1	ILLINOIS POLLUTION CONTROL BOARD STATE OF ILLINOIS
2	STATE OF ILLINOIS
3	
4	PAUL JOHNSON, INC.,)
5	Petitioner,)
6	vs) No. PCB 05-109
7	ILLINOIS ENVIRONMENTAL PROTECTION) AGENCY and CITY OF WATERMAN,) ILLINOIS,)
8) Respondents.)
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11	TRANSCRIPT OF PROCEEDINGS held in the
12	hearing of the above-entitled matter, taken
13	stenographically by Maria E. Shockey, CSR, before
14	BRADLEY P. HALLORAN, Hearing Officer, at the City
15	Hall Annex, Council Chambers, Sandwich, Illinois, on
16	the 8th day of March, A.D., 2005, scheduled to
17	commence at 9:00 a.m.
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1	APPEARANCES:
2	
3	ILLINOIS POLLUTION CONTROL BOARD, James R. Thompson Center 100 West Randolph Street
4	Suite 11-500 Chicago, Illinois 60601
5	(312) 814-8917 BY: MR. BRADLEY P. HALLORAN, Hearing Officer
6	MS. ALISA LIU
7	BAKER & McKENZIE,
8	One Prudential Plaza 130 East Randolph Drive
9	Chicago, Illinois 60601 (312) 861-2835
10	BY: MR. RICHARD M. SAINES
11	Appeared on behalf of the Detitioner
12	Appeared on behalf of the Petitioner, Paul Johnson, Inc.;
13	ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,
14	1021 North Grand Avenue East Springfield, Illinois 62794-9276
15	(217) 782-5544 BY: MR. CHARLES W. GUNNARSON
16	DI. MR. CHARLES W. GUNNARSON
17	Appeared on behalf of the Respondent,
18	Illinois Environmental Protection Agency;
19	CLIFF, FOSTER, CORNEILLE & BUICK,
20	331 West State Street Sycamore, Illinois 60178
21	(815) 264-3340 BY: MR. KEVIN E. BUICK
22	American holes of the December 1
23	Appeared on behalf of the Respondent, Village of Waterman, Illinois.
24	

1	HEARING OFFICER HALLORAN: We're on
2	the record. Good morning. My name is
3	Bradley Halloran. I'm with the Illinois
4	Pollution Control Board. I'm also assigned
5	to this matter entitled Paul Johnson, Inc.,
6	Petitioner, versus the Illinois Environmental
7	Protection Agency and City of Waterman,
8	Illinois, Respondents. This is PCB 05-109.
9	It's a water well setback exception petition.
10	Today is Tuesday, March 8, 2005.
11	It's approximately 9:05 a.m. and I note that
12	there are no members of the public here.
13	The hearing is being held pursuant to
14	Section 106.300, Subpart C of the Board's
15	procedural rules regarding water well setback
16	exceptions and hearing will be governed in
17	accordance with Section 101, Subpart F of the
18	Board's procedural rules.
19	I note that this hearing is
20	intended to develop a record for review for
21	the petition and it will be reviewed by the
22	whole Illinois Pollution Control Board. I
23	will not be deciding this case, again, it's
24	the Board that will be the ultimate

1	decisionmaker. They will review the
2	transcript of this proceeding, the record,
3	and the post hearing briefs.
4	My job is to ensure an orderly
5	hearing and present a clear record and rule
6	on any evidentiary matters that may arise.
7	After the hearing, the parties will have an
8	opportunity to submit post hearing briefs.
9	These too will be considered by the Board.
10	And I do want to introduce
11	Alisa Liu. She's sitting to my right. She's
12	a technical employee of the Illinois
13	Pollution Control Board. She may or may not
14	be asking questions today.
15	With that said, Mr. Saines, would
16	you like to introduce yourself, please?
17	MR. SAINES: Sure. Richard Saines,
18	S-A-I-N-E-S. I'm the counsel of behalf of
19	the petitioner, and I'm here with Mr. Steve
20	Swenson from Clayton Group Services. Clayton
21	is spelled C-L-A-Y-T-O-N. He's the technical
22	consultant that I'll be offering as the only
23	witness.
24	HEARING OFFICER HALLORAN: Mr. Buick?

1	MR. BUICK: Yes. My name is
2	Kevin Buick, B-U-I-C-K, on behalf of the
3	Village of Waterman. I might note there's
4	some references throughout the petitions to
5	the city of Waterman and I just want to note
6	for clarification that Waterman is indeed a
7	village, and I'm here with the Village
8	engineer, Norman Beeh, B-E-E-H
9	MR. BEEH: Correct.
10	MR. BUICK: (Continuing) who is the
11	Village engineer.
12	HEARING OFFICER HALLORAN: Thank you,
13	Mr. Buick.
14	Mr. Gunnarson?
15	MR. GUNNARSON: Yes. My name is
16	Charles Gunnarson. I'm an attorney with the
17	Illinois Environmental Protection Agency and
18	I'm assigned to this matter representing the
19	IEPA today. With me as well is Mr. Lynn
20	Dunaway, D-U-N-A-W-A-Y, who's a geologist
21	with the division of public water supplies,
22	groundwater unit, and Mr. Dunaway provided
23	
	the technical review of the petition for the

1		HEARING OFFICER HALLORAN: Thank you,
2		Mr. Gunnarson.
3		Mr. Saines, you may proceed with
4		your case in chief. You can do an opening,
5		you can waive opening. You can make any
6		comments on any matters that may arise and/or
7		call your first witness, Mr. Swenson.
8		O P E N I N G S T A T E M E N T
9	BY MR.	SAINES:
10		Thank you. I appreciate that. I'll
11		just make a brief statement. I want to thank
12		both the Illinois EPA, Village of Waterman,
13		and the Board in particular for granting the
14		expedited hearing request and accommodating
15		the schedule for this hearing on a relatively
16		short notice.
17		The reason for the expedited
18		hearing, of course, is that we've been
19		involved in a cleanup of existing shallow
20		groundwater contamination at the site for a
21		couple of years now and we're at the point
22		where we've got a completion plan in place.
23		And in order to get that plan
24		implemented and really get this groundwater

1	cleaned up, we need to, you know, adhere to
2	the statutory requirements in the Illinois
3	Environmental Protection Agency Act, one of
4	which is to make sure that we're consistent
5	with the prohibition on locating new
6	potential routes within the setback area of a
7	community well.
8	So this hearing is intended to
9	seek an exception from that, an exception
10	from that prohibition to allow us to
11	effectively clean up the shallow groundwater.
12	And I'd like at this point to call
13	Mr. Swenson as
14	HEARING OFFICER HALLORAN: I guess
15	Mr. Saines, I'm sorry. I should ask
16	Mr. Buick or Mr. Gunnarson, do you have any
17	openings?
18	MR. BUICK: We do not, your Honor.
19	HEARING OFFICER HALLORAN: Okay.
20	Thank you.
21	MR. GUNNARSON: Neither do we.
22	HEARING OFFICER HALLORAN: Okay. I'm
23	sorry, Mr. Saines, proceed.
24	MR. SAINES: No problem. Sorry to

1	jump in there.
2	If it's okay with everybody, I'd
3	like to just call Mr. Swenson and he'll be
4	here to answer your questions. But before we
5	get into your questions, if it's okay, I'd
6	like to just sort of run through some
7	additional materials that have been provided
8	to the Illinois EPA and the Village
9	subsequent to the petition that was filed on
10	December 10th of 2004 so that we can enter
11	those into the record and that they're
12	available for everybody to review.
13	These are materials that have been
14	shared, again, with the Illinois EPA and the
15	Village pursuant to their request for
16	additional information, and it's referenced
17	in fact in the Illinois EPA's response that
18	there was additional information that they
19	were interested in receiving, so pursuant to
20	that request, we provided some additional
21	information. So at this juncture, I'll call
22	Mr. Swenson.
23	HEARING OFFICER HALLORAN: Okay.
24	Mr. Swenson, you can remain seated and

- 1 Maria will swear you in.
- 2 (Witness sworn.)
- 3 WHEREUPON:
- 4 STEVEN R. SWENSON
- 5 called as a witness herein, having been first duly
- 6 sworn, deposeth and saith as follows:
- 7 EXAMINATION
- 8 BY MR. SAINES:
- 9 Q. Could you just state and spell your
- 10 name for the record, please?
- 11 A. My name is Steven R. Swenson,
- 12 S-W-E-N-S-O-N.
- Q. Okay. And, Mr. Swenson, who are you
- 14 employed by?
- 15 A. Clayton Group Services.
- Q. And what do you do there?
- 17 A. I'm a project manager.
- 18 Q. Okay. Can you tell us what your basic
- 19 educational background is?
- 20 A. I received my bachelor's and master's
- 21 from Northern Illinois University, department of
- 22 geography, environmental sciences.
- Q. Okay. And you mentioned you're a
- 24 project manager. Are you the project manager on the

1 Paul Johnson site that's at issue here today?

- 2 A. Yes.
- 3 Q. Okay. Can you just briefly describe
- 4 what your duties entail as project manager for the
- 5 site?
- 6 A. Everything from report writing,
- 7 budgets, technical review, overseeing field staff,
- 8 working with the -- as a go-between between the
- 9 client and the Agency.
- 10 Q. Okay. Within Clayton Group Services,
- 11 are you the one -- the person most knowledgeable
- 12 about the technical aspects of this particular site?
- 13 A. Yes.
- Q. Okay. I'd like to offer as Group
- 15 Exhibit No. 1, which I have copies of for everybody
- 16 (indicating).
- 17 I've just distributed group
- 18 Exhibit No. 1 to the parties at the hearing. And,
- 19 Mr. Swenson, can you just take a look at that and
- 20 review that briefly if you don't mind?
- 21 (Witness perusing the document.)
- 22 A. Okay.
- Q. Have you familiarized yourself with
- 24 it?

- 1 A. Yes.
- 2 Q. Could you briefly describe in general
- 3 terms, without getting into the details of each
- 4 attachment, what Group Exhibit 1 represents?
- 5 A. Attachment A is a summary of the
- 6 groundwater analytical results that we've collected
- 7 at the site, basically starting from January 2002 to
- 8 the present. Attachment two is a summary boring
- 9 location map showing the extent of the excavation,
- 10 the location of all the monitoring well sampling
- 11 points to date at the site, and attachment three is
- 12 the proposed groundwater monitoring plan that was
- 13 requested by Lynn Dunaway.
- 14 Q. Okay. And Mr. Dunaway -- you referred
- 15 to Lynn Dunaway. Mr. Dunaway is with the Illinois
- 16 EPA?
- 17 A. Yes.
- 18 Q. Let me just ask you a little bit more
- 19 detail on this Group Exhibit No. 1. With respect to
- 20 Attachment No. 1, was this information provided to
- 21 the Illinois EPA subsequent to the filing of the
- 22 petition?
- 23 A. Yes.
- Q. Okay. Do you remember if that was on

- 1 January 24, 2005?
- 2 A. Yes.
- 3 Q. And it was on January 24, 2005?
- 4 A. Yes.
- 5 Q. Okay. And was this information
- 6 requested by the Illinois EPA subsequent to the
- 7 petition as additional information?
- 8 A. Yes.
- 9 Q. Okay. So you prepared this
- 10 information and submitted it to the Illinois EPA
- 11 pursuant to their request?
- 12 A. Correct.
- 13 Q. Okay. With respect to attachment
- 14 two -- or what's actually Attachment B here in Group
- 15 Exhibit No. 1, you mentioned it's a site map with
- 16 boring locations. Again, was this provided to the
- 17 Illinois EPA subsequent to the filing of the
- 18 petition?
- 19 A. Yes.
- 20 Q. Okay. And that was done pursuant to
- 21 their request as well?
- 22 A. Yes.
- Q. Okay. As with Attachment A and
- 24 Attachment B here, both of those were also provided

1 to Mr. Buick at the Village of Waterman; is that

- 2 correct?
- 3 A. Yes.
- 4 Q. Okay. And was that date on
- 5 February 15, 2005?
- 6 A. Yes.
- 7 Q. Okay. And Attachment C of Group
- 8 Exhibit No. 1, you mentioned that's a proposed
- 9 groundwater monitoring plan. Similar to the first
- 10 two attachments in Group Exhibit 1, was this
- 11 submitted pursuant to the Illinois EPA's request?
- 12 A. Yes.
- 13 Q. Okay. And that was subsequent to the
- 14 petition?
- 15 A. Yes.
- 16 Q. Okay. That was submitted to the
- 17 Illinois EPA on January 26, 2005 as well?
- 18 A. Yes.
- 19 Q. And also to the Village of Waterman on
- 20 February 15th?
- 21 A. Yes.
- Q. Okay. Very good.
- 23 I'd like to offer Exhibit No. 2 as
- 24 well.

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1 HEARING OFFICER HALLORAN: And just to
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- 2 make the record clear, when Mr. Saines was
- 3 referring to attachment one, it was actually
- 4 Attachment A.
- 5 BY MR. SAINES:
- 6 Q. Okay. Mr. Swenson, I'm now showing
- 7 you what's been marked as Exhibit No. 2. Can you
- 8 just familiarize yourself with that?
- 9 (Witness perusing the document.)
- 10 A. Okay.
- 11 Q. Do you recognize Exhibit No. 2?
- 12 A. Yes.
- 13 Q. All right. Can you briefly describe
- 14 what Exhibit No. 2 is?
- 15 A. It is a follow-up to Mr. Dunaway's
- 16 request to -- I've got a -- I'm fighting a cold
- 17 here, so I apologize. (Continuing) -- that the
- 18 presence of the shale in the two city wells and an
- 19 expanded well search be conducted to find out if
- 20 that's continuous across the region or if it's
- 21 localized to the area directly below the site.
- Q. Okay. And just in descriptive terms,
- 23 Exhibit No. 2 is a letter, the date of which says
- 24 March 4, 2005, however, for the record, that was

1 actually sent to Mr. Dunaway on March 7th; is that

- 2 correct?
- A. Correct.
- 4 Q. Okay. And it's a one-page -- or well,
- 5 a two-page letter, including the signature,
- 6 attaching a figure one, which is a site location map
- 7 with what appears to be a 2500-foot radius circle
- 8 drawn and a 5,000-foot radius circle drawn; is that
- 9 correct?
- 10 A. Correct.
- 11 Q. Okay. And as you're looking at the
- 12 map, there are sort of light blue -- or I guess I
- 13 would call them light blue dots and a little bit
- 14 darker blue dots with a check pattern in them; is
- 15 that correct?
- 16 A. Correct.
- 17 Q. Okay. What do the light blue dots --
- 18 solid light blue dots signify?
- 19 A. The light blue dots signify well logs
- 20 that indicate the presence of a shale unit in the
- 21 boring log.
- 22 Q. Okay. And with respect to the darker
- 23 blue dots?
- 24 A. Those are well logs that did not

- 1 indicate the presence of a shale unit.
- Q. Okay. And just for reference, the
- 3 area of concern in terms of the existing contaminant
- 4 plume on this figure, can you just describe where
- 5 that is located in this figure?
- 6 A. The site is the red box at the center
- 7 of the figure.
- 8 Q. And the extent of the plume or the
- 9 contamination as exists in the shallow groundwater,
- 10 does that extend beyond the red box area?
- 11 A. It would probably be just slightly
- 12 north to the red box.
- 13 Q. Okay. But contained reasonably close
- 14 to where that box is?
- 15 A. Correct.
- 16 Q. Okay. In terms of inches of the scale
- of this map is, let's see, one inch equals --
- 18 A. Two thousand feet.
- 19 Q. One inch equals 2,000 feet. Thank
- 20 you.
- 21 So in terms of inches outside of
- 22 the red box, I mean, would you be able to identify
- 23 it? I mean, is it a 16th of an inch, is it a 32th
- 24 of an inch, is it -- approximately just for scale

- 1 purposes?
- 2 A. Approximately it would the black dot
- 3 just north of the red box would be the limit.
- Q. Okay. Could you estimate what the
- 5 inches is on that, how many inches is that or do you
- 6 know what --
- 7 A. Maybe a 32th.
- 8 Q. A 32th of an inch, okay.
- 9 A. Yes.
- 10 MR. SAINES: Okay. Thank you.
- 11 I've got Exhibit 3 and Exhibit 4,
- both of which respond to questions that were
- submitted by the Board yesterday.
- 14 HEARING OFFICER HALLORAN: Okay.
- MR. SAINES: So what I thought we
- 16 would do is maybe we could go through some of
- those questions right now on the record.
- 18 HEARING OFFICER HALLORAN: Okay.
- 19 That's fine.
- 20 MR. SAINES: And as those questions
- 21 come up, we may introduce additional exhibits
- in response to some of those questions.
- 23 HEARING OFFICER HALLORAN: Okay.
- 24 Terrific. Thank you.

- 1 BY MR. SAINES:
- 2 Q. So, Mr. Swenson, I'm showing you a
- 3 filing here that was sent by the hearing officer,
- 4 Mr. Halloran, dated March 7, 2005. Is that when you
- 5 received this as well?
- 6 A. Yes.
- 7 Q. So that was yesterday, correct?
- 8 A. Yes.
- 9 Q. Okay. And this is entitled Potential
- 10 Questions for Hearing and there's a series of
- 11 questions here and what I'd like to do is sort of
- 12 read the questions aloud and then solicit
- 13 Mr. Swenson's answers to those questions.
- I also want to note for the record
- 15 that to the extent necessary we would also reserve
- 16 the right to address those questions in more detail
- 17 as part of the post hearing brief, but we would like
- 18 to sort of, you know, put some preliminary answers
- 19 at least on the record at this point.
- 20 So the first question relates to a
- 21 sentence in our petition and I'll read it as it's
- 22 stated in the document entitled Potential Questions
- 23 for Hearing and it's states: The petition on Page 4
- 24 states, "Prior to treating the hydrocarbons, a

- 1 series of injections are completed around the
- 2 perimeter of the hydrocarbons plume. The purpose of
- 3 the perimeter injections is to form a hydraulic
- 4 barrier that prevents the lateral migration of the
- 5 contaminant plume during treatment, end quote.
- 6 The first question related to
- 7 statement says: Would you please specify what is
- 8 injected to create a barrier?
- 9 A. It would be a combination of an ORC
- 10 slurry, which would be ORC and water, I believe
- 11 there would also be some nutrients injected.
- 12 Q. All right. You used the term ORC,
- 13 just for people that are not familiar with that
- 14 phrase, can you describe that?
- 15 A. Oxygen release and compound.
- 16 Q. Okay. The second question: Would you
- 17 please describe how the hydraulic barrier would
- 18 work, and the second part to that question is: Does
- 19 it provide a barrier to groundwater flow movement or
- 20 contaminant transport?
- 21 A. I believe it does two things: One, by
- 22 injecting -- we inject just into the groundwater
- 23 table. It basically forms a mound that as you --
- 24 once you complete the perimeter, you've got a mound

- 1 of groundwater that when you inject in the inside,
- 2 then you're pushing against that mound. Basically,
- 3 you're filling the capillary fringe and the
- 4 unsaturated soil just above the water table. You're
- 5 saturating it with water.
- 6 Q. Okay. And when you describe a mound,
- 7 what you're saying is you're creating a perimeter
- 8 mound around the entire area of contamination so
- 9 that there is inward pressure towards the center of
- 10 the contamination, correct?
- 11 A. Correct.
- 12 Q. Okay. So in answer to that question,
- 13 the question says: Does it provide a barrier to
- 14 groundwater flow movement or contaminant transport,
- is there a yes or no answer to that?
- 16 A. Yes. Basically, in the short-term it
- 17 would prevent the outward migration of the
- 18 groundwater.
- 19 Q. Okay. The third question under this
- 20 series of questions is: How deep will the injection
- 21 wells be?
- 22 A. Groundwater is approximately ten feet
- 23 below the ground surface. The injections, I
- 24 believe, will be between ten and 14 feet.

- 1 Q. Okay. The fourth question in the
- 2 series is: After completing Phase I and Phase II on
- 3 the areas identified by IET, which for the record is
- 4 the vendor providing the bioremediation services, in
- 5 Attachment C as A, B, and C, would the injection
- 6 process be repeated?
- 7 A. The injection process would be
- 8 repeated if the results of the groundwater
- 9 monitoring demonstrates we still have areas of
- 10 concern.
- 11 Q. And you mentioned groundwater
- 12 monitoring. That's the groundwater monitoring that
- is part of the groundwater monitoring plan that you
- 14 had submitted to the Illinois EPA as Attachment C to
- 15 Group Exhibit No. 1; is that correct?
- 16 A. Correct.
- 17 Q. Okay. The next reference text for
- 18 which there's a question states as follows: In
- 19 IET's proposal in Attachment C, Page 19 under Phase
- 20 I (Time Zero) and Phase II (Time 100 days), there is
- 21 a reference to a diagram showing the location of the
- 22 injection points and the anticipated impact zones.
- The question reads as follows: I
- 24 did not find this diagram in the attachments, and I

1 was wondering if you would please enter a copy into

- 2 the record?
- 3 In response to that, we have what
- 4 has been marked as Exhibit 3, which I will
- 5 distribute now (indicating).
- 6 Mr. Swenson, I'm showing you
- 7 what's been marked as Exhibit 3. Can you just
- 8 review that and then when you're ready just briefly
- 9 describe what it is?
- 10 A. Okay. It is a grid of proposed
- 11 injection points for Phases I and II. They're both
- 12 identical for areas A, B, and C with area A being
- 13 north of Adams Street, area B being the excavated
- 14 area, and area C being the perimeter around the
- 15 excavated area south of Adams Street.
- Q. Do you believe Exhibit 3 is responsive
- 17 to question five, which I just read from this
- 18 document?
- 19 A. Yes.
- 20 Q. Okay. The next statement for which
- 21 there's a question is as follows: In IEPA's
- 22 response at Page 5, the IEPA notes the lack of a
- 23 monitoring plan or schedule. Petition at eight
- 24 states that the expected in-situ bioremediation time

- 1 is one year. However, in Attachment C, IET's
- 2 proposal on Page 2 states: IET has structured a
- 3 program which will allow for significant removal
- 4 over a two-year period.
- 5 The question is as follows: Have
- 6 you developed a schedule for remediation showing
- 7 milestones such as timeframes for injections,
- 8 groundwater sampling, and compliance with Class I
- 9 groundwater standards and 35 IAC 742 remediation
- 10 objectives?
- 11 A. Yes.
- 12 Q. Okay. And where would that schedule
- 13 be?
- 14 A. In the groundwater monitoring plan in
- 15 Exhibit 2 -- or excuse me, Group Exhibit 1,
- 16 Attachment C.
- Q. Okay. And just for reference, the
- 18 groundwater monitoring plan that is now contained in
- 19 Group Exhibit 1 and Attachment C, did that exist in
- 20 some form prior to you creating it for Group
- 21 Exhibit No. 1?
- 22 A. Yes. It was submitted in the amended
- 23 corrective action plan submitted to the Illinois EPA
- 24 plan LUST section to do the bio injections. Counsel

- 1 has it down there (indicating).
- Q. Okay. You said LUST section, that's
- $3 \quad L-U-S-T$?
- 4 A. Yes, leaking underground storage tank.
- 5 Q. Okay. Thank you.
- 6 Now, did that plan in Group
- 7 Exhibit No. 1, Attachment C, is it identical to that
- 8 which was submitted as part of the corrective action
- 9 plan?
- 10 A. Some minor modifications have been
- 11 made at the request of Lynn Dunaway.
- 12 Q. And, again, Lynn Dunaway is with the
- 13 Illinois EPA?
- 14 A. Correct.
- Q. Okay. So with respect to the
- 16 monitoring plan then as modified in Group Exhibit
- 17 No. 1, is that going to then be used as part of the
- 18 corrective action plan as well?
- 19 A. Yes.
- 20 Q. Okay. So those will be identical?
- 21 A. Yes.
- Q. Okay. The next question from the
- 23 Illinois Pollution Control Board is: Have you
- 24 developed a monitoring plan? And, Mr. Swenson, the

- 1 answer to that question is?
- 2 A. Yes.
- 3 Q. Okay. The next statement in the
- 4 series of questions is as follows: According to
- 5 IEPA's response at Page 5, additional data was
- 6 provided to the Agency by Clayton Group Services
- 7 that was not part of the original petition. The
- 8 data apparently demonstrates the effectiveness of
- 9 the bioremediation at the site.
- 10 And question No. 8: Would you be
- 11 willing to enter this data into the record in the
- 12 proceeding? Could you summarize the data for the
- 13 hearing today to describe the effectiveness of
- 14 bioremediation at the site in the past?
- We have gone through Group
- 16 Exhibit 1. Is that the data that you represent
- 17 demonstrates the effectiveness of bioremediation?
- 18 A. Yes.
- 19 Q. Okay. So let's just -- in response to
- 20 this question, let's delve into that just a little
- 21 bit more and refer back to Group Exhibit No. 1,
- 22 attachment -- well, you tell me. Where in this
- 23 group exhibit does it reference the effectiveness
- 24 or does it demonstrate the effectiveness of it?

- 1 A. I believe the effectiveness is
- 2 demonstrated with the analytical data from the sumps
- 3 on Page 5 of 7 on Table 1 in Attachment A.
- Q. Okay. Can you describe in this Page 5
- of 7, Table 1, Group Exhibit 1, Attachment A, how
- 6 the effectiveness is demonstrated?
- 7 A. Following removal of the impacted soil
- 8 and the source material, ORC was placed in the
- 9 bottom of the excavation before it was backfilled
- 10 with gravel. Following completion of the
- 11 backfilling activities, six sumps were installed to
- 12 monitor. Groundwater samples were collected from
- 13 the sumps on June 1, 2003, February 5, 2004, and
- 14 September 15, 2004, and in each such improvement was
- 15 observed with the groundwater quality.
- 16 Q. Okay. So in other words, the level of
- 17 contamination was decreasing over time?
- 18 A. Correct.
- 19 Q. Okay. All right. Is there anything
- 20 else you'd like to add in response to that question?
- 21 A. Not at this time.
- Q. Okay. The next statement in the
- 23 series of questions is as follows: According to
- 24 IEPA's response at Page 7 and the petition on

- 1 Page 3, the Clayton Group recently installed
- 2 additional borings to determine the extent of the
- 3 shallow groundwater plume.
- The question is as follows: How
- 5 many additional wells did Clayton install and what
- 6 did they demonstrate in terms of groundwater
- 7 contamination?
- 8 Again, I think we want to delve
- 9 into this in a little bit more detail if we refer to
- 10 figure --
- 11 A. One, Attachment B.
- 12 Q. -- one, which is in Attachment B to
- 13 Group Exhibit 1, just to make things clear. Can you
- 14 on this figure describe -- or just point out by
- 15 reference to the boring log or the boring number so
- 16 it's clear for the record what the additional wells
- 17 were?
- 18 A. Clayton completed approximately seven
- 19 borings using a geoprobe to further delineate the
- 20 extent north of West Adams Street. The wells
- 21 were -- following completion of the geoprobing, a
- 22 temporary one-inch monitoring well was placed in the
- 23 open hole and Clayton attempted to go after a
- 24 groundwater sample.

- 1 Q. Okay. And with respect to this
- 2 additional information, you also did a new round of
- 3 sampling and monitoring wells ten and 15; is that
- 4 correct? If it's not correct, let me know.
- 5 A. Yes, we did.
- 6 Q. Okay. So can you describe whether you
- 7 have further been able to define the extent of the
- 8 contamination to the north and west as a result of
- 9 the soil boring installation?
- 10 A. Yes. We were able to collect
- 11 groundwater samples from three locations. CSB 402,
- 12 which is the westernmost probe location and the one
- 13 closest to the municipal well, the groundwater
- 14 sample nondetected with B-tex and PNAs.
- Q. Okay. What about 405?
- 16 A. Well, 405 was a northernmost and,
- 17 again, we were able to collect a sample for B-tex
- 18 and PNAs; it was nondetect.
- 19 Q. Okay. And what does that mean for
- 20 purposes of description?
- 21 A. Nondetect means it was -- the compound
- 22 was not detected at the limits of the laboratory
- 23 equipment.
- Q. Okay. So in general terms, would you
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1 say you have what we call defined the lateral extent

- 2 of the contamination pursuant to those borings?
- 3 A. Yes.
- 4 Q. Okay. Now, in reference to the
- 5 question, which, again, says: How do these boring
- 6 demonstrate in terms of the extent of groundwater
- 7 contamination, what do they demonstrate, in terms of
- 8 the extent, is there anything else relevant to
- 9 monitoring well ten or 15 that would be consistent
- 10 with the Illinois EPA's response indicating that
- 11 there was more extensive contamination?
- 12 A. Can you repeat the question?
- 13 Q. Sure. It was a terrible question. I
- 14 would be happy to rephrase it.
- 15 Illinois EPA responded, and I'm
- 16 paraphrasing, but that the new data indicated more
- 17 extensive groundwater contamination, I think those
- 18 were the terms they used, and since we've just
- 19 discussed that, we actually have defined that there
- 20 is nondetects on the perimeters, so we've defined
- 21 the lateral extent.
- 22 Did the results from monitoring
- 23 well ten and 15 indicate any reason for the Illinois
- 24 EPA to suggest that it showed more extensive

- 1 contamination; in other words, were there different
- 2 levels in the monitoring wells that were detected in
- 3 this new round of sampling?
- 4 A. No.
- 5 Q. Okay. So do you understand what the
- 6 Illinois EPA said when they said that the additional
- 7 monitoring ports indicate more extensive groundwater
- 8 contamination?
- 9 A. I'm a little confused on that point.
- 10 Q. You're not sure what the reference is
- 11 in regard to?
- 12 A. Correct.
- 13 Q. Okay. That's fair. I'm sure we'll
- 14 figure that one out.
- 15 Okay. Let's move on to the next
- 16 series of questions. The statement says as follows:
- 17 Page 8 of the petition discusses the option of
- 18 replacing or relocating the municipal well.
- 19 And the five questions under that
- 20 is as follows: In order to detect potential
- 21 impacts, have you made any arrangements with the
- 22 city -- and when they say city here, I think that is
- 23 the reference to the Village of Waterman -- to
- 24 monitor the CWS well No. 2 for components that will

- 1 be injected into the remediation wells?
- 2 A. No.
- 3 Q. Okay. Do you think that that's
- 4 something that is necessary in this case?
- 5 A. No.
- 6 Q. Okay. Could you explain why?
- 7 A. I believe the city is already
- 8 monitoring the well for volatile, bacteria, and
- 9 nitrate/nitrites as part of their public water
- 10 service.
- 11 Q. So, in other words, there's data that
- 12 currently exists for that well?
- 13 A. Correct.
- Q. Okay. And the monitoring that the
- 15 Village is doing, is that ongoing, is this a
- 16 continuous obligation?
- 17 A. Correct.
- 18 Q. Okay. Do you happen to recall or know
- 19 offhand what the existing data shows with respect to
- 20 that?
- 21 A. There are no issues with the well
- 22 regarding contamination.
- Q. Okay. The next question reads:
- 24 Attachment C to the petition contains some MSDSs,

- 1 which are material safety data sheets, for the
- 2 materials to be used in the injection process.
- 3 Would it be effective to monitor the CWS well No. 2
- 4 for some of the parameters identified in those
- 5 MSDSs?
- 6 And your opinion on that?
- 7 A. No.
- 8 Q. Okay. Can you explain why?
- 9 A. The stuff being injected, the ORC, the
- 10 oxygen releasing compound, is basically a solid.
- 11 The byproduct, again, is a solid, an oxygen that is
- 12 not mobile. The bacteria being injected for the
- 13 upper plate counts basically cling to the soil
- 14 particles of the subsurface of the vatozone
- 15 (phonetic) and just into the groundwater table, they
- 16 are not mobile -- I mean, they don't swim through
- 17 the groundwater.
- 18 The other new nutrients being
- 19 injected are equivalent to farm fertilizer, in
- 20 layman's terms, at low concentrations just enough to
- 21 ensure that there's enough nutrients to maintain the
- 22 micropopulation.
- Q. So in short, as you're designing a
- 24 system for the remediation, this is not something

1 that you would typically recommend in a system like

- 2 this?
- A. Correct.
- Q. Okay. The next question states: Only
- 5 the first half of the MSDS for the Regenesis ORC
- 6 appeared in Attachment C. Would you please submit
- 7 the entire MSDS?
- And in reference to that, in
- 9 response I'm showing you what's been marked as
- 10 Exhibit No. 4. Can you look at that quickly?
- 11 A. Yes.
- 12 Q. Or take as much time as you need
- 13 actually.
- 14 (Witness perusing the document.)
- 15 A. Okay.
- 16 Q. Okay. Do you know what that is?
- 17 A. Yes.
- 18 Q. Can you describe it, please?
- 19 A. It's the material safety data sheet
- 20 for oxygen-releasing compound or ORC as downloaded
- 21 from Regenesis' web site.
- 22 MR. SAINES: Okay. I'd like to offer
- 23 Exhibit No. 4 into the record in response to
- 24 the Illinois Pollution Control Board's

- 1 request.
- 2 BY MR. SAINES:
- 3 Q. The next question states as follows:
- 4 If no monitoring of the CWS well No. 2 is planned,
- 5 how will you ensure that the well hasn't been
- 6 impacted?
- 7 A. From my understanding, the well is
- 8 already being monitored.
- 9 Q. Okay. Is that similar to the question
- 10 that we discussed previously related to the ongoing
- 11 monitoring obligation of the Village?
- 12 A. Correct.
- 13 Q. Okay. The next question states: If
- 14 the unthinkable happens and the injection wells do
- 15 impact the CWS well, have you discussed a
- 16 contingency plan with the Village?
- 17 A. No.
- 18 Q. Okay. The next question: Have you
- 19 talked to the Regenesis ORC representative about
- 20 what to do in the event that the CWS well is
- 21 impacted? Could you describe some likely actions,
- 22 such as a boil order?
- 23 So let's take the first question
- 24 first. Have you talked to the Regenesis ORC

- 1 representative?
- 2 A. I spoke with the subcontractor.
- 3 Q. Related to this question?
- 4 A. Yes.
- 5 Q. Okay. And what was the nature of the
- 6 conversation in general terms?
- 7 A. I'm sorry. I misspoke.
- No, I have not spoken to him on
- 9 the ORC issue.
- 10 Q. Okay. So you spoke to him for other
- 11 reasons, but you didn't talk about this particular
- 12 issue?
- 13 A. Right.
- Q. Okay. Let's go to the next question:
- 15 Could you describe some likely actions, such as a
- 16 boil order?
- 17 Given the nature of the
- 18 constituents here, what would you think would be the
- 19 likely response action that would need to be taken
- 20 to the extent there was contamination found in the
- 21 municipal well?
- 22 A. My understanding of the injection
- 23 process and the compounds being injected, if there
- 24 was to be an impact to the well, there would have to

- 1 be some kind of a pretreatment.
- Q. Now, when we talk about impact to the
- 3 well, for purposes of context, I mean, is it
- 4 possible -- let me ask this question: Is it
- 5 possible that you would have impacts from the ORC
- 6 compound without there being any impacts from the
- 7 existing contamination?
- 8 A. They would have to follow the same
- 9 pathway.
- 10 Q. So to the extent there's impacts of
- 11 the ORC compound, that would mean there would be
- 12 impacts of the existing contamination, correct?
- 13 A. Correct.
- 14 Q. And the point of using the ORC
- 15 compound is to clean up the existing contamination
- 16 and get rid of it?
- 17 A. Correct.
- 18 Q. Okay. The last question in this
- 19 series is: Does the Village have another source of
- 20 community water supply besides well No. 2?
- 21 A. I believe they have two additional
- 22 wells, well No. 3 and a third one, which is either
- 23 on line or near completion, but the city engineer
- 24 would be able to respond to that -- or the Village

- 1 engineer.
- 2 Q. Okay. Fair enough.
- 3 Do you have any idea, and if you
- 4 want to defer to the Village engineer, that's fine,
- 5 but do you have any idea following on from the
- 6 question asked by the Illinois Pollution Control
- 7 Board, could you please describe how it compares to
- 8 the subject well No. 2?
- 9 A. They are both completed in bedrock
- 10 approximately 400 feet deep.
- 11 Q. Okay. And just for reference, how
- 12 deep is this contaminant zone that's currently there
- 13 right now, what are we talking about?
- 14 A. Within the first ten, 15 feet of the
- 15 surface.
- 16 Q. Okay. And the last question -- or
- 17 last statement here from the series of questions
- 18 states as follows: Petition at eight indicates the
- 19 expected time to complete the in-situ bioremediation
- 20 is one year, and the IEPA recommends that
- 21 groundwater remediation efforts continue for a
- 22 minimum of two consecutive quarters with no
- 23 exceedance of the Class I standards or 35 IAC 742
- 24 remedial objectives.

1	The question is: Do you foresee
2	any problems with having the setback exception
3	expire once these conditions are met?
4	A. Once the site is cleaned up and we can
5	demonstrate that the groundwater meets Class I, I
6	see no reason why the setback exception should be
7	enforced, so the variance should expire.
8	MR. SAINES: Okay. That concludes my
9	questioning of Mr. Swenson and we're happy to
10	take questions from anybody else.
11	HEARING OFFICER HALLORAN: Thank you,
12	Mr. Saines.
13	Mr. Buick?
14	MR. BUICK: At this time, your Honor,
15	I think that we would defer and I guess we
16	would prefer to allow the IEPA to proceed and
17	then we may reserve if there's any follow-up
18	questions, but I guess I would be more
19	comfortable allowing Mr. Gunnarson to proceed
20	before we try to take the horns.
21	HEARING OFFICER HALLORAN: Okay.
22	Thank you.
23	MR. SAINES: Could we take two minutes
24	off the record real quick?

1	HEARING OFFICER HALLORAN: Sure.
2	We're off the record, Maria.
3	(Whereupon, a discussion was had
4	off the record.)
5	HEARING OFFICER HALLORAN: We're on
6	the record.
7	Mr. Gunnarson, do you have any
8	questions of Mr. Swenson?
9	MR. GUNNARSON: I don't have any
10	direct questions of the petitioner's witness.
11	I'm ready to proceed with our case in chief
12	at this time.
13	HEARING OFFICER HALLORAN: Okay. Let
14	me hold on.
15	Mr. Saines, have you rested your
16	case in chief?
17	MR. SAINES: I don't have a formal
18	closing statement prepared, but I would like
19	to say if this is the time to say it, that
20	the goal here, of course, is to clean up
21	existing contamination that is there.
22	HEARING OFFICER HALLORAN: Okay.
23	Ms. Liu may have some questions as well.
24	We'll do the closing

1	MR. SAINES: Later?
2	HEARING OFFICER HALLORAN: when the
3	time comes.
4	MR. SAINES: Okay. Fair enough. With
5	the exception of that, yeah, I'm done.
6	HEARING OFFICER HALLORAN: Okay.
7	Thank you.
8	So if Mr. Buick and Mr. Gunnarson
9	do not have any questions of Mr. Swenson,
10	Ms. Liu, do you have any questions of
11	Mr. Swenson?
12	MS. LIU: I do. I have one question.
13	HEARING OFFICER HALLORAN: Okay.
14	MS. LIU: You mentioned that the
15	Village monitors its community water supply
16	for nitrates and I was wondering if the
17	nutrient source that you're using in the
18	injection process is a nitrogen-based one?
19	MR. SWENSON: Well, first of all, my
20	understanding is they monitor for nitrates.
21	I'm not stating that as a fact. The nutrient
22	source is urea, ammonium nitrate, and an
23	orthophosphate.
24	MS. LIU: Thank you.

1 MR. SAINES: Can I ask a follow-up on

- 2 that?
- 3 HEARING OFFICER HALLORAN: Yes, you
- 4 may.
- 5 FURTHER EXAMINATION
- 6 BY MR. SAINES:
- 7 Q. So urea ammonium nitrates, would that
- 8 be within the family of constituents that Ms. Liu
- 9 requested because she said nitrates and she was
- 10 asking a general question about nitrates. You
- 11 mentioned urea ammonium nitrate. Would that be a
- 12 yes to her question; in other words, she said is the
- 13 media you're using a nitrate-based media and so the
- 14 answer is yes, it is?
- 15 A. Yes.
- 16 Q. And the specific compound is urea
- 17 ammonium nitrate?
- 18 A. Urea, ammonium nitrate, and
- 19 orthophosphate, three sources.
- Q. Okay. Urea, comma, ammonium
- 21 nitrate --
- 22 A. Yes.
- 23 MR. SAINES: Okay. Fair enough.
- MS. LIU: Thank you.

- 1 HEARING OFFICER HALLORAN: Okay.
- 2 Anything further, Ms. Liu?
- 3 MS. LIU: No. Thank you.
- 4 HEARING OFFICER HALLORAN: Okay.
- 5 Thank you.
- 6 Mr. Gunnarson, you want to proceed
- 7 with your case in chief? I think Mr. Saines
- 8 has completed his.
- 9 Mr. Buick?
- 10 MR. BUICK: If I could have one
- opportunity as to his follow-up question
- 12 related to Ms. Liu's question and
- Mr. Swenson's responses --
- 14 HEARING OFFICER HALLORAN: Okay.
- 15 EXAMINATION
- 16 BY MR. BUICK:
- 17 Q. Just from the Village's standpoint,
- 18 Mr. Swenson, knowing I suppose perhaps better than I
- 19 what the routine tests that the Village would
- 20 administer, for example, for bacteria and other
- 21 types of --
- MR. BEEH: Contaminants.
- 23 BY MR. BUICK:
- Q. (Continuing) -- would the type of

- 1 remediation that this would involve involve
- 2 necessary screening for additional types that would
- 3 not have been part of the Village's ordinary testing
- 4 process?
- 5 A. I think Paul Johnson and the Village
- 6 would have to sit down and take a look at that to
- 7 verify that everybody's on the same page.
- 8 Q. Are you familiar with anything
- 9 specific in the way of additional problems that this
- 10 would pose that, again, could be something that
- 11 might slip under the Village's radar if they're
- 12 doing the standard battery of ordinary tests?
- A. Not that I'm aware of.
- Q. But it is a possibility and something
- 15 that should be looked at?
- 16 A. It should be looked at, I would agree
- 17 to that.
- MR. BUICK: Thank you.
- 19 HEARING OFFICER HALLORAN: Any
- 20 redirect, so to speak, Mr. Saines?
- 21 FURTHER EXAMINATION
- 22 BY MR. SAINES:
- Q. Well, just as a general matter, I
- 24 guess I'll ask the following question: To the

- 1 extent there's a demand or formal request to augment
- 2 or perform some additional monitoring of these
- 3 community wells to make the parties comfortable and
- 4 that falls within the scope of the leaking
- 5 underground storage tank cleanup pursuant to which
- 6 we're operating as part of this, I don't know, would
- 7 you be amenable to doing that type of monitoring?
- 8 A. Yes.
- 9 FURTHER EXAMINATION
- 10 BY MR. BUICK:
- 11 Q. I'll ask a follow-up to that. If that
- 12 type of follow-up monitoring is done and I don't
- 13 know, Mr. Swenson, if you're able to speak to this,
- 14 but based on your discussions with Paul Johnson,
- 15 Inc., do you believe that they're amenable to
- 16 handling the cost of that responsibility or the cost
- 17 of that so the cost is not inadvertently passed on
- 18 to the Village in the process?
- 19 MR. SAINES: Well, let me -- if you
- don't mind, if I can address that as a legal
- 21 matter. Paul Johnson, Inc. is currently
- 22 undergoing a remediation process under the
- leaking underground storage tank program,
- 24 which provides for reimbursement of approved

1	expenditures related to remediation.
2	So I think that the short answer
3	is that we would submit that documentation
4	and everything else to the Illinois EPA for
5	approval as part of the cleanup and we would
6	see what they would say as to whether or not
7	in fact they would deem that as approved
8	expenditures that you would get reimbursed
9	for.
10	So the initial cost would be
11	funded by Paul Johnson, Inc. and then
12	ultimately be reimbursed on the fund.
13	BY MR. BUICK:
14	Q. And if I could ask, Mr. Swenson, in
15	your experience, are those the types of expenses
16	that are in fact approved in your past experience?
17	A. Yes.
18	MR. BUICK: Okay. Thank you.
19	HEARING OFFICER HALLORAN: Any further
20	questions of this witness, Mr. Swenson? And
21	it may come to pass, I'm not sure if anybody
22	wants to ask Mr. Beeh any questions, but if
23	so, we'll put him under oath as well.
24	With that said, I guess Mr. Saines

1	has rested his case in chief.
2	Mr. Gunnarson?
3	MR. GUNNARSON: Thank you. As noted
4	before, I'm here on behalf of the Illinois
5	EPA as is Mr. Dunaway in a technical nature.
6	The Agency filed its response to
7	Paul Johnson, Inc.'s petition for the water
8	well setback exception on January 27th of
9	2005, and essentially that response
10	recommended granting the exception pending
11	that three conditions were met, two involved
12	the submittal of additional information into
13	the record here today regarding the
14	effectiveness of the in-situ or direct push
15	technology in treating the hydrocarbon
16	contamination of the shallow groundwater and
17	also follow-up information regarding the
18	environmental impact of that technique.
19	And by the petitioner's
20	introduction of Exhibit 1, we believe they
21	have satisfied that and that is the
22	information that was provided to the Agency
23	subsequent to the filing of the petition, so
24	I think the Agency is comfortable in saying

1	at this point that we believe those two
2	conditions have been met.
3	The third one is essentially that
4	if the Board does decide to grant the
5	exception, that that exception is granted on
6	the condition that Paul Johnson, Inc. can
7	demonstrate two consecutive quarters of
8	compliance with the Class I groundwater
9	standards.
10	We feel that's necessary to ensure
11	that the remediation has in fact been
12	completed satisfactorily and gives us a level
13	of confidence to feel that the site has
14	indeed been addressed, so we would ask that
15	the Board consider that when it is
16	considering whether or not to grant this
17	exception.
18	And perhaps one point of
19	clarification: I would like to ask
20	Mr. Dunaway a question related to something
21	that Mr. Saines had mentioned. I think it
22	was also mentioned in the Board's questions
23	to the petitioner if I might at this point?
24	HEARING OFFICER HALLORAN: We should

- 1 probably swear him in.
- 2 Maria, please?
- 3 (Witness sworn.)
- 4 WHEREUPON:
- 5 LYNN E. DUNAWAY
- 6 called as a witness herein, having been first duly
- 7 sworn, deposeth and saith as follows:
- 8 EXAMINATION
- 9 BY MR. GUNNARSON:
- 10 Q. Mr. Dunaway, earlier in this hearing,
- 11 counsel was referencing to a question that had come
- 12 about pursuant to the Pollution Control Board's
- 13 submittal of questions that was dated March 7, 2005,
- 14 and essentially what it addressed was a comment made
- in the Agency's petition -- response to the
- 16 petition, pardon me, at Paragraph 15, the last
- 17 sentence of that on Page 7 of our response and I'll
- 18 read that quote from the response here, it says:
- 19 Section 1, Page 3 indicates that Clayton has
- 20 recently installed additional monitoring points
- 21 indicating more extensive groundwater contamination
- 22 and I believe Section 1, Page 3 refers to the
- 23 petition. Can you perhaps put that sentence or that
- 24 comment in a context when you were doing your review

- 1 and what your thoughts were at that point?
- 2 A. Yes. In our response, it was
- 3 referring to that section of the petition and it was
- 4 sort of the context in which the petition was
- 5 written and that it's referring to the new areas as
- 6 being those north of Adams Street. And additional
- 7 information was submitted showing that that had in
- 8 fact been investigated, but the way it was submitted
- 9 in the petition, it sounded as though there were
- 10 additional areas beyond that.
- 11 But if you look at the data in
- 12 fact with the new additional data that was submitted
- 13 and that was entered as I believe Group Exhibit 1,
- 14 it's clear that they were talking about the area
- 15 north of Adams Street that had already been
- 16 discovered, but it was better defined with the
- 17 additional borings.
- 18 And they were referring to the
- 19 area that had not been treated with ORC as that area
- 20 with the understanding on their part, and it wasn't
- 21 necessarily clear from that paragraph, that they had
- 22 treated the base of the excavation with ORC. And it
- 23 was -- when we were doing the response without the
- 24 additional information, it was not clear where that

1	area was, but with the additional information, it
2	became clear after we had submitted our response.
3	HEARING OFFICER HALLORAN: Thank you,
4	Mr. Dunaway?
5	MR. GUNNARSON: Thank you,
6	Mr. Dunaway.
7	At this point, Mr. Hearing
8	Officer, the Agency doesn't have anything
9	additional in its case in chief, but we're
10	certainly available for any questions from
11	the Board or the other parties.
12	HEARING OFFICER HALLORAN: Thank you.
13	Mr. Saines?
14	MR. SAINES: I have no questions.
15	HEARING OFFICER HALLORAN: Okay.
16	Ms. Liu?
17	MS. LIU: I would like to ask the
18	Village a question if they would like to be
19	sworn in.
20	HEARING OFFICER HALLORAN: Okay. So
21	no further questions of Mr. Dunaway at this
22	time.
23	So, Mr. Beeh, would you please
24	raise your right hand and the court reporter

1	will swear you in?
2	(Witness sworn.)
3	MS. LIU: Mr. Beeh, one of the
4	questions we asked was regarding an alternate
5	water supply and Mr. Gunnarson indicated that
6	there was another 400-foot deep well. I was
7	wondering if you would comment on its
8	capacity and ability to act as an alternate
9	water supply?
10	MR. BEEH: The Village of Waterman
11	currently has three active wells, this is one
12	of them. In 2002, we began developing a new
13	well approximately 1500 feet north/northeast
14	of this current site and, you know, have
15	completed the well and the well house, we
16	have that online.
17	Just for the record, in drilling
18	and developing it, we did not encounter shale
19	until we were below the limestone and it was
20	at the depth of between 406 and 425 feet, but
21	we did go through a significant layer of
22	clay.
23	But the Village has two other
24	wells that are currently online and active at

T	the same time. But we also use the Well in
2	question all of the time and it is I guess
3	also for the record, all three wells are in
4	the limestone formation or lower. The new
5	well is in limestone and sandstone and it
6	goes down to 685 feet.
7	So we do have other sources, but
8	you never know if a well is going to go down
9	and you should always have a backup. In the
10	letter from Clayton dated March 4, 2005, they
11	refer to the shale formations and presumably
12	that's because they're a fairly impervious
13	layer, but, you know, our and I'm not sure
14	why this new well log didn't show up in your
15	search, but it's not the shale does vary
16	depending upon where you're at.
17	I do have one question and I was
18	wondering what is the
19	HEARING OFFICER HALLORAN: Excuse me.
20	Can Mr. Buick ask the question?
21	MR. BEEH: Oh, sure. I'm sorry.
22	HEARING OFFICER HALLORAN: I know this
23	is kind of informal but
24	MR. BUICK: Does Ms. Liu have any

- follow-up? I do have a couple of things I
- would like to ask Mr. Beeh, if possible.
- MS. LIU: No. Thank you.
- 4 EXAMINATION
- 5 BY MR. BUICK:
- 6 Q. Before we get to your question,
- 7 Mr. Beeh, just directing your attention to the
- 8 Board's questions that were submitted and
- 9 specifically the question No. 14 that was posed
- 10 regarding if the unthinkable happens and the
- 11 injection wells do impact the CWS well,
- 12 Mr. Swenson's testimony was that there was no
- 13 contingency plan that had been discussed with the
- 14 Village.
- 15 From the Village engineer's
- 16 standpoint, could you give the Board and the hearing
- 17 officer some idea of what type of contingency plan
- 18 would be appropriate for what the situation would
- 19 present?
- 20 A. I guess in my opinion if the well were
- 21 to become contaminated, the contingency plan would
- 22 be to replace it and we would have to begin a
- 23 planning proceeding with that process. The well
- 24 completed in the last couple years, the total cost

- 1 would have been between 400 and 500,000.
- 2 Q. Your question, Mr. Beeh, do you have
- 3 an answer to the question regarding what the life
- 4 cycle of the treatment method would be? I mean,
- 5 from your standpoint, do you have any understanding
- 6 of what the life cycle I guess of the ORC compounds
- 7 would have been?
- 8 A. No, I really don't. And I would be
- 9 interested in knowing how long the treatment process
- 10 will be going on underground, is it something which
- 11 continues indefinitely, is it something which will
- 12 end at some point?
- MR. BUICK: Thank you.
- 14 HEARING OFFICER HALLORAN: Mr. Saines?
- MR. SAINES: Does he need to be
- 16 re-sworn?
- 17 HEARING OFFICER HALLORAN: No. He's
- 18 still under oath.
- 19 MR. SAINES: Mr. Swenson, please feel
- free to respond to that.
- 21 MR. SWENSON: Are you talking about
- once we inject it, how long it will be --
- MR. BEEH: (Indicating.)
- MR. SWENSON: Well, once the ORC is

1	basically added to water, it begins releasing
2	oxygen compound and it will continue
3	releasing for approximately 180 days by that
4	stretch of drop-off.
5	As far as the bacteria being
6	injected, the whole purpose of that is to
7	increase kind of spike the native
8	population of bacteria. There are bacteria
9	there now consuming the hydrocarbons.
10	The whole idea being is to promote
11	their development by giving them the oxygen
12	needed and the nutrients to promote their
13	growth. The other thing with bio is, the
14	hydrocarbon degrading bacteria, the class,
15	are very slow in kind of coming out of
16	their I'm blanking on the word.
17	MS. LIU: Dormant.
18	MR. SWENSON: (Continuing) their
19	dormant stage, whereas, if you just put ORC,
20	you know. There's other classes of bacteria
21	that degrade plant matter, animal matter, you
22	know, the whole gamut of compounds, and what
23	would happen is you would spike those
24	populations up that would then be competing

Τ.	with your hydrocarbon degrading bacteria.
2	So the purpose of adding the
3	hydrocarbon degrading bacteria from day one
4	is to bring everybody up onto an even playing
5	field with degrading the hydrocarbons. Once
6	we're done and the contaminants as we
7	monitor the contaminants or the nutrients,
8	the nutrients are used up by the bacteria in
9	the subsurface at the groundwater interface.
10	Once we're done and we show that
11	we've got the two quarters clean and we close
12	out, we will not be introducing anymore
13	oxygen and the bacteria counts will drop back
14	to their preexisting levels because there
15	will be nothing to support the additional
16	plate counts.
17	HEARING OFFICER HALLORAN: Thank you.
18	MR. BUICK: Mr. Hearing Officer, would
19	I be permitted one question in follow-up to
20	that?
21	HEARING OFFICER HALLORAN: Sure. I
22	guess we've somewhat suspended the formal
23	procedural rules, but if there's no
24	objection, sure, go ahead Mr. Buick.

1	MR. BUICK: Thank you.
2	
3	
4	FURTHER EXAMINATION
5	BY MR. BUICK:
6	Q. This is maybe an obvious question, but
7	is this bacteria harmful for human consumption that
8	you're referencing?
9	A. That, I don't know. I would have to
10	follow up with that.
11	MR. BUICK: Okay.
12	HEARING OFFICER HALLORAN: Okay.
13	Ms. Liu, any question?
14	MS. LIU: No. Thank you.
15	HEARING OFFICER HALLORAN: Mr. Saines?
16	MR. SAINES: I was wondering if I
17	could ask a question of Mr. Beeh?
18	HEARING OFFICER HALLORAN: Okay.
19	MR. SAINES: It relates to the new
20	data log, is that okay?
21	HEARING OFFICER HALLORAN: That's
22	fine.

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EXAMINATION

23

24 BY MR. SAINES:

- 1 Q. Okay. Because we don't show it on
- 2 our -- what was previous marked as Exhibit 2, I've
- 3 taken the liberty of marking an additional
- 4 Exhibit 5, and I was wondering if you would be so
- 5 kind as to the best you can to put an X on the site
- 6 diagram on Exhibit 5 as to where that new well is
- 7 located?
- 8 A. (Indicating.)
- 9 Q. Okay. And for the record, the -- can
- 10 you make it a little bit bigger so it will be easier
- 11 to read there, easier to see?
- 12 A. (Indicating.)
- 13 Q. For the record, to the best of your
- 14 knowledge, the well log information shows that you
- 15 went through a significant layer of clay but you did
- 16 not encounter shale at this location until
- 17 approximately 600 feet?
- 18 A. No. Four hundred and six feet.
- 19 Q. Four hundred and six feet, okay.
- 20 A. Below the limestone.
- 21 Q. Below the limestone, okay.
- Do you recall about how thick the
- 23 clay layer was that you went through?
- 24 A. Ninety-five feet.

1

24

```
Ninety-five feet of clay?
           Q.
                  Well, clay or sandy clay, yes.
 2
           Α.
                   MR. SAINES: Okay. Thank you.
                       And I will submit this as Exhibit
 5
           No. 5. Unfortunately, I don't have multiple
 6
            copies of this, but we can get that done.
 7
                   HEARING OFFICER HALLORAN: Thank you.
 8
                  MR. SAINES: Thank you.
 9
                  HEARING OFFICER HALLORAN: I'm not
10
            sure where we are. I think, Mr. Buick,
           you're still -- I think Mr. Gunnarson and the
11
           IEPA has rested their case in chief.
12
13
                      Mr. Buick?
                  MR. BUICK: I think we have nothing
14
            further at this time.
15
                  HEARING OFFICER HALLORAN: Okay.
16
17
           While I have you all sworn in, Ms. Liu, do
18
           you have any questions?
                  MS. LIU: No. Thank you.
19
20
                  HEARING OFFICER HALLORAN: Mr. Saines,
21
           any rebuttal?
22
                      FURTHER EXAMINATION
     BY MR. SAINES:
23
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Q. One question to clarify the question

- 1 from the Village, which I think was in relation to
- 2 sort of how long are we going to be doing the
- 3 treatment. Mr. Swenson, can you just, without being
- 4 precise in terms of number of days, but anticipated,
- 5 you know, what you anticipate the time from when you
- 6 start the ORC process until when you're completed
- 7 with it, can you give a general sense of what you
- 8 anticipate that time frame to be?
- 9 A. Our goal was to have the remediation
- 10 done within one year.
- 11 MR. SAINES: Okay. Thank you.
- 12 HEARING OFFICER HALLORAN: Thank you.
- 13 Any other questions, follow-up of
- Mr. Swenson?
- 15 (No response.)
- Okay. Before I forget and we'll go
- off the record shortly, I do want to address
- 18 two things: I'm supposed to give a
- 19 credibility determination. Based on my
- observations, experience, legal knowledge, I
- 21 find that there are no credibility issues
- 22 with the witnesses, all three of them, who
- 23 testified here today.
- 24 And it's my understanding that

1		$\operatorname{Mr.}$ Saines has offered Exhibits No. 1 through					
2		5, I believe, into evidence. Any objection,					
3		Mr. Gunnarson or Mr. Buick?					
4		MR. BUICK: No.					
5		MR. GUNNARSON: None.					
6		HEARING OFFICER HALLORAN: These					
7	Exhibits 1 through 5 are admitted into						
8	evidence.						
9		Any closing, Mr. Saines?					
10		C L O S I N G S T A T E M E N T					
11	BY MR. SAINES:						
12		Just a real brief statement just to					
13	reiterate that the goal that we're trying t						
14	accomplish is in fact to clean up existing						
15	hydrocarbon contamination in the shallow						
16	6 groundwater zone and that, you know, t						
17	7 purpose of this proceeding is to allow						
18	8 do that in what we believe is the most						
19	effective and efficient manner.						
20		HEARING OFFICER HALLORAN: Thank you.					
21		Mr. Buick, anything?					
22		C L O S I N G S T A T E M E N T					
23	BY MR.	BUICK:					
24		From the Village of Waterman's					

1		standpoint, we're very supportive of that
2		goal, of course, and our concern is only to
3		try to ensure that if, as the Board had
4		indicated, the unthinkable occurs and there
5		is some migration of the bioremediation into
6		the Village's water supply, that there's some
7		manner of dealing with it, some manner of
8		addressing that. That's the concern that we
9		would have.
10		HEARING OFFICER HALLORAN: Thank you.
11		Mr. Gunnarson?
12		MR. GUNNARSON: Thank you, Mr. Hearing
13		Officer.
14		C L O S I N G S T A T E M E N T
15	BY MR.	GUNNARSON:
16		Just to reiterate, the IEPA continues
17		to stand behind its response filed on
18		January 27th. Essentially it seems like the
19		only issue remaining from that are the three
20		conditions we had suggested was that the
21		Board, again, consider requiring two
22		consecutive quarters of clean monitoring
23		pursuant to Class I groundwater standards
24		prior to allowing the remediation to cease.

1	HEARING OFFICER HALLORAN: Thank you.				
2	Mr. Saines?				
3	MR. SAINES: Just one response to				
4	that. For the record, that's not				
5	objectionable to the petitioner. We would				
6	agree to adhere to that regime.				
7	HEARING OFFICER HALLORAN: Okay.				
8	Before we go off the record to discuss post				
9	hearing briefs, I do want to note for the				
10	record that this hearing was noticed up				
11	pursuant to Section 101.602 of the Board's				
12	Procedural Rules.				
13	At this time we'll go off the				
14	record to discuss post hearing briefs and				
15	we'll come back on momentarily. Thank you.				
16	(Whereupon, a discussion was had				
17	off the record.)				
18	HEARING OFFICER HALLORAN: We're back				
19	on the record. We've been discussing post				
20	hearing briefing schedules. We concluded				
21	that the transcript will be ready on or				
22	before March 18th, I believe.				
23	We've scheduled simultaneous post				
24	hearing opening briefs and they're due on or				

1	before March 25; simultaneous reply briefs,
2	if any, due on or before March 31st. I have
3	set public comment due date March 21st. Any
4	other things I forgot to mention?
5	(No response.)
6	I think that's it. I want to thank
7	Mr. Gunnarson, Mr. Dunaway, Mr. Beeh,
8	Mr. Buick, Mr. Swenson, Mr. Saines. Thanks
9	for coming today and I want to thank the City
10	of Sandwich for their hospitality.
11	I want to thank specifically
12	Mr. Gunnarson and Mr. Dunaway for coming all
13	the way from Springfield and making it, you
14	know, 20 to 9:00, well before that time. I
15	appreciate that. With that said, thanks and
16	have a safe drive home. This concludes the
17	hearing today.
18	(Which were all the proceedings
19	had in the above-entitled cause
20	on this date.)
21	
22	
23	
24	

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1
     STATE OF ILLINOIS
                         )
                            SS.
    COUNTY OF DUPAGE
 4
 5
                       I, MARIA E. SHOCKEY, CSR, do
 6
     hereby state that I am a court reporter doing
 7
     business in the City of Chicago, County of DuPage,
 8
     and State of Illinois; that I reported by means of
 9
     machine shorthand the proceedings held in the
     foregoing cause, and that the foregoing is a true
10
     and correct transcript of my shorthand notes so
11
12
     taken as aforesaid.
13
14
15
                           Maria E. Shockey, CSR
16
                           Notary Public,
                           DuPage County, Illinois
17
     SUBSCRIBED AND SWORN TO
18
     before me this ___ day
     of _____, A.D., 2005.
19
20
         Notary Public
21
22
23
24
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