

24 MS. MICHELMAN: I wanted to follow up

1 because there are soccer fields there. What if
2 they wanted to put in a well to irrigate the soccer
3 fields, do we know what the implications of that
4 would be?

5 MR. GUSWA: Well, I would expect if
6 they wanted to put in a well, they would go through
7 the well permitting process.

8 MR. CONOBY: Would a potential well
9 in that area have the potential to have a zone of
10 contribution or influence to affect the plume?

11 MR. GUSWA: If it's an unconsolidated
12 deposit well at a lower pumping rate, I don't think
13 so. If it is a bedrock well with a high pumping
14 rate, it's possible.

15 MR. CONOBY: All irrigation wells in
16 town are bedrock wells. It's a large soccer field.
17 They do have wells for other soccer fields for
18 irrigation. I guess the answer to the question is,
19 it has the potential to be impacted by this
20 contamination.

21 MR. GUSWA: If there were a
22 high-yield bedrock well in the soccer field area
23 pumping, then it has the potential to affect it,
24 yes, I think it would have the potential.

1 MR. CONOBY: Thank you.

2 MR. McINNIS: Mr. Anderson?

3 MR. ANDERSON: We have a copy of the
4 survey. I would like it to be a part of the
5 record. I have a copy of the specimen form.

6 MR. CONOBY: Yes. I would verify it
7 with the other parties to make sure it is accurate
8 and representative.

9 MS. SHEEHAN: Yes.

10 MR. CONOBY: We will enter this as an
11 exhibit.

12 MR. ANDERSON: The last time we were
13 here we marked Exhibit 5 as the August 2001 EPA
14 report, which is the plume map. This time we have
15 a handout from EPA which we should mark as the
16 December 2002 plume map. There are a few questions
17 that I have about the differences between maps.
18 When we were talking last time about the scale 7 to
19 10 shown currently on the map up in front of you
20 here, on the yellow on the earlier chart in August
21 2001, the yellow was 1 to 10. The plume is much
22 larger on the map.

23 MR. GUSWA: Yes. But they are
24 mapping different concentrations.

1 MR. ANDERSON: The rationale for
2 changing from 1 to 10 to 7 to 10 is what?

3 MR. GUSWA: The EPA MCL or maximum
4 concentration level for VOC is 7 micrograms per
5 liter.

6 MR. ANDERSON: On the earlier report
7 there were several areas that were question marks
8 on the EPA map mainly to the northeast and
9 northwest of the plume and then so the southeast of
10 the plume. Let me approach.

11 MR. CONOBY: Can I clarify, you're
12 comparing the 2001 map from EPA to the current maps
13 that are being presented?

14 MR. ANDERSON: Yes. I would like him
15 to explain why they were question marks in the old
16 map and now we have data on the new map where there
17 are contaminants now and there were question marks
18 then.

19 MR. GUSWA: At the time of that
20 earlier version we had proposed to drill wells to
21 the northeast as well as -- the northeast meaning
22 in this general area (indicating), as well as to
23 the south of the Grace site. We have now installed
24 those wells and collected samples from those wells

1 that allow us to remove the question marks.

2 MS. SHEEHAN: We also have collected
3 groundwater samples beneath Fort Pond Brook and the
4 Assabet River further defining the plume.

5 MR. ANDERSON: Based on the new data,
6 is it fair to say that the levels above the
7 groundwater MCL standards have reached the
8 monitoring wells under certain circumstances?

9 MR. GUSWA: They reach it in
10 monitoring wells there are nearby. I don't believe
11 that water that's pumped out of the public supply
12 wells actually exceeds the MCL because there's
13 clean water also brought in. There must be some
14 dilution that reduces the concentrate. There are
15 concentrations in monitoring wells nearby the
16 public supply wells that exceed the MCL.

17 MR. ANDERSON: Is the same true of
18 the Scribner well?

19 MS. SHEEHAN: Scribner has been
20 detected above the drinking water standard.

21 MR. McINNIS: In the raw water?

22 MS. SHEEHAN: In the raw water.

23 MR. ANDERSON: To the southeast at
24 the bend with the Assabet River is that an area

1 that discharges into the Assabet River?

2 MR. GUSWA: Yes.

3 MR. McINNIS: I was trying to find in
4 the record from the last meeting, I remember
5 Mr. Demming answered a similar question. He was
6 saying that there was, I believe his answer was --
7 trying to find it -- that there was some
8 contamination in the raw water and that they
9 treated it and they got to no detect in the
10 finished water. I don't believe he gave values.
11 It probably wouldn't help us to know if it was
12 above drinking water standards or not.

13 MS. MICHELMAN: I think you said what
14 I was going to say, you should check with the water
15 district to get the information.

16 MR. McINNIS: Thank you. Any other
17 topics or have we concluded this portion of the
18 meeting?

19 MR. CONOBY: I think we reviewed the
20 report, which we appreciate you providing as you
21 said you would. I guess the question comes up:
22 What are you requesting as far as action from this
23 Board at this time?

24 MR. GUSWA: I think in terms of the

1 process --

2 MS. JOHNS: I think we feel a
3 moratorium would be most protective. However, what
4 I wrote in my letter was that we believe that
5 changes to the application process could also be
6 very beneficial. So suggestions that we had
7 developed in coordination with EPA was that EPA
8 could supply some kind of insert to the application
9 form so that when an applicant came up to pick up
10 the forms that they would have an understanding of
11 what the issues were as far as the area for the
12 private well survey, the area of the plume, and
13 that there was a potential for homeowner liability
14 if a well was installed and created or spread
15 contamination.

16 One thing I think as a group we
17 agreed, that if an applicant was moving through the
18 process as far as proceeding to gain an application
19 approval, that notification be made to EPA if this
20 well was within the private well survey area.

21 MR. CONOBY: That's within 500 feet
22 of this mapping of the plume?

23 MS. JOHNS: The survey area is set.
24 That's not going to change. We believe the plume

1 will decrease or shrink in size, but the private
2 well survey area is set.

3 MR. GUSWA: This dashed line, which
4 is also on your figure --

5 MR. CONOBY: I thought you originally
6 had requested a certain setback distance from the
7 plume. Is that still what you're requesting? You
8 mentioned a survey area, which I think is a little
9 different.

10 MR. GUSWA: Originally the survey
11 area was based on 500 feet from the plume boundary.
12 There were some simplifications made so it would
13 carry to the end of the street, something like
14 that, so that in some areas it was a little more
15 expansive. This represents an area which was at
16 one time within 500 feet of the mapped plume
17 boundary.

18 MR. McINNIS: Ms. Johns, I would like
19 to enter your letter into the record. I don't
20 believe it has been done. Could I ask you if you
21 recognize this as your letter?

22 MS. JOHNS: I think it is my letter.

23 MR. McINNIS: Would you enter that as
24 a letter to the Board from Remedium, dated October

1 28, 2002.

2 MR. ANDERSON: Can we put these
3 documents in the record?

4 MR. McINNIS: That's acceptable to
5 me.

6 (A recess was taken.)

7 (Marked, Exhibits 17 - 30.)

8 MR. McINNIS: We will resume the
9 meeting. Where we left off we concluded discussion
10 of the well report. There was at least one other
11 input that we were going to receive tonight. Mary
12 Michelman said she would like to make a
13 presentation on other town's well regulations.

14 MS. MICHELMAN: I'm going to do an
15 overhead presentation. I have two extra copies of
16 what I'm going to talk about if anybody wants a
17 copy of what would have been the overhead slide.

18 I'm Mary Michelman on behalf of ACES,
19 Acton Citizens for Environmental Safety. I would
20 like to provide to you a summary of private well
21 regulations in 15 Massachusetts towns. These are
22 Board of Health regulations. We actually have the
23 pile of the regulations. We thought a better way
24 to be present it to you would be in table form to

1 make it easier to look at to make comparisons
2 between towns.

3 Table 1 is produced actually in
4 response to some questions that the Board of Health
5 members had about do these towns rely on private
6 wells for their sole drinking water source. We did
7 a telephone survey of the relevant health
8 departments and water departments and ask them to
9 please estimate what percentage of their town has a
10 public water supply. As you can see, Acton has 96
11 percent public water. If you look across the
12 table, you see that most of these towns aren't
13 relying on private wells as their sole source of
14 drinking water.

15 Table 2 summarizes water quality
16 requirements. Each of the towns has a set of
17 testing requirements for their well water. It
18 varies from town to town. I would put up slide
19 Page 3 now and show you that across the top we have
20 a list of towns, Acton, Boxborough, Burlington,
21 Carlisle, Charlton, Groton, Harvard, Lexington,
22 Littleton, Lunenburg, Northbridge, Pepperell, Stow,
23 Sudbury and Westford. The last column is State
24 Recommended. Those recommendations are the ones

1 provided in the DEP document Private Well
2 Guidelines, which I think you've also been
3 referring to previously in this hearing. Along the
4 column going down is the list of parameters.

5 If you turn to the next page, the
6 third page of this table, that shows what's
7 relevant to this hearing, which is VOCs, who
8 requires VOC measurements. That includes the Towns
9 of Burlington, Carlisle, Charlton, Northbridge and
10 Stow. Then Harvard, Lexington, Littleton,
11 Lunenburg and Westford, they require VOC testing at
12 the discretion of the Board of Health. It's
13 interesting to note that Carlisle, which is going
14 through the process of revising their regs, their
15 VOC testing requirement is specified for one
16 particular area of town, which they refer to as
17 residential district A. The reason for that
18 requirement is that there was an underground
19 storage tank that leaked gasoline.

20 Table 3 makes a comparison of setback
21 requirements for private wells in these
22 regulations. So what you're looking at is what
23 distance do you need to be from a certain feature
24 in order to put a private well in. The two that

1 are most relevant to the hearing would be active or
2 closed landfill and hazardous waste spill sites.
3 The Towns of Boxborough, Groton, Harvard,
4 Littleton, Lunenburg and Stow both have, all have
5 400-foot setbacks from these potential contaminant
6 sources. And then Northbridge actually has a
7 thousand-foot setback from any waste deposit
8 site/landfill.

9 Skipping to Page 7, that's Table 4.
10 One thing I wanted to mention was that in addition
11 to looking -- as far as resources go, in addition
12 to looking at Board of Health regulations and the
13 private well guidelines by DEP, another useful
14 resource is this Private Well Protection Handbook
15 for Local Boards of Health. It is put out by
16 Massachusetts Association of Health Boards. We
17 found that to be a useful resource.

18 Table 4 looks at the Board of Health
19 private well requirements around the time of
20 installing a well. If you're going to put a well
21 in, what's the process. All of the towns we looked
22 at required a permit. Also, as part of that
23 permitting process, a number of towns require a
24 description of possible sources of contamination.

1 That could include prior and current land uses that
2 would be within a certain distance of where the
3 proposed well location is. The distances varied
4 from town to town. Northbridge was a thousand
5 feet. Some of the towns were 200, some 400.

6 If you turn to the next page, Page 8,
7 that's a continuation of the same table. Another
8 thing that a lot of communities that we looked at
9 required was not only for water quality results to
10 be submitted to the Board of Health, but that the
11 Board of Health would need to provide or the health
12 agent would need to provide approval of the water
13 quality results before the water is used. That's
14 the case in Boxborough, Burlington, Charlton,
15 Groton, Harvard, Lunenburg, Littleton, Northbridge,
16 Stow, Sudbury and Westford.

17 And then if you skip Page 9, just
18 showing you the highlights, Table 5 talks about, it
19 looks at what decommissioning requirements there
20 are. If a well is no longer going to be in use and
21 destroyed, what are the processes that you would go
22 through. What's of note in reference to this
23 hearing is that a number of towns talk about
24 movement of contamination in reference to

1 decommissioning. For example, Burlington,
2 Charlton, Lexington and Stow, their regs say for
3 wells abandoned it must be decommissioned -- a well
4 is abandoned/must be decommissioned if it meets one
5 of six criteria, and that includes: "Has the
6 potential for transmitting contaminants from the
7 land surface into an aquifer or from one aquifer to
8 another and the situation cannot be corrected."

9 On this issue, the Private Well
10 Protection Handbook, which I referenced, on Page
11 37, it has a relevant comment. They have a section
12 called Commonly Asked Questions About Private
13 Wells. I have a couple of copies of this if you
14 guys want to look. I'll read you part of question
15 1. "Why should we regulate private wells if
16 everyone in our community is served by municipal
17 water or the MWRA? The answer. Private wells are
18 a significant potential sort of groundwater
19 contamination as a vehicle for injecting pollutants
20 directly into the aquifer. By pumping contaminated
21 water, they can cause the movement of contaminated
22 plumes into new areas and to increase the
23 possibility of human exposures."

24 In addition to that, the Burlington

1 health director says that the use -- they have
2 public wells where contamination was discovered in
3 1978. They have a number of plumes that are within
4 the area of the well. There is -- they have
5 instituted on a case-by-case basis a prohibition of
6 irrigation wells; that's both existing and proposed
7 ones. VOC testing is required. If levels are
8 above drinking water standards, then the well can't
9 be used. The reasons he gave for having this
10 policy were threefold: One, to prevent movement of
11 the contaminant plume, because again there are
12 several plumes close to town wells. And two, to
13 prevent the irrigation from posing a potential
14 human health risk. And then three, to prevent
15 potential interference with ongoing remediation or
16 cleanup of existing contamination.

17 On to the last table, Table 6, on
18 Page 11. Knowing that what we are dealing with
19 here is irrigation wells, this table is included.
20 We looked for any reference to irrigation wells in
21 the Board of Health regulations. There's a lot of
22 blank space in this table because there weren't
23 that many references. Sudbury is one town that had
24 a lot of information. That's based not on the regs

1 but a bylaw that was passed in Sudbury. One thing
2 that Acton has is, our regs say that water quality
3 requirements are the same for irrigation and
4 drinking water wells.

5 Again, if you turn to Page 23 in the
6 Private Well Protection Handbook, at the bottom it
7 says: "Boards of health may be very correct in
8 assuming that there's no such thing as a nonpotable
9 well serving a residence. Even if the intention is
10 to provide water for carwashing and lawns, there's
11 always a risk that children will drink from hoses
12 used to fill swimming pools, or at a future date it
13 may be hooked up to house plumbing." It goes on
14 from there.

15 Hopefully this will be helpful
16 information. That's the purpose of it. I thank
17 you for all the time and effort that's gone into
18 your looking at this issue.

19 MR. McINNIS: Thank you very much.
20 You obviously put a lot of work into this.

21 MS. MICHELMAN: Not just me.

22 MR. McINNIS: The organization put a
23 lot of work into this.

24 MS. MICHELMAN: Absolutely.

1 MR. McINNIS: Thank you. Would you
2 be willing to take any questions?

3 MS. MICHELMAN: Sure.

4 MR. McINNIS: If anybody has a
5 questions?

6 MS. HOLLY: Carol Holly. Mary and I
7 tag-teamed over the course of about seven months on
8 this table. I have been in communication with
9 Marcia Benes, executive director of MAHB, regarding
10 the irrigation well issue. While I have not been
11 able to follow up with specific conversations with
12 specific communities, she has told me that many,
13 many, many of the MWRA towns and cities have banned
14 irrigation wells in or near brownfield sites
15 because of the expense of the MWRA water and fear
16 that people hook them into household plumbing. I
17 will be looking into that in the future and get in
18 contact with them. I can tell you that the MAHB
19 definitely feels that irrigation wells are
20 something that need to be closely monitored.

21 Somewhere in that handbook over the
22 summer I read that the MAHB really encourages
23 boards of health and the citizens action groups to
24 be friendly -- and I'm going to try in the future

1 to be friendly -- because we are a good resource.
2 If you had an intern do this table, it would have
3 been a summer job on the town budget. ACES thought
4 that maybe we should apply for a grant. We took
5 off and did it on our own. We can help you. We
6 can do a lot of research, a lot of legwork for you.
7 And with the current budget issues facing the town,
8 I think we should keep lines of communication open.
9 If you want us to step out, let us know.

10 MR. McINNIS: Any other questions or
11 comments? Thank you very much. I appreciate all
12 the work.

13 (Discussion off the record.)

14 MR. McINNIS: I had in mind to
15 discuss any new information that needed to be
16 presented. And then we will discuss any
17 information that was still pending. This is all of
18 the new information that I'm aware of. Does anyone
19 have any other new information they wish to
20 present? In that case, I'll open the discussion.

21 When I went back through the record,
22 I believe the things we asked for were the well
23 report. We asked for other sites in Massachusetts
24 which had faced similar issues. We have been given

1 information both from ACES and from EPA on that.
2 The only one outstanding issue that I'm aware of is
3 that we owe W. R. Grace or Remedium a statement of
4 work for a possible consultant agreement to support
5 the Board of Health in evaluating this issue. I
6 believe we have not provided that to Grace.

7 MR. HALLEY: We have not. I was
8 hoping that Jim Okun, from O'Reilly Talbot & Okun,
9 would be here tonight. He hasn't made it. We
10 still need to define that work and get it to Grace.

11 MR. McINNIS: I would just say that I
12 have had discussions with Mr. Halley. It's my
13 recommendation to Mr. Halley that any scope of work
14 would include support in evaluating possible
15 applications for a well in the plume of
16 contamination. So in other words, it would be an
17 opportunity for us to get some consultant or expert
18 input in evaluating an application to determine
19 what the impact would be and help possibly make a
20 decision as to the acceptability of a location of
21 potential irrigation well somewhere within the 500
22 feet of the map plume.

23 That's my recollection of what the
24 issues were that were outstanding from the last

1 meeting. With the exception of the SOW, the
2 statement of work, I believe that's the only thing
3 I have as outstanding. Does anyone else have any
4 other items that they feel are outstanding at this
5 time?

6 MR. CONOBY: The only other items
7 were EPA's and DEP's response for additional
8 questions or comments regarding the hearing. Other
9 than the one email and one letter that was just
10 received today, I don't think there's anything
11 else.

12 MR. McINNIS: Sarah White, you said
13 you were representing the EPA tonight?

14 MS. WHITE: I'm here on behalf of the
15 EPA. I'm a community involvement coordinator. I
16 would be happy to bring back any questions that the
17 Board has.

18 MR. McINNIS: Is there any other
19 statement or recommendation or comment that you're
20 aware of that the EPA would like to have on the
21 record?

22 MS. WHITE: I defer on saying that.
23 I would have to talk to the project manager,
24 anything other than what he wrote in the letter. I

1 would have to confer with him.

2 MR. McINNIS: I believe Mr. Keefe
3 from DEP is here tonight?

4 MR. KEEFE: As it relates to our
5 position on September 30th, I don't think since
6 then that our position has changed on the issue.
7 We certainly don't oppose the proposed moratorium.
8 Notwithstanding that, there are other alternatives
9 you might consider to a moratorium,
10 administrative-type controls. Based on the
11 information that we think exists to date and the
12 risk assessment to be completed soon, using that as
13 a basis we wouldn't necessarily implement the
14 moratorium but we certainly don't oppose it.

15 MR. McINNIS: With that, I would ask:
16 Is there any other business to put on the record
17 tonight?

18 MR. CONOBY: I believe there are no
19 other comments from the DEP or EPA, though EPA may
20 have a future comment. I think the other issue was
21 going back to the request of why we started the
22 public hearing as to the moratorium on the
23 installation of irrigation wells within a 500-foot
24 setback of the currently mapped zone of

1 contamination. I think you talked about a survey,
2 which was just an administratively convenient way
3 of referring to that same area. Is that correct?

4 MR. McINNIS: I believe when you
5 referred to the zone that you were looking for the
6 moratorium that you referred to it as the survey
7 boundary. Previously we had referred to it as the
8 500-foot setback. What's the proper delineation of
9 the area?

10 MR. GUSWA: That survey was the
11 boundary, is the outline of the area within which
12 there was the private well survey, which was based
13 on a 500-foot distance either within the plume or
14 500 feet beyond the boundaries of the plume.

15 MR. McINNIS: And that's the seven-
16 parts-per-billion plume or one-part-per-billion
17 plume?

18 MS. WHITE: At the time it was the
19 one-part-per-billion plume as it was defined at
20 that time.

21 MR. McINNIS: What would you propose
22 be the boundary currently, the 500 feet from the
23 seven-part-per-billion plume?

24 MS. WHITE: The same survey area.

1 MR. CONOBY: The survey area is
2 essentially the 500-foot boundary from the plume as
3 defined by the one-part-per-billion concentration
4 in the groundwater.

5 MS. JOHNS: In 2000.

6 MR. CONOBY: But between the year
7 2000 and 2002 as we currently have the data, is
8 that area expanded or the same?

9 MR. HALLEY: It is better defined.

10 MR. McINNIS: Changed.

11 MR. CONOBY: Is it a different area?

12 MS. WHITE: Slightly different but
13 not significant.

14 MR. CONOBY: Not significant. Just
15 making sure we are not basing it on prior data
16 which is no longer accurate.

17 MR. McINNIS: Ms. Michelman?

18 MS. MICHELMAN: You were referring to
19 the work that you might have to have the town
20 consultant do to help you evaluate future wells and
21 that was something you wanted to bring to Grace and
22 have them pay for that advice. I just wanted to
23 know if you close the hearing, will the public see
24 that?

1 MR. McINNIS: See what?

2 MS. MICHELMAN: What is the advice
3 the consultant has come up with.

4 MR. McINNIS: I would have to answer
5 that I can't tell you what will happen in the
6 future. But there's no reason why that wouldn't be
7 a public document that I can think of at the
8 moment.

9 MR. ANDERSON: Maybe I can help. If
10 you anticipate taking information from the
11 consultant for the town paid for by Grace to use to
12 decide an issue in this case, you should leave the
13 hearing open until we get that information. You
14 should receive that in public forum with an
15 opportunity to respond to public comment.

16 MR. McINNIS: There's a slightly
17 different flavor to it. This would be input we
18 would receive from a consultant in reference to an
19 application for an irrigation well that has yet to
20 be submitted, a future application for an
21 irrigation well.

22 MR. CONOBY: Maybe I can clarify it.
23 The comment was made at the prior public hearing
24 that, what is the probability we would have if

1 someone submitted an application for an irrigation
2 well within the survey area, and if there was such
3 an application and there was not a moratorium, how
4 would the town evaluate that. The discussion
5 ensued regarding getting a consultant's report to
6 help determine the advisability and the impact of
7 what that well would be at a future time if an
8 application came forward.

9 MR. McINNIS: And picking up on the
10 last paragraph of Ms. Johns' letter, where I
11 believe, to paraphrase your last paragraph, you
12 essentially offered support in helping the Board
13 review potential applications, I believe. I've
14 given away my copy, so...

15 MS. JOHNS: I guess I thought what we
16 were talking about was consultant support to the
17 Board as they considered the moratorium.

18 MR. McINNIS: That was one part of
19 it, yes.

20 MS. JOHNS: What we agreed to do was
21 look at a scope of work.

22 MR. McINNIS: I'm referring to also
23 in the last paragraph of your letter to us, I
24 believe it said something to the effect of you

1 offered support in terms of evaluating future
2 cases.

3 MR. HALLEY: I will read it.
4 "Therefore, we suggest that the permit application
5 for both towns could be supplemented with
6 information from U.S. EPA regarding the extent of
7 the plume, the private well survey area, the area
8 considered a federal Superfund site as well as
9 concerns about well installation, operation, and
10 the potential for homeowner liability. The Board
11 of Health should also consider modifying the
12 application process to include notification and
13 consultation with U.S. EPA in cases where an
14 applicant within the private well survey area
15 decides to continue with the application process
16 after initial formal review of the application by
17 the Board."

18 MR. McINNIS: Thank you. What I read
19 into that is that there was an offer for technical
20 assistance through the EPA or I was going to
21 suggest through this possible consultant
22 arrangement to help evaluate any future
23 applications. Was that not at all your intent?

24 MS. JOHNS: I don't think I'm in a

1 position to say Grace is not interested in doing
2 that. I still think if you're developing a scope
3 of the work with O'Reilly Talbot & Okun, we still
4 want to look at it. That offer still stands. If
5 that's an important part of it for you, we need to
6 understand that.

7 MR. McINNIS: Where I was going is,
8 this is a consultant arrangement which we have yet
9 to define that would create a report that is yet to
10 be written for a situation that is yet to occur.
11 To answer whether or not that will be a public
12 record, I can't tell you.

13 MS. MICHELMAN: I was wondering if
14 whatever the consultant says is going to weigh into
15 your decision to have a moratorium or to try to get
16 to the same goal in another way. What I didn't
17 understand was what exactly would the consultant be
18 doing, whether they would be consulting for you on
19 a case-by-case basis when someone applied for the
20 well, or help you develop whatever this information
21 packet would be that would go with the application
22 out to whoever, that Maryellen described earlier,
23 or whether there was some sort of institutionalized
24 thing where it's up front, this is how we are going

1 to do it, this is part of this decision and,
2 therefore, kind of part of the hearing, or whether
3 or not it was just having basically a contract with
4 the consultant that as applications come in we'll
5 figure it out for each one, or whether it would be
6 the consultant looking at the entire mapped plume
7 at one point in time and saying: If it is here,
8 you worry about it; if it's here, you don't worry
9 about it.

10 MR. McINNIS: You had lots of
11 scenarios in there. I think we were looking at a
12 subset of the ones that you mentioned.

13 The Board hasn't passed judgment on
14 the SOW. It has yet to be written and presented to
15 Grace. But some elements that I personally would
16 be looking for in the SOW and remains to be seen
17 whether they would make it in would be general
18 advice on technical issues related to this
19 moratorium that we wish to ask of an independent
20 consultant.

21 MS. MICHELMAN: Meaning like how you
22 would design the well?

23 MR. McINNIS: I mean questions that
24 the Board might develop that they would wish to

1 have an independent technical person answer.

2 The second thing might be possible
3 guidelines or, as you mentioned, information that
4 would be presented to possible applicants. The
5 third thing I would be personally looking for is
6 support in reviewing an application. That's what I
7 would have in mind. There are two other members
8 here and they probably have a different view and we
9 have yet to discuss it.

10 MS. MICHELMAN: Since it gets at the
11 whole issue of how -- whether or not the bottom
12 line will be that there will be new wells in the
13 area or not, depending on what the consultant
14 advises, I was hoping that the hearing would remain
15 open so that the public would at least get to hear
16 what the consultant was coming up with.

17 MR. McINNIS: Let me just maybe
18 answer what I think you're asking. Do we ever have
19 closed sessions of the Board of Health? The answer
20 is no. So the public always has access to the
21 deliberations of the Board of Health.

22 MR. CONOBY: I think there are
23 circumstances where you can have closed, but they
24 are extraordinary and specifically defined by the

1 open meeting law.

2 MR. McINNIS: Agreed. I'll rephrase.
3 We have yet to have one, to my knowledge.

4 MS. MICHELMAN: I was just, since
5 whatever the consultant comes up with is going to
6 influence, you know, your decision on how to
7 proceed, whether it be with a moratorium or whether
8 there was some administrative scenario that this
9 consultant could come up with, that's part of the
10 whole issue of this public hearing, I guess I was
11 hoping the public hearing would remain open if
12 you're still considering things.

13 MR. McINNIS: I think I understand.
14 As I understand from Mr. Anderson, it is possible
15 to close the hearing subject to receipt of
16 additional information and that closing the portion
17 of the hearing only closes the evidentiary portion.
18 It doesn't close the deliberations. The Board
19 would still have an opportunity to discuss how they
20 wish to respond. That could occur at a future time
21 even if the evidentiary portion of the hearing is
22 considered closed.

23 Does that answer your question?

24 Did I state the circumstances

1 correctly, Mr. Anderson?

2 MR. ANDERSON: If you're taking new
3 evidence, keep the hearing open. If you're
4 receiving a report that is narrow and confined, you
5 can close the hearing and take only that one piece
6 of information. If you're taking anything broader
7 than that, keep the hearing open.

8 In the scenario that you described,
9 if you have the town consultant advise you whether
10 or not to have a moratorium, keep the hearing open
11 to receive that information. If you have decided
12 essentially not to have a moratorium but to have
13 some administrative controls on applications, and
14 the consultant is going to in the future advise you
15 on that application, that doesn't have to be part
16 of this hearing. If you are making a decision, A,
17 a moratorium, B, no moratorium, or C,
18 administrative controls, and you are having a
19 consultant advise you on that, do it as part of
20 this hearing.

21 MR. McINNIS: Thank you.

22 MR. CONOBY: At this point we do have
23 some open issues with the consultant's scope of
24 work, with potential comments from the EPA. We

1 just received additional information at this
2 meeting. So it seems advisable that we continue
3 the hearing to another date certain, to do that and
4 keep the process moving and yet receive that
5 additional information that's been requested.

6 MR. McINNIS: Okay. I understand
7 based on Mr. Anderson's comments that if we wish to
8 receive input from this consultant, which I would
9 say is possible, then I guess we would want to keep
10 the hearing open. Is that what you are effectively
11 saying?

12 MR. CONOBY: I think it would be
13 advisable to keep the hearing open in anticipation
14 of those items.

15 MR. OLIVERI: I agree.

16 MR. McINNIS: Can I ask Mr. Halley
17 what your anticipated time line to show us an SOW
18 would be?

19 MR. HALLEY: Given the time of year,
20 the first week in January would be appropriate.

21 MR. McINNIS: Trying to do some
22 scheduling in my head. So we pass an SOW. It is
23 presented to Ms. Johns at Grace. Could you
24 estimate how long it might take for you to reply as

1 to what your decision would be?

2 MR. HALLEY: Once it is in your
3 hands.

4 MS. JOHNS: I would say a week or two
5 at the most.

6 MR. CONOBY: We've really got a
7 couple of months.

8 MR. HALLEY: Continue the hearing to
9 the second meeting in January?

10 MR. McINNIS: The consultant needs a
11 little time to prepare any information. If the
12 purpose is to receive it at the next hearing, we
13 are probably looking at March.

14 MR. HALLEY: First meeting in March.

15 MR. McINNIS: Maybe the second
16 meeting in March.

17 MR. CONOBY: Why don't we shoot for
18 the beginning of March. We can always make a
19 decision at that time to continue it again if
20 circumstances so warrant. There's no sense in
21 pushing things out too far. This has been a long
22 process already.

23 MR. McINNIS: May I ask another
24 question for a point of order. If we leave the

1 hearing open and there's still a piece of evidence
2 to be received, possibly be received, does that
3 prevent us from initiating deliberations, before
4 receipt of that information?

5 MR. ANDERSON: You need the
6 information before you deliberate.

7 MR. McINNIS: Why I asked that
8 question, I'm not sure that we may in fact ever
9 have a question for this consultant. We might, we
10 might not. How comfortable are people in terms of
11 do you feel we need to wait to have a consultant
12 available and potentially ask this consultant
13 before you are ready to think about how we wish to
14 respond to this issue or do you think we've got
15 enough information already?

16 MR. CONOBY: It seems at this point
17 that the health department feels it is prudent to
18 at least investigate that path. It certainly could
19 be productive information. So at this point it
20 seems, based on the fairly short time cycle, it
21 would be appropriate to review that. We've
22 received other information to review. We have
23 potential comments from the EPA. Based on all of
24 those, it probably would be advisable to continue

1 the hearing to a future date certain for
2 consideration of those items.

3 MR. McINNIS: All I was referring to
4 was, if we can't begin to deliberate how to solve
5 or conclude this issue until the first meeting in
6 March, and assume that there's some deliberation
7 period after that, we are going to be in April
8 before we conclude this. I suppose that still
9 works, because that's typically when somebody would
10 be considering an irrigation well. I wanted to
11 make sure you were comfortable with that.

12 MR. CONOBY: Construction during the
13 winter months, considering what it is like today,
14 is pretty slim. Historically, we have seen most
15 applications in the spring related to new
16 construction. That does bring up the issue of the
17 time of the administrative hold that we need to
18 address.

19 MR. McINNIS: I think I understand
20 where the sense of the Board is going.

21 MR. ANDERSON: I would suggest that
22 you continue to the first meeting in January, at
23 which time the health department will present a
24 draft of the SOW that the board will accept,

1 amendment or reject. Assuming you accept it or
2 accept it with amendments, you give it to Grace.
3 Grace responds to that by the second meeting in
4 January as to whether it would fund that. The
5 town's consultant can study the information
6 provided and respond to you probably by the second
7 meeting in February. At that point you can decide,
8 having heard from Grace's consultants, the
9 citizens' and the town's consultant, to deliberate
10 or continue for further.

11 MR. McINNIS: So you would suggest a
12 series of continuations?

13 MR. ANDERSON: Yes. The first one in
14 January for a SOW. The second one in January is a
15 ten-minute item for Grace to respond. They can
16 work to refine things. We will know at that point
17 whether or not you will have a consultant. If you
18 don't, you can deliberate; if you do, you have 30
19 days to get the information from the consultant.
20 It's a short time frame if everyone cooperates.

21 MR. McINNIS: There's no problem of
22 having a short continuation of a hearing segment as
23 part of regular meeting?

24 MR. ANDERSON: Not at all, as long as

1 you continue it to a date certain.

2 MR. CONOBY: Do you think we will
3 have a draft scope of work by that time period,
4 considering the holidays?

5 MR. HALLEY: I believe we can.

6 MR. CONOBY: That will be
7 advantageous, to have a quicker time frame.

8 MS. MICHELMAN: I have a question
9 about process, which is how is the public notified
10 that the hearing has been continued or that it is
11 going to be on this agenda? I was thinking
12 about -- I talked to you earlier about, I had
13 thought that this hearing on the 30th was continued
14 to December 2nd. It wasn't. It was continued to
15 the first meeting in December. But it wasn't in
16 the newspaper. This week it was in the newspaper
17 for last week that there was a Board of Health
18 meeting. I was wondering just about the public
19 notification and how that happens.

20 If you continue it from tonight to
21 the first meeting in January, how do you make sure
22 that the paper publishes it? What is the mechanism
23 by which the public is notified for the specific
24 date? I don't think the specific date of this

1 meeting was ever in the media. I don't know.

2 MR. McINNIS: Mr. Anderson.

3 MR. ANDERSON: There is no further
4 newspaper notice that's required. The Board can
5 issue one as a courtesy. Tonight you will decide
6 what the date is you will continue to, and you will
7 announce it at this meeting.

8 MR. McINNIS: Thank you. I was going
9 to say something similar, or Mr. Halley will say
10 it. The legal requirement is that we have to
11 notify the town clerk 48 hours in advance for it to
12 be a legal meeting. They post it in a public place
13 is their requirement, the town clerk's office,
14 which is typically Town Hall. That's the legal
15 requirement.

16 Typically, we try to go beyond that.
17 I know we provide information to the Beacon
18 whenever they request it and even several times
19 when they don't. What they do with that
20 information, I'm sure you understand, is not in our
21 control. But I can also tell you, having been
22 asked this question many times over the years, the
23 easiest course is call the health department. They
24 will tell you what's on the agenda for the upcoming

1 meeting as soon as they know it. It is a process
2 of first in - first on the agenda, typically. They
3 can tell you items that are scheduled on the agenda
4 as soon as they are scheduled for a future agenda.
5 The agenda is usually firmed about the Thursday or
6 Friday before the Monday meeting. If you want to
7 know what's on the next Monday's meeting, that's
8 the best time to call.

9 MS. MICHELMAN: It sounded like some
10 of your concern, when to schedule it and not,
11 putting it off until March, was because you didn't
12 want to limit someone who might want to put in an
13 irrigation well. I think we've also talked about
14 the probability of someone coming to you. It
15 wasn't like there are 400 people itching to do it
16 March 1st. I wonder if that shouldn't be a factor
17 when you're trying to figure out how to set the
18 dates for when. Maybe the other reason is that you
19 would like to do some discussion about this in
20 deliberating.

21 MR. McINNIS: I'm not sure what you
22 mean.

23 MS. MICHELMAN: Was one of the
24 reasons why you didn't want to wait until March

1 until you had all the information before you
2 started deliberating on the issue, was that driven
3 by that you didn't want to hold up someone who
4 wanted to put in an irrigation well beginning then.
5 My suggestion is that you might not be holding
6 anybody up, so maybe that wouldn't be a factor in
7 your decision on the timing.

8 MR. McINNIS: My personal reason why
9 I was doing that is that it will be coming up on
10 six months for this issue. Maybe I'm getting early
11 Alzheimer's, but my long-term memory, I start to
12 lose things that happened six months ago. I wanted
13 to try to keep the time frame as short as possible
14 so that the issues and discussion and information
15 presented would be fresh in the minds of the
16 members of the Board of Health.

17 As we discussed before, we can't have
18 discussions off the record. There are three of us
19 here tonight that would love to grab a beverage and
20 sit down and really talk about the interesting
21 issues, but we are not allowed to do that and we
22 won't. I would like to keep the time frame as
23 short as possible so that the information is fresh
24 in everyone's mind so that when we have the

1 discussion it will be fruitful.

2 MS. MICHELMAN: I understand that.
3 The one part that you might want to consider is
4 that if you're considering alternatives to
5 moratorium, you would want to know if -- you might
6 be thinking along the lines: if we have a
7 moratorium, that's the most protective. If we
8 don't have a moratorium, we need to find some other
9 scenario that's also as protective as we can. And
10 in order to know whether or not such a viable
11 scenario exists, it sounds like you want this
12 consultant's help. To deliberate for a moratorium
13 or not, and then come to a decision no moratorium,
14 and then down the line find out oh, there isn't a
15 viable alternative -- maybe when you're
16 deliberating you're not coming to a decision.

17 MR. McINNIS: That's the ultimate
18 goal of deliberations.

19 MS. MICHELMAN: I know. I'm
20 wondering about do you need all the information
21 before you really are discussing where we ought to
22 go for this?

23 MR. CONOBY: We have to close the
24 hearing before we can deliberate. That's a simple

1 thing, Mary. What we need to do is make a decision
2 to close it or continue it.

3 MR. McINNIS: We've decided we wish
4 to continue it.

5 MR. CONOBY: We are going to continue
6 to a date certain. It sounds at this point that
7 the first meeting in January would be the
8 appropriate time frame. That's only a few weeks
9 away. As far as what date is the first meeting in
10 January, it will be posted. There will be a
11 calendar available of what the meeting's
12 anticipated schedule will be for the year and where
13 they will be.

14 Getting back, we've had a lot of
15 discussion and good information tonight. We are
16 waiting for more. It will probably be prudent to
17 continue the hearing to the first meeting in
18 January.

19 MR. McINNIS: Was that a motion?

20 MR. CONOBY: Yes, sir.

21 MR. OLIVERI: I second it.

22 MR. McINNIS: Motion made and
23 seconded.

24 MR. ANDERSON: What is the expiration

1 of the administrative hold?

2 MR. McINNIS: I believe December
3 24th.

4 MR. ANDERSON: You may consider
5 extending that to the first meeting.

6 MR. McINNIS: We may.

7 MR. ANDERSON: The other question is,
8 professionals getting paid to attend, are you going
9 to focus solely on the scope of work or just to
10 attend?

11 MR. McINNIS: I would propose that it
12 would not be necessary for them to attend. Clearly
13 it is a public meeting and they are welcome to
14 attend. I don't anticipate any direct questions.

15 MR. CONOBY: I think we are going to
16 accept the scope of the work, discuss it in a draft
17 and then transmit it out. The proceedings of the
18 minutes would be available as well as being an open
19 meeting. But being an open meeting, it is obvious
20 that we encourage and invite everyone to attend.

21 MR. McINNIS: Does that answer your
22 question?

23 MR. ANDERSON: Thank you.

24 MR. McINNIS: Any other pieces?

1 Hearing none, all those in favor you a say aye.

2 (Board: Aye.)

3 MR. CONOBY: As far as the
4 administrative hold, I think obviously during the
5 course of this it is necessary and prudent, indeed,
6 to continue that procedure for the health
7 department to administratively hold applications as
8 has been the case for the last months.

9 MR. McINNIS: That's a motion to
10 continue the administrative hold?

11 MR. CONOBY: Not yet. I think we
12 need to determine what would be an appropriate time
13 to continue that hold for. The last time I believe
14 it was six months. Hopefully we could have it done
15 sooner than that. Six months would bring us to
16 June.

17 MR. McINNIS: Bring us to the end of
18 June, which would kind of put us into watering
19 season, you might say. Would you perhaps consider
20 something more like 120 days or 90 days?

21 MR. CONOBY: You could. We are
22 obviously talking another 30 or 60 days before we
23 have some of the issues resolved. Then we start
24 deliberations. I don't think it would be a problem

1 to have -- we don't want to have a short-term hold.
2 We've done it for six months. You could shorten
3 that and revisit it. It is open for discussion.

4 MR. OLIVERI: Would you make it for
5 120? And if we come to a different conclusion, we
6 can alter it either way.

7 MR. CONOBY: We'll have plenty of
8 meetings in between.

9 MR. McINNIS: Pick a number.

10 MR. CONOBY: Well, it is December.
11 120 days.

12 MR. McINNIS: 120 would be the end of
13 April approximately. Does that sound acceptable?

14 MR. CONOBY: I'm also thinking about
15 the town meeting during that time period.

16 MR. McINNIS: One meeting in April

17 MR. HALLEY: If the board reaches a
18 decision, you can drop the administrative hold and
19 put into place what the decision is.

20 MR. CONOBY: I guess in the hope of
21 optimism, 120 days sounds like a better number at
22 this time. I would make a motion to the Board
23 continue the administrative hold for an additional
24 120 days from the expiration of the existing hold

1 to continue it continuously for the 120 days beyond
2 the prior date.

3 MR. McINNIS: Very good. Is there a
4 second?

5 MR. OLIVERI: I second the motion.

6 MR. CONOBY: I want to make sure that
7 there's no gap in between. You are extending the
8 time period. It is a continuous administrative
9 hold. There would be no opportunity for ambiguity
10 as to what the decision is for this hold.

11 MR. McINNIS: Okay. It will continue
12 in effect for an additional 120 days.

13 MR. CONOBY: Correct.

14 MR. HALLEY: With no interruption.

15 MR. McINNIS: Is there further
16 discussion or comments? Hearing none. All those
17 in favor say aye.

18 (Board: Aye.)

19 MR. McINNIS: The motion carries.
20 Does anyone else have any other business to bring
21 before the meeting tonight? In that case I believe
22 a motion for adjournment would be appropriate.

23 MR. CONOBY: So moved.

24 MR. OLIVERI: Seconded.

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MR. McINNIS: All those in favor of
adjournment say aye.

(Board: Aye.)

MR. McINNIS: Meeting adjourned.

(Marked, Exhibits 31 and 32.)

(9:54 p.m.)

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Exhibits

- 17, Letter, 12/5/02, Golden to Halley, and documents.
- 18, Letter, 12/4/02, Michelman to ABH, and documents.
- 19, ABH Agenda, 12/9/02, and documents.
- 20, Email, Keefe to McInnis, 12/9/02.
- 21, Environment Reporter article.
- 22, Email, Eisengrein to Halley, 12/9/02.
- 23, Letter, Benjamin to Acton Property owner, 2/4/02.
- 24, EPA Region 1, New England Community Update.
- 25, Letter, Johns to McInnis, 10/28/02.
- 26, Letter, Deming to McInnis, 10/7/02.
- 27, Poster, location of Lisa Lane and Bellantoni Drive wells.
- 28, Poster, Bellantoni Drive supply well conventional logs.
- 29, Poster, Lisa Lane supply well conventional logs.
- 30, Poster, 2001-2002 VDC concentrations.
- 31, ACES documents.
- 32, MAH Private Well Protection Handbook excerpt.

1 Commonwealth of Massachusetts)
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3 County of Suffolk)
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6 C E R T I F I C A T E
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9 I, David A. Arsenault,
10 Registered Professional Reporter and Notary Public
11 for the Commonwealth of Massachusetts, do hereby
12 certify that the foregoing record is a true and
13 accurate transcript of my stenographic notes taken
14 on December 9, 2002 in the above-captioned matter.
15
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19  _____

20 David A. Arsenault

21 My commission expires May 12, 2006
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