

## Transcript of DHEC Public Meeting

May 19, 2009

In Re: Automatic Switch Company (ASCO) Site



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DHEC Public Meeting, In Re: Automatic Switch Company (ASCO) Site 5/19/2009

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County of Aiken	)	
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South Carolina Department	)	
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Environmental Control	,	
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In Re:		
	) Public Meeting	
Automatic Switch Company	)	
(ASCO) Site		
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The within public hearing was taken before Donna K. Joy, a notary public in and for the State of South Carolina, commencing at the hour of 6:40 p.m., Tuesday, May 19, 2009, at the River of Life Church, 1411 Columbia Highway N., Aiken, South Carolina.

Reported by Donna K. Joy

Page 2			
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4	DHEC officials present:	Ms. Pat Vincent	
5		Ms. Angie Jones	
6		Mr. Ted Millings	
7		Mr. Michael May	
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11	Speakers from the public:	Ms. Tracey Turner	
12		Mr. George Waddell	
13		Mr. John Fletcher	
14		Mr. Alan Gregory	
15		Mr. Scott Foster	
16		Mr. Steve Clarke	
17		Mr. Julian Earl Young	
18		Mr. Andrae Daniels	
19		Ms. Sheila Carter	
20		Ms. Nancy Fletcher	
21		Mr. Larry Morris	
22		Ms. Cassie Barnhill	
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MS. VINCENT: Thank you guys for coming. We're going to just go ahead and start our public meeting. The South Carolina Department of Health and Environmental Control is very thankful that you are here today to attend the meeting. And we are here to discuss the ASCO Automatic Switch site that — that's located at 1561 Columbia Highway, also known as Highway 1 in — here in Aiken.

The Department is here for several purposes. First, we would like to share information with you about the site, which is located in your community. Second, we would like to provide to you an opportunity in which the Department can discuss the proposed plan for cleanup of the site. And then, finally, we want to also have an opportunity for us to respond to any of your questions or if you have some comments that you would like to share with us. We want to be able to try to respond to those, and if we can't, we'll get back with you on any type of response.

We have several DHEC representatives here today. I'll first introduce myself. My name is Pat Vincent, and I am with the State Remediation section of DHEC's Bureau of Land and Waste Management.

We're located in Columbia, South Carolina.

The next important person here today is Angie Jones. She's the project manager and spokesperson for the site. And she's also with the State Remediation Section in Columbia. Ms. Jones will be presenting our presentation to you about the site in just a few minutes.

We also have some regional folks that are local in -- in your area, very familiar with what goes on here in the community. We've got Ted Millings in the back with the blue shirt. He's helping distribute some of the -- the information for us. We also have Michael May. Michael -- thank you. He is also from the regional office here too.

We are -- we are excited to be able to provide this information to you, and Ms. Jones -- before she presents her -- her presentation, I'd like to cover a few things with you.

First, you know, I mentioned the sign-in sheet earlier. We would like for you to record your name and your address. That is -- please write legibly so that I can make sure that you're on our mailing list in the future. We also want to make sure that the sign-in sheet -- let you know, excuse me, that the sign-in sheet is something that's available to the public. If you would like to have some

information redacted, please just let me know -- such as e-mail addresses or telephone numbers or that kind of thing.

Second, we have some documents that relate to the ASCO site that we've stored at the Aiken County Public Library that is what we call an "Administrative Record," and we've updated that recently with some — the more recent information on this proposed-plan stage. The administrative record, for your information, contains documents that helped the Department in making its technical decisions at the site. The information in those documents and reports can sometimes be very technical, but, thankfully for people like me, it helps that they have summaries that kind of help you to understand what you may be trying to obtain from that report.

We also -- you can go to the library and -- and look at it. We've provided you the times that the library is open. We also have those documents available at our bureau's office in Columbia, and you can make an appointment with our Freedom of Information office. And if you would like to see those, just let me know, and we'll set that up for you.

Page 6 1 Third, we have a wonderful lady sitting to --2 seated to my right. Ms. Joy is our court reporter. 3 She will be recording the meeting and later will 4 provide the Department with a transcript of the 5 Now, a transcript is a word-for-word type 6 of document so that it will help us to know that 7 we've answered all your questions, and also -- we 8 will also have mics that we will need to have to be 9 sure we're capturing all your questions, too, along 10 So wanted to let you know that she is the wav. 11 there to -- for that purpose. 12 And we will make the transcript available, once 13 it's available to us, so that you can look at that 14 on the Web site. And if you need our DHEC Web site, 15 I'll be glad to provide that to you as well. 16 Ms. Jones is going to be discussing some 17 background information about the site, the site 18 investigative results -- results, some clean-up 19 alternatives that the Department considered, and the 20 clean-up alternative that Department thinks is the 21 best for the site based on the information that we 22 have available to us at this point. 23 You will have an opportunity to -- to provide

some comments at the close of her meeting, but

you're also given an opportunity to provide written

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comments to us afterwards. And you have until June 20th to provide us those written comments. That's very important to us for you to have some input on what's happening in your community.

If you have your comments written, you may leave those, also, in the back. We have a box that you can drop them in and -- so that we can get those responses to you. The proposed plan has a page on the back of it that you can record those comments on that.

And now I'm going to let Ms. Jones start with her presentation. Thank you.

MS. JONES: Hi. I want to thank everyone again for coming tonight. I know many of you have attended meetings like this in the past. This is the first one that I have been to since I've been the project manager on this site. So thank you all for coming, once again.

Let me quickly say for those of you that are new that the ASCO site is the source of some contamination, and this contamination has spread off the property and into the groundwater, and it has affected some private drinking-water wells.

My goal for tonight, as Pat said, is to present to you several options that was presented to the

## Page 8 1 Department that we've evaluated, and we've made a 2 decision that we think that this alternative is the 3 best one for the site. But we want your input. 4 Now, in order to explain these cleanup options, 5 I first want to give you a little background 6 information describing briefly those events that led 7 up to this point. Then I will discuss the options 8 that we evaluated, and I'll present to you those. 9 really want you to understand these options and have 10 a voice in the selection of the cleanup. 11 with me. Some of this does get a little technical. 12 I will try to keep that brief. But we'll have 13 plenty of time to answer your questions. I timed 14 myself on this presentation. It does take about 15 20 to 25 minutes. 16 In 1974, a company known as Therm-O-Disc 17 constructed the facility for the manufacturing of 18 thermostats for various commercial appliances and 19 products. Metal was shipped to the facility and cut 20 into discs. It was then cleaned and placed into a 21 heated oil bath for testing purposes. After 22 testing, these discs were cleaned again and 23 assembled into the thermostats. 24 Now, remember when I mentioned that the discs 25 were cleaned? Well, they were cleaned with

solvents. Solvents are just liquid chemicals used as degreasers. They are commonly used in manufacturing. These solvents were stored in underground tanks, just like tanks at a gas station.

In 1987, when the degreasing process at the facility was being taken out of service, the tanks were being removed. During this removal, someone noted that there was a hole in one of the tanks. Samples were collected, and they showed that the tanks had leaked some contamination of these solvents into the soil.

Here you can see a layout of the facility.

This area right here -- first of all, this is -this is No. 1, May Royal would be back over here,
and the area of the tanks was back here in the back.

This is a retention pond. And in your handout -- if
you have one of the handouts, you can -- you can see
all the other areas along the property.

Well, since the closure of these tanks in 1987, numerous investigations have been conducted at the site to evaluate the condition of the facility's property as well as those properties surrounding the facility.

I do want to note that in 1988 the property transferred from Therm-O-Disc to ASCO, which is the

-- the site you see in front of the building right now.

In 1995 when there was some plans for expansion of the building in the area of the former tanks that had leaked, ASCO excavated approximately 370 cubic yards of soil and debris. This was taken off site to a permanent landfill.

Due to some structural concerns of adjacent buildings, the excavation was not extended at the time to underneath the building. There was some residual contamination that did remain in the soils under the building. So ASCO voluntarily expanded their investigation to further evaluate the soil contamination.

A few years later in 2001, the same contaminates that were found onsite were now found off the ASCO property. This was our first evidence that migration of the contaminates had occurred off the property.

You see right there in 2001, I state that we found PCE and TCA. These were the two solvents used at the property for the degreasers. You also see up there that I mentioned the contaminate 1,1-DCE.

Well, I didn't mention that chemical earlier as being a solvent used at the facility. This is a

breakdown product. And what this shows is that the PCE and the TCE is -- is breaking down. These are volatile organic compounds. They readily vaporize, I guess you'd want to say, and they -- they break down as they travel and migrate through the soil and the groundwater.

So now that we have contamination off the ASCO property, wells needed to be installed to know exactly where the contamination was, how it was moving, how deep it was, how far it had traveled.

The company also began to sample some private wells. You know, we had one well that was sampled that had a hit, which told us that we needed to continue looking. That well was connected to municipal water. But we wanted to make sure that all the private wells in that area were protected.

All this work and data leads us to some additional involvement on DHEC's part. On behalf of Therm-O-Disc and ASCO and Emerson Electric Company -- Emerson Electric is the parent company to Therm-O-Disc and -- and ASCO -- Emerson entered into a contract with DHEC.

Now, this legally-binding document called for Emerson to determine the nature and extent of the contamination, tell me where the source of this

contamination was, and it also required them to evaluate ways to clean up this contamination, both on the property and off the property.

So we have all this historical information that would lead us to believe that the old tank area that leaked that was underground was our source of the contamination. But we also wanted Emerson to evaluate all the areas on the property to make sure that there were not any other areas that could potentially cause a problem. And this list shows other areas on the site that we wanted to evaluate to make sure they were not any contributing factors to the contamination.

And this next slide is a list of all the groundwater work that was performed by Emerson. Monitoring wells, which is just like your private well -- just a well -- something to the ground that we pulled samples from -- they were installed both on the facility and off. And once again, we needed to know exactly where the contamination was: how deep it was and where it had traveled.

Emerson also conducted an inventory of private wells in the affected area. Now, these wells are sampled on a quarterly basis, and the information on these private wells is provided to DHEC and the

property owner.

This next map -- it's kind of small -- but if you look on your handout, you can see all the different wells that were installed and all the private wells around the property. They've done a pretty extensive survey of the private wells in the area.

What we found from all this investigation is that this list of chemicals has been found in soils and groundwater at levels that exceed allowable safe levels.

Once again, the contamination from the tanks was the PCE -- now, this stands for Tetrachloroethene; it's a -- just a volatile organic compound, PCE -- and then TCA, which is 1,1,1-Trichloroethane, just another volatile compound.

Now, the breakdown products are listed below: The TCE, the 1,1- and the 1,2-DCE. Now, there are other breakdown products as the top two solvents break down, but these are the only contaminants that we found that exceed the allowable safe levels.

Now let me show you where these contaminants were found -- if you can turn to the map -- there you go -- within the former storage and degreaser

area. Once again, here's No. 1, this area back in
here, the storage and degreaser area. The soils are
contaminated with PCE, the solvent, and their
breakdown products. Contamination extends to a

depth of approximately 40 feet below the ground

surface, and the highest contaminations are detected

underneath the building.

were found at unacceptable levels, this table shows what levels are acceptable for the compounds in the soil. These levels are levels that have been determined to be protective of the groundwater. They are based on EPA levels. This means that if a contaminant, let's say PCE, the top contaminant, is in the soil at a level less than 0.06 parts per million, that this contaminant will not leach and move from the soil and contaminate the groundwater. We want to make sure that the level is low enough that it will not dissolve into the groundwater.

And speaking of groundwater, let me show you the groundwater results. From our well installation, we found that groundwater was encountered at a depth greater than 139 feet. We also know, from the placement of our wells, that the highest concentrations of the PCE, the TCA, and the

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breakdown DCE are detected directly downgradient of that former tank area.

Here you can see the location of the plume.

Now, when I say "plume," I want you to look at these circles right here. Once again, No. 1, here's the source area back in here, this is May Royal Drive, and these plumes are what I consider the areas of groundwater that are contaminated with the contaminants.

10 Let me point out that these lines --

- 11 UNKNOWN FEMALE: Excuse me, ma'am.
- MS. JONES: Yes.

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- UNKNOWN FEMALE: We can't see those blue lines.
- MS. JONES: I know. It's --
- UNKNOWN FEMALE: There's no red dot or anything.
- MS. JONES: Oh, you can't see the red dot? Okay.

There are two blue circles up on that map, and those show areas of contamination where we've installed wells, and we have certain levels of contaminants within those circles. So anything within those circles we know it has a certain level of contamination.

The blue lines that are more vertical are -they indicate groundwater elevations, and this
points out the direction of groundwater flow. So in

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1 this case, groundwater is flowing predominately along May Royal Drive.

> This second map is the plume of the TCA. was also one of the other solvents onsite from the And you can see that this contamination plume -- this area -- is not as extensive. So once again, look at the blue circles between the ASCO plant and No. 1.

> And finally, the plume of the breakdown product You can see that the contaminants here have been detected way beyond the ASCO property. approximately 2,000 feet downgradient along May Royal Drive.

> Now, when we were trying to define this plume in the area of contamination, once again, there are standards that we have, and they're called "maximum contaminant levels." These are the maximum levels that are allowable in the groundwater. And here's a table with those numbers.

> The contaminants found in the groundwater currently exceed these cleanup levels, so we need to remediate and clean up so that the groundwater levels are below these numbers.

> Once again, there are more breakdown products, other volatile organic compounds, that show up to us

when we receive data, but there are none above these allowable levels.

So all this data that was collected from the 1987 report when the tanks were removed were summarized by Emerson in a Remedial Investigation Report. This report was submitted to the Department for the Department to approve.

Emerson took all this data, and they began researching options which would clean up the contamination. These options were also presented to the Department in another report called a "Feasibility Study." These two reports are some of the reports that Pat mentioned were in the local library.

So we reviewed all these options that Emerson presented, and what we're here tonight to do is to summarize these options for you and to present the Department's preferred remedy. And this is the part where we're requesting your input.

We have three options to address the contaminated soil. Now, once again, the contaminated soil is only on the ASCO property underneath the building. Although Emerson looked at several other options, certain technologies were eliminated based on site-specific information. They

Page 18 1 just wouldn't work at this site based on the depth 2 of our contaminants and the type of contaminants. 3 So we narrowed our extensive investigation down to 4 Let me describe these to you. 5 The first alternative is basically no action. 6 I am required by my regulations to look at this as a 7 baseline so that I can see how effective other 8 alternatives may be. With this, there would be no 9 monitoring. And right now we do have monitoring, 10 but in this option, there would be no monitoring. 11 We would not be able to tell if the contaminants 12 were breaking down, if the plume was getting longer, 13 the contamination was going deeper. No information 14 would be gathered. No deed restrictions would be 15 placed on the property. There would be no cost 16 associated with this alternative. 17 UNKNOWN MALE: Excuse me, please. 18 MS. JONES: Yes, sir. 19 UNKNOWN MALE: Why -- why would that even be an option? 20 MS. JONES: I'm just required to evaluate that as a 21 baseline. I mean, my regulations just tell me --22 basically, to -- just to see that other options 23 would work. There are some cases where it's just a 24 formality. And maybe there are some sites where the 25 contamination is so minimal that nothing has to be

done, and in that case, the no action would work.

But in this case, it would not.

UNKNOWN MALE: I understand.

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MS. JONES: The second alternative is institutional and engineering controls. These are basically just legal and physical barriers that restricts access to those contaminated soils. It's like a deed restriction that you'd place on the property so that no one can come into contact with the soils.

Although access to the facility is controlled -- there are fences, there's concrete flooring over the contaminated soils, there's asphalt paving -- these controls would not reduce the actual volume of the contaminated soil in the ground. The cost to implement this alternative is \$30,000.

The third alternative is called "Soil Vapor Extraction (SVE)." This technology works by pulling a vacuum on the affected soils, which are underneath the building, so you can easily pull the vapors. It causes the vapors to be pulled to the surface where they can be treated at the surface. It targets those contaminants which readily evaporate and break down, like our volatile organic compounds, so this would work great with these contaminants.

Emerson conducted a pilot test to see if this

option were even feasible to work at this site, and we did have favorable results. Those results were submitted to the Department and it proved that this technology would work at the site. Cost to implement this option is \$500,000.

Now here's a list of options we looked at to address the groundwater contamination. Once again, other options were researched but were eliminated because they would just not be effective at this site. We have some pretty deep levels of contamination. When I say "deep," I mean the depths of groundwater. And so some options would not be feasible here at the site.

The first alternative I'll describe to you is, once again, no action. Nothing would be done, no monitoring, no protections for contamination reaching private wells. We would not know where the contamination was moving. Once again, that's only -- merely a baseline for use as comparison.

The second alternative is groundwater monitoring — and groundwater monitoring only. We would monitor the wells that we installed on the property. We would monitor private wells routinely to monitor the area of contamination, the plume. This would not actively reduce the contamination, it

would merely track where the contamination was.

If we had physical properties of the soil that would help to break down these chemicals faster, this may work in some cases. But for -- for this case, it's not an active treatment. It is a supplement when you use other technology because you always want to monitor to see how effective your remediation is. Estimated cost of groundwater monitoring alone is \$340,000.

The third alternative is groundwater extraction and treatment. It's also known as "pump and treat": pump it out of the ground, treat it above ground. Recovery wells would be installed in the areas of highest groundwater contamination: along the property line, down at the end of May Royal Drive at the end where we have the extent of the plume. The contaminated groundwater is pumped from the ground to the surface, and then it is treated by either granular activated carbon -- basically, a filter similar to filters that you could put on your -your well in your kitchen, but a little more extensive -- or possibly an air stripper. I think I have an example of an air stripper next. We would continue monitoring with this option, and the estimated cost to perform this alternative is

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\$4.7 million. Now, this would treat groundwater on the ASCO property and off the property, all along down May Royal and anywhere that contamination extends those cleanup numbers.

This next slide is just a brief description of an air stripper. There we go. I -- I'm not sure if you can tell, but water comes in at the top and it flows down through the packing material, air is blowing up, and once again, it breaks down the contaminants, and then the air goes out of the top.

The last alternative that we looked at to evaluate the groundwater is a permeable reactive barrier. This treatment occurs in place. Nothing is pumped out of the ground and treated out of the ground; it's treated in place. Material is injected into the area where the groundwater's contaminated, and that treatment material breaks down the contaminants. One of these treatment materials is zero-valent iron. That's worked in some cases. Basically, you install a well, and you pour this material down into your well; and as the groundwater moves around that well, the groundwater contaminants break down. This would occur on the site and off the property. Estimated cost of this remedy: \$12.6 million.

So when the Department evaluates cleanup options, we are required to evaluate with respect to certain criteria. And here's a list of that criteria.

What we do first is to make sure the option meets those first two criteria. It's mandatory that we protect human health and the environment and that we're compliant with state and federal regulations. We have to clean up to those levels that I told you about earlier.

Then we look to see which option provides the best balance of trade-offs with respect to the other criteria: long-term effectiveness, reduction of volume, short-term, costs -- all these other things we look at to try to evaluate the most effective remedy.

Now, community acceptance -- right there at the bottom -- of the preferred remedy will be evaluated after this meeting and after the 30-day public comment period has ended. Once again, that's why we're here tonight: to gain your input. The Department -- we can choose to modify our remedy or we can select another remedy based on your comments tonight.

So the option that DHEC is proposing to use at

Page 24 1 the site -- for the soils, we propose the soil vapor 2 extraction. Once again, this is where the -- the 3 vapors are -- are vacuumed and pulled up to the 4 surface where they are treated. Once again, this 5 provides protection to the environment, protection 6 to human health, it reduces the contamination, it 7 reduces the volume through active treatment. 8 don't just wait until the contamination breaks down; 9 we actively treat it. 10 We have pilot tests, which are tests that were 11 conducted on the site to see if the soil and the --12 was conducive to these -- the system, and it was. 13 It was well-suited for this area. This type of 14 technology works well in other areas. It does 15 prevent further migration of contaminants from the 16 soil into the groundwater. 17 And our groundwater selection is selection 18 No. 3, extraction and treatment. It protects human 19 health, protects the environment. It reduces 20 groundwater contamination through active treatment. 21 Extraction wells will be installed along the 22 property line on the ASCO property before you get to 23 They would also be installed in areas of 24 highest concentrations off the property and along

the downgradient edge along May Royal Drive.

The extracted water would then be pumped back to the ASCO property, where it's treated on the ASCO property. There'll be a tank. There'll be some type of an -- either an air stripper that I mentioned earlier or some carbon that would treat the groundwater.

Then once the groundwater's been treated, we have certain disposal options. We have a retention pond onsite. We have the POTW. But what we're looking at is probably surface water discharge. And there are permits required for this.

The Department and Emerson early on established certain goals for this site, and it's the Department's position that this preferred cleanup option that I just mentioned to you meets these We want to prevent any more contaminants goals. from migrating from the soil to the groundwater. We want to prevent the groundwater from flowing even farther and contaminating more wells. We want to prevent anyone from coming into contact with the groundwater and drinking the groundwater that exceeds those safe levels. And then we want to restore the groundwater to those drinking water standards so that anyone else that may install a well in that area is able to do so safely. We want

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to make sure this is done in a reasonable time frame.

So to tell you where we are with the paperwork process, the first arrow says "Proposed Plan."

That's what I am proposing to you: this plan to clean up the contamination. So after 30 days, after I evaluate your comments, we select a remedy. That remedy selection will be drafted and a document will be prepared called a "Record of Decision." This document states what Emerson will do to clean up the site.

Then those next categories along that pipeline: Remedial Design is the phase where Emerson tells me specifically how this system will be constructed — the piping, the materials needed. And a lot of this legwork has already been done. Emerson's been very proactive about looking ahead in anticipation of DHEC's approval.

So as Pat mentioned earlier, tonight kicks off this public comment period for 30 days. Once again, there's Administrative Record at the library. And I think I've listed my phone number and my e-mail and our mailing address.

So if you can, flip to that last slide real quick. In a nutshell, to summarize it and put this

very simply: Tanks were filled with solvents.

Unfortunately, these tanks leaked. The soil became contaminated. The contaminated soil led to contaminated groundwater. A lot of data was collected: Where is the contamination? How bad is it? How far is it? How deep is it? This data was used to evaluate options for cleanup. So we're here

tonight to decide which option is best to clean up

9 the site.

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MS. VINCENT: Okay. Now we've come to our time for discussion on the proposed plan. Again, we -- this is a portion that will also be recorded, so we need to have the microphones. I will come to you so that you will not have to get up here and stand up in front of people. But I'll also be holding two speakers. The court reporter has also asked me to -- to hold a speaker for them to make sure they're able to pick up what you're saying.

When I come to you with your -- to get your question, I'd like for you to tell -- state your name before you present your question or -- or a comment that you might have. That will help us also.

And we mentioned the Administrative Record is available. That's at the library. You may ask why

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Page 28
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          do we put the documents at the library?
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          it is available to you. We want to make sure it's
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          at a location that's close. We want to make sure
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          that it's a location that's open at night, because
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          we recognize many people work, as we do.
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               So who has the first question or comment?
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               Please state your name.
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     MS. TURNER:
                  Tracey Turner. Was there any testing --
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          soil testing or water contamination testing done
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          outside of the -- the circles or the "plumes" that
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          you call it?
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     MS. JONES: Groundwater contamination -- I mean,
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          groundwater sampling, yes. The soils are localized
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          only to those areas onsite. Those are the only soil
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          samples that we collected were onsite, where we knew
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          we had a source area.
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               Now, the groundwater was collected offsite.
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          can probably show you another map over here that
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          shows all the wells that are, you know, off the
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          property: all along Osbon, all along May Royal.
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          Those are private wells, but we also have some
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          monitoring wells there that -- that Emerson
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          installed on these people's property for sampling.
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     MS. TURNER:
                  So you actually did the testing downgradient
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          but not necessarily to the northeast of the
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- property?
- MS. JONES: I'd say most of it was east.
- 3 MS. TURNER: Okay.
- 4 MS. JONES: East of where those tanks were removed from.
- 5 East of --
- 6 MS. TURNER: But not north.
- <sup>7</sup> MS. JONES: No.
- 8 MS. TURNER: Okay. So --
- 9 MS. JONES: Well, now --
- MS. TURNER: -- there's --
- MS. JONES: Well, there are some wells in that area, but
- we would not -- we did not find any contamination
- there. I'm sorry. There are some wells, I guess,
- on the other side of -- of the -- the fairgrounds
- $^{15}$  and --
- UNKNOWN FEMALE: -- Rodgers Road.
- MS. JONES: Ma'am?
- UNKNOWN FEMALE: Rodgers Road.
- MS. JONES: Rodgers Road. There are some wells along
- Rodgers Road -- I mean, in that area.
- MS. TURNER: Okay. So there's really no telling if
- there's any contamination on the adjacent property
- to ASCO to the north unless testing is completed.
- MS. JONES: We feel like we've asked Emerson to install
- enough wells that we have a good boundary. You

Page 30 1 know, we have -- we have wells that are impacted and 2 then we step out a little farther in all directions 3 to find, you know, has it reached this location? 4 And if those -- if those wells come back with 5 contaminants in it, then we go a little bit farther 6 in all directions until you hit clean. 7 So -- so we do feel that we have looked far 8 enough to the north and then far enough to the east, 9 all around that property, to know where those 10 contaminations have -- have migrated. And I can 11 show you on the map afterwards where these wells are 12 located and that they came back with no detections. 13 MS. TURNER: Okav. 14 MS. VINCENT: We do have some large maps sitting over 15 here in the -- in the front row of the chairs. 16 These maps were -- are some that were used in our 17 presentation. It'll possibly help you in seeing 18 things a little clearer, recognizing that the maps 19 aren't that clear on the screen that -- at that 20 distance. But if you would like to talk with anyone 21 directly about the map, we'll be glad to do that as 22 well. 23 MR. WADDELL: I'm George Waddell. I live on Osbon Drive, 24 and this plume is within 100 or so feet of my well 25 now, and I use that for drinking water. When they

```
Page 31
1
          start this cleanup, do they expect it to immediately
          stop the spread of the plume any farther?
3
          soon will they start the cleanup?
                 To answer the first part of your question,
4
     MS. JONES:
5
          how soon will you -- how soon will the remedy --
 6
          will you start to see some effects of that remedy?
          And I would say -- you said, "instantly."
 7
          don't know if instantly would be the word, but very,
8
 9
                      I mean, within a matter of -- you know,
          verv soon.
10
          you turn on the system, you start pumping, you
11
          conduct some tests, you pull your samples, and you
          should definitely see results immediately.
12
13
     MR. WADDELL: Do -- do you know how many feet a month or
14
          -- or quarterly or what this -- this is moving?
15
     MS. JONES:
                 How fast it's moving?
                          I -- I'm real concerned because --
16
     MR. WADDELL: Yeah.
17
     MS. JONES:
                Yeah.
     MR. WADDELL: -- I use this for drinking water, and it's
18
19
          within probably 150 feet of my well now.
20
     MS. JONES: Okay. And your well is not one with -- wells
          that we currently sample?
21
22
     MR. WADDELL: Oh, yeah. You've --
23
     MS. JONES:
                Oh --
24
     MR. WADDELL: You've --
25
     MS. JONES:
                -- so --
```

```
Page 32
 1
     MR. WADDELL: -- sampled --
 2
     MS. JONES:
                -- it is.
 3
     MR. WADDELL: -- it. It's still okay.
 4
     MS. JONES:
                Right.
 5
     MR. WADDELL: But it's getting close.
 6
     MS. JONES:
                Okay. And that's -- first of all, let me say
 7
          that's why Emerson has really been pushing DHEC to
 8
          -- to have this meeting and to put this out there:
 9
          to go ahead and let Emerson start pumping, to start
10
          cleaning, to start some type of cleanup.
11
               I -- I do have a report that talks about how --
12
          the -- the grading of the groundwater, how fast it's
13
          moving. That number's escaping me right now, but I
14
          can look it up and tell you. It -- I don't want to
15
          throw out a number. Let me look it up, and I can
16
          tell you how fast that is. But we -- we look at it,
17
          like, per year -- how many feet per year it may
18
          move. But it's good that your well is being
19
          sampled, because it's being sampled quarterly --
20
     MR. WADDELL:
                   Yes.
21
     MS. JONES: -- and so we'll be able to see those
22
          detections. And once they start increasing, then
23
          you know that the contamination getting -- is
          getting closer to you.
25
     MR. WADDELL: Yeah.
```

- 1 MS. JONES: The second part of your question, you asked when would this start. Once again, in 30 days I can draft a document that states this is the cleanup 3 that the community and DHEC wants to operate at the 5 site. That DHEC -- I mean, that -- that report, as 6 soon as it goes out, Emerson can start implementing. But there would be no lag. I do know that Emerson 7 8 has already done a lot of legwork looking into required permits and looking into specs for the 9 10 system, so I think they'd be very eager to start as 11 soon as possible.
- 12 MR. FLETCHER: I actually have several questions.
- 13 MS. VINCENT: State your name, please.
- MR. FLETCHER: My name is John and Nancy Fletcher at 14 623 May Royal. We're at the end of the road. 15
- 16 MS. JONES: Okay.
- 17 And our water is contaminated and has not MR. FLETCHER: 18 been before. But this is our only source of 19 This is what we bathe in, this is drinking water. 20 what we drink, this is what we feed our animals, 21 coffee, and everything. I guess first of all, the 22 -- should we -- or can we drink the water or not? 23 And if --
- 24 MS. FLETCHER: No one --
- 25 -- if we --MR. FLETCHER:

```
Page 34
 1
     MS. FLETCHER:
                   -- has ever answered that --
 2
     MR. FLETCHER:
                    Nobody --
 3
     MS. FLETCHER:
                    -- question --
 4
     MR. FLETCHER:
                    Nobody --
 5
     MS. FLETCHER:
                   -- for us.
 6
     MR. FLETCHER: -- can answer that question.
 7
     MS. JONES:
                 Uh-huh.
                    And if we can't or we shouldn't -- all
 8
     MR. FLETCHER:
 9
          we've seen on the internet -- and which we've looked
10
          up on our own -- is that short-term it might not be
11
          so bad, but long-term it can. Well, what is short-
12
          term, what is long-term?
13
     MS. JONES:
                 Uh-huh.
14
     MR. FLETCHER: Should we not drink it at all? Stop right
15
          now because you're saying it's no good?
16
     MS. JONES:
                 Uh-huh.
17
     MR. FLETCHER:
                    This is all we have. And if so, how --
18
          who's going to pay for our drinking water?
19
          have to buy it from the store? What do we do?
20
                Okay. Let me -- since you have several
     MS. JONES:
21
          questions, let me just answer that one first.
22
     MR. FLETCHER:
                    Sure.
23
     MS. JONES: I am not a risk assessor. But, I mean, I've
24
          read the material, and I know how when you talk
25
          about short-term risks versus long-term risks.
```

```
Page 35
 1
          These numbers that I put up for those maximum
          contaminate levels, which protect the groundwater
 3
          that you drink, those are based over a long period
          of time. We're talking 20/30 years. And it's also
 5
          based -- I mean, there are certain parameters that
 6
          would -- would apply. Elderly people may be more
          susceptible to it; young children may be more
 8
          susceptible. But these numbers are protective of
 9
          the -- of the most susceptible person.
     MR. FLETCHER: Okay. I understand, but I don't know
10
11
          whether that makes me feel any better or --
12
     MS.
         JONES:
                Okay.
13
         FLETCHER: -- not, but . .
                I will tell you -- it's hard for me to answer
14
     MS. JONES:
15
          that. Should you drink the water or should you not?
16
          That -- that --
17
     MR. FLETCHER:
                    Well --
18
     MS. JONES:
                 -- level is --
19
     MR. FLETCHER: -- nobody has said "boil the water,"
20
          anything. We can't get any information about this
21
          chemical, what -- what we should do about --
22
     MS. JONES:
                 Uh-huh.
23
     MR. FLETCHER: -- you know, the facts of it right now,
          because this is all we have to drink.
24
                Okay. Since that level -- since DHEC does
25
     MS. JONES:
```

```
Page 36
 1
          not want that level of contamination in your water
 2
          -- we don't want you drinking that level -- then --
 3
          then my stance will be that -- that you need to have
 4
          an alternate source of water.
 5
     MR. FLETCHER:
                    Right. Okay.
 6
     MS. JONES: Now, in the interim -- I mean, it's a -- I
 7
          guess it's a public -- I mean, a personal choice as
 8
          to whether you feel you're being harmed by drinking
 9
          that water for a few days, a few weeks --
10
     MR. FLETCHER:
                    Don't know. I don't know.
11
     MS. JONES:
                Right.
12
     MR. FLETCHER: And y'all don't, either. So that's what
13
          scares me.
14
     MS. JONES: Okay. I know I didn't answer that very well.
15
          Like I said --
16
     MR. FLETCHER: No, you --
17
    MS. JONES:
                -- I'm not --
18
     MR. FLETCHER: -- you're doing fine.
19
     MS. JONES:
                Okay. I'm not a risk person. But those --
20
          those levels are a long-term exposure levels --
21
         years and years and years.
22
    MR. FLETCHER: Can I continue?
23
    MS. JONES:
                Yes.
24
    MR. FLETCHER:
                    If we are to, say, go with city water, are
25
          we going to have a water bill from now on?
```

- have a water bill now. Our water was fine.
- MS. JONES: Uh-huh.
- MR. FLETCHER: Well, now it's contaminated. Okay, say
- you'll -- say we're put on city water. What about
- our monthly bill? We don't want a monthly bill. We
- 6 never had one before.
- 7 MS. JONES: I think that question can be resolved with
- 8 Emerson's involvement.
- 9 MR. FLETCHER: Okay.
- MS. JONES: I think we can answer that.
- MR. FLETCHER: Okay. Also, can -- if our well is not fit
- to drink, is it -- is it good for, say, filling up a
- pool, watering the garding -- garden, using -- or --
- or giving to our animals? Is -- well, I guess if we
- can't drink it, the animals probably shouldn't,
- either. But we're just trying to get some answers
- to -- to some of those questions --
- 18 MS. JONES: Uh-huh.
- 19 MR. FLETCHER: -- also.
- MS. JONES: What I can tell you about these volatile
- compounds: Several of the options we present talk
- about pumping and, you know, basically, disturbing
- the water. It breaks down these contaminants. So a
- lot of people that -- that -- that use wells that
- are slightly contaminated, which I believe, you

```
Page 38
 1
          know, could be the case here --
 2
     MR. FLETCHER:
                    Right.
 3
     MS. JONES:
                -- when they're irrigating, say, their
 4
          garden, you're really breaking up that
 5
          contamination.
 6
     MR. FLETCHER: Okay.
 7
     MS. JONES:
                 Now, I -- I would have to look at the exact
 8
          level of what's in your well and how it was being
 9
          dispersed, but that's a most-likely scenario.
10
     MR. FLETCHER:
                   And I think you mentioned that, also, a
11
          filtering of the well water?
12
     MS. JONES:
                 Yes.
13
     MR. FLETCHER: Would that affect our gallons per minute,
14
          like, say, at our shower head or our -- if that was
15
          to happen instead of being put on city water, would
16
          that affect how much water pressure we have from our
17
          well as of -- as it is now?
18
     MS.
                 I don't believe so. We -- we would --
         JONES:
19
     MR.
         FLETCHER:
                    Okay.
20
     MS. JONES:
                -- take certain tests, and we would make sure
21
          that the -- the unit that was placed on your well
22
          would adequately -- you know, it was fit for your
23
          well.
24
     MR. FLETCHER:
                    Right.
25
                 That it would handle the -- the load.
     MS. JONES:
```

- MR. FLETCHER: (To Ms. Fletcher) Anything else
- you want to say?
- MS. FLETCHER: No.
- 4 MR. FLETCHER: Well, I guess that's all I can say right
- 5 now.
- 6 MS. JONES: Okay.
- 7 MR. FLETCHER: Thank you.
- MS. VINCENT: And Ms. Jones can get back with you on some
- of those questions, too, after we've spoken with
- 10 Emerson personnel.
- Please state your name, sir.
- MR. GREGORY: Alan Gregory with the Western Carolina
- State Fair. What would be the time frame and how
- big a unit is this piece that's going to set up and
- pump all that stuff? Is it a truck or a big tank?
- We don't want it around during fair time's what I'm
- 17 getting at.
- MS. JONES: Oh, we would definitely work around the
- constraints of -- of -- of the fair. Once again,
- there are a lot of considerations that go into -- to
- place when we think about where these pumping wells
- are located. You know, if we have contamination on
- the Jaycee's -- on that property as well as down May
- Royal, I know those residents don't want a lot of
- noise and a lot of big buildings on their property

```
Page 40
 1
          that are disturbing them. So all that's taken into
 2
                    So efforts will be taken to minimize any
          account.
 3
          disturbances on the property of the fairgrounds.
 4
                  You'll have to drill other wells? You'll
     MR. GREGORY:
 5
          have to drill more wells to do the stripping,
 6
          correct?
 7
     MS. JONES:
                 Potentially, yes, sir.
 8
     MR. GREGORY:
                   The -- the other one's just monitoring it,
 9
          of course.
10
     MS. JONES:
                 Correct.
11
     MR. GREGORY:
                   So I know when I was at the Savannah River
12
          site, they sprayed some of it up in the air and got
13
          rid of some of the Trichloroethenes --
14
     MS. JONES:
                 Uh-huh.
15
     MR. GREGORY: -- and some of the stuff like that.
16
          you're going to collect everything, in other words.
17
     MS. JONES:
                 Right. It will be pumped -- say, if it's on
18
          the fairgrounds --
19
     MR. GREGORY:
                   Uh-huh.
20
     MS. JONES:
                -- it'll be -- the wells will be installed
21
          there and be pumped from the fairgrounds back to
22
          ASCO.
23
     MR. GREGORY: So you'd have to pipe everything back --
24
     MS. JONES:
                Yes.
25
     MR. GREGORY: -- over there?
```

```
Page 41
                      We want everything to be on the ASCO
     MS. JONES:
                Yes.
          property.
     MS. VINCENT: Any other questions?
 3
     MS. JONES: You did see that the cost was 4.7 million.
 4
 5
          That -- that's part of that cost.
                  Have you done any study on the volume that
 6
     MR. FOSTER:
 7
          you want to process on a daily or weekly basis of
 8
          water coming from the ground and going back after
 9
          being processed? What is the volume -- what is the
10
          capacity that is the ultimate volume you'd --
11
     MS. JONES:
                 For --
12
     MR. FOSTER: -- like to --
13
     MS. JONES:
                 -- our --
14
     MR. FOSTER: -- see --
15
     MS. JONES: -- system --
16
     MR. FOSTER: -- have processed?
17
                -- that we would like to see?
     MS. JONES:
18
     MR. FOSTER: Right.
19
     MS. JONES:
                 Steve, I want to pick your brain. You just
20
          told me this number earlier.
                  Our -- our initial projections are about --
21
     MR. CLARKE:
22
     MS. VINCENT: Hang on just a minute --
23
     MR. CLARKE:
                  -- 200 --
24
     MS. VINCENT: -- Steve.
25
     MR. CLARKE: -- gallons per (talkover).
```

```
Page 42
 1
     MS. VINCENT:
                   Hold on just --
 2
     MS. JONES:
                         About 200 gallons per minute.
                 Okay.
 3
     MR. FOSTER: Per minute. Okay.
 4
     MS. VINCENT: Was that -- was that it?
 5
     MR. YOUNG:
                 Now, you was asking the question --
 6
     MR. FOSTER: So it'd just be --
 7
     MR. YOUNG:
                 -- how fast --
 8
     MR. FOSTER: -- the loop in --
 9
     MR. YOUNG:
                 -- the water --
10
     MR. FOSTER: -- in other words.
11
     MR. YOUNG:
                 -- is moving. I can tell you something on
12
          that.
13
     MR. FOSTER:
                  Uh, oh.
                            Excuse me.
14
                 Okay. His question was asking me how -- when
     MS. JONES:
15
          we're pumping this water and we're treating
16
          it --
17
     MR. YOUNG:
                 Yeah, I know.
18
     MS. JONES:
                -- how much are we going to --
19
     MR. YOUNG:
                 Yeah.
20
     MS. JONES:
                 -- do.
                        And that was about 200 gallons --
21
     MR. YOUNG:
                I'll ask --
22
     MS. JONES:
                -- per minute.
23
     MR. YOUNG:
                -- her and let you tell you about that
24
          question, though.
                              But --
25
     MS. JONES:
                 The earlier --
```

```
Page 43
 1
    MR. YOUNG:
                -- my --
                -- question --
 2
    MS. JONES:
 3
                 -- she wanted --
     MR. YOUNG:
                 -- about how fast --
 4
     MS. JONES:
                -- me to tell you --
 5
     MR. YOUNG:
 6
     MS. JONES:
                -- the groundwater --
     MR. YOUNG: -- you want me to tell you that my wells, one
          of them is 200 foot deep and one of them is 200 and
 9
          -- about 280 feet deep. I got 35 things of
10
          contamination on it. That's -- so way over eight.
11
          And my deepest well is starting to show it now. So
12
          on the last sampling, it is getting into the deep
13
          well.
14
                It's dropping. Okay.
     MS. JONES:
15
     MR. YOUNG:
                It's dropping. So you was asking how it was
16
          moving. But it's moving very slow, but it's in the
17
          deep well now.
18
                       I do believe it is very slowly and
     MS. JONES:
                 Yes.
19
          I --
20
     MR. YOUNG:
                 Yeah.
21
                -- I don't want --
     MS. JONES:
22
     MR. YOUNG:
                But it's --
23
     MS. JONES:
                -- to throw out --
                It's not the --
24
     MR. YOUNG:
25
                 -- a number that's incorrect.
     MS. JONES:
```

### Page 44 1 -- I can still drink a little water out the MR. YOUNG: 2 deep well, but I still don't drink it. 3 MS. JONES: Okav. 4 MR. YOUNG: I haven't drank it in a year and two. 5 MS. VINCENT: Sir, could you state your name as well. 6 MR. YOUNG: (To Mrs. Young) What did he say? 7 MS. YOUNG: Tell them your name. 8 MR. YOUNG: Julian Earl Young. 9 MS. VINCENT: Thank you. 10 MR. YOUNG: I'm on the one that got the contaminated 11 well. 12 MS. JONES: Mr. Young, right. Right. 13 MS. VINCENT: Any other questions? 14 MR. FLETCHER: I'd just also like to ask how, you know --15 if we decide to sell our house later, how this might 16 affect our property values. 17 MS. JONES: Uh-huh. 18 MR. FLETCHER: If we have to explain to somebody, "Well, 19 we had to have our well capped off because it's 20 contaminated. Well, it wasn't before, but it is 21 now." Is that going to -- is that -- can that hurt

up in their yard.

us, or, you know, what can happen with that?

MS. JONES: We have this question a lot from communities

that some people are about to put the for-sale sign

22

23

24

What I can tell you is that if you eliminate that pathway from the groundwater to your body, either by tapping on to the city water or putting that filter on your well, you've eliminated any risk. So it's just like you were living in a site where the groundwater is not contaminated. There is no pathway for the contamination to reach your body. So in that respect, your property is not damaged. I do understand there may be something underneath the ground 150/180 foot deep, yes. But now, I can tell you, long-term, you know, in a few years, once the system starts pumping, hopefully that plume will -- will move away from your property.

MR. FLETCHER: Well, we were kind of hoping that, but when we went to our first meeting, which has been, I don't know, a few years ago or when all this began, we were not affected by it. And we were on a different aquifer when all this started. And my -- one -- my first questions when all this began was:

Is it going to affect us down the road?

No, everything's going to be fine.

Well, no, it's not fine. We are affected --

MS. JONES: Uh-huh.

MR. FLETCHER: -- all the way down in our aquifer. Just

like Mr. Earl's talking about. He's got one so --

```
Page 46
 1
          so deep and one at 280. Our's is 190. We're all
 2
          affected. And we're wondering how far it's going to
 3
          go, and what's going to happen from here.
 4
     MS. JONES:
                 Uh-huh.
 5
     MR. FLETCHER: Very concerned.
 6
     MS. JONES:
                And we do appreciate your concerns. We've
 7
          heard that from numerous property owners that --
 8
          that are probably more and some are less concerned
 9
                   It's -- the sooner we get out there, the
          as you.
10
          better.
                   I mean, the sooner we start pumping, the
11
          sooner you will see better groundwater.
12
          things do take time. I do know that it took a long
13
          time for the contamination to reach you --
14
         FLETCHER: And we understand that.
15
         JONES: -- and it took a lot of time to investigate.
16
          And, you know, hopefully it won't take as long to
17
          remediate it, but these things do take a while to
18
                  We're trying our best to -- to get out there
19
          and -- and make it better.
20
     MR. FLETCHER:
                    Well, DHEC's been great, because, you
21
          know, you have tested everything. And we wouldn't
22
          be here if it wouldn't have been for your
23
          information. We're very thankful for that.
24
          worried --
25
     MS. JONES: Okay.
```

- 1 MR. FLETCHER: -- and concerned.
- MS. JONES: Okay. (To Ms. Vincent) He's done.
- MS. VINCENT: I'll let you answer that question if you
- want to.
- 5 MS. JONES: He -- he was just making a statement. They
- 6 were --
- MS. VINCENT: Okay.
- 8 MS. JONES: -- concerned.
- 9 MS. VINCENT: Got a question back here.
- MR. DANIELS: My name is Andrae Daniels. I'm at 552 May
- Royal Drive. This is probably my first meeting.
- I've been here for a couple of years. I don't think
- I was here when all this came up. I probably should
- be talking to the gentleman right there.
- I noticed when I -- when I bought my house, I
- was told that -- about the contamination and so on
- and so forth but that everything had been switched
- over to city water. And haven't had any problems
- since then. It's been about \$50 a month. I guess
- you was asking about a water bill? It's been about
- \$50 a month. I mean, am -- I'm assuming everybody
- here is -- is on well water?
- MS. VINCENT: No.
- MS. JONES: There -- there's a mixture.
- MR. DANIELS: There's --

## Page 48 1 MS. JONES: There are --2 MR. DANIELS: -- a mixture? Okay. 3 MS. JONES: Water lines are out there, but some people 4 would prefer to use their private wells. 5 MR. DANIELS: Okay. Okay. I mean, I -- I just didn't 6 Like I say, I was new to the area. 7 MS. JONES: Uh-huh. 8 This whole situation here is kind of new to MR. DANIELS: 9 When it was put to me as far as what happened, 10 I just -- I didn't figure it was a big deal, so to 11 speak. 12 MS. JONES: I think probably -- not for you, because your 13 water -- you're getting your water from the city. 14 MR. DANIELS: Yeah. 15 MS. JONES: Right. 16 MR. DANIELS: Okay. 17 MS. VINCENT: That it? 18 Any other questions? 19 State your name, please. 20 MS. CARTER: My name is Sheila Carter. I have a swimming 21 pool in my back yard. 22 MS. JONES: Uh-huh. 23 MS. CARTER: I have children that get in that pool. 24 You're saying that we shouldn't drink the well 25 water, which I have. My pool is filled with the

```
Page 49
          well water. So is it endangering these children
1
          that swim in my pool? I mean, I got a lot of kids
3
          that come over.
    MS. JONES: Right. Can you tell me your address again?
4
5
          T didn't --
    MS. CARTER: I -- 71 Rodgers Road.
 6
7
     MS. JONES: You're at 71 along --
8
     MS. CARTER: Right.
 9
                -- Rodgers.
     MS. JONES:
                  I'm at the end of the road.
10
     MS. CARTER:
                   North?
11
     MS. VINCENT:
                And you've been receiving your data.
12
     MS. JONES:
13
     MS. CARTER: Oh, yeah.
     MS. JONES: And I don't think you've had any
14
          exceedances --
15
16
     MS. CARTER:
                 No.
17
                -- in your well, have you? Then -- then --
     MS. JONES:
                 Well, it's -- it's changed. I mean, the --
18
     MS. CARTER:
          the -- the -- the levels have changed several
19
20
          times.
     MS. JONES: Right.
21
     MS. CARTER: Because I've got a friend that's a chemist,
22
23
          and --
24
     MS. JONES:
                 Uh-huh.
     MS. CARTER: -- I kind of ask him all the time, you know.
25
```

# DHEC Public Meeting, In Re: Automatic Switch Company (ASCO) Site 5/19/2009

## Page 50 1 MS. JONES: Uh-huh. 2 MS. CARTER: But I haven't heard this not drinking the 3 well water until now. And I'm --4 MS. JONES: Well, let me clarify it. 5 MS. CARTER: Okay. 6 MS. JONES: Your well water is below the standard that we 7 consider safe. MS. CARTER: Okay. 8 9 MS. JONES: There was a slide that I put up, PCE --10 MS. CARTER: Okay. 11 -- 5. If your water -- the data that --MS. JONES: 12 MS. CARTER: Mine's --13 MS. JONES: -- you received --14 MS. CARTER: -- point -- it's 0.8. It's --15 MS. JONES: 0.8. 16 MS. CARTER: -- it's what I got, yeah. The -- the 15th, 17 the letter I got from Emerson. 18 MS. JONES: Okay. So you see, that -- and I want to make 19 sure my units are correct, but that's well below 20 that --21 MS. CARTER: Okay. 22 MS. JONES: -- 5 parts per million. 23 MS. CARTER: So it's -- you're saying that it -- it's not

Southern Reporting, Inc.

a danger to children or anything like that.

MS. JONES: Correct.

24

- <sup>1</sup> MS. CARTER: Okay.
- MS. JONES: But certain other people, their limits are
- 3 above --
- MS. CARTER: Yeah.
- 5 MS. JONES: -- those safe numbers.
- MR. DANIELS: All right. Once again, my name's Andrae
- Daniels, May Royal Drive. I just had a question
- about whether there is any effect to the employees
- 9 at ASCO.
- MS. JONES: To my knowledge, no, there have not been any
- impacts. Once again, these tanks were below ground
- when they leaked, and all the remediation when they
- dug it up and disposed of it was handled, you know,
- with safety precautions.
- MR. FLETCHER: Did she say she lived at Rodgers Road?
- MS. CARTER: Yes.
- MR. FLETCHER: Rodgers Road? Well, we're right at the
- next road over. You're at .08?
- 19 MS. CARTER: Uh-huh.
- MR. FLETCHER: Our's is 7.2.
- MS. JONES: It could depend on how deep your well is,
- 22 like --
- MR. FLETCHER: 190 feet.
- MS. CARTER: Mine's 220.
- MR. FLETCHER: We're --

```
Page 52
 1
     MS. JONES:
                 Similar.
 2
     MR. FLETCHER:
                     We're at 190.
 3
     MS. FLETCHER:
                     I have a question. Hi, my name is Nancy
 4
          Fletcher, and it's -- I live at 63 May Royal Drive.
 5
          We just got that number, like, you know, three weeks
 6
               But my question is -- and I understand what it
 7
          is DHEC is recommending as far as getting the water
 8
          cleaned up.
 9
               But I was wondering if one of my options for my
10
          -- you know, my own personal property could be if we
11
          do get -- if we do elect to connect to city water,
12
          will they still do -- and if this goes forward, then
13
          our well will continue to be tested as far as --
14
     MS. JONES:
                  I --
15
     MS. FLETCHER:
                   -- far as --
16
     MS. JONES:
                 I do believe --
17
     MS. FLETCHER:
                     -- what --
18
     MS. JONES:
                 -- so.
                          I --
19
     MS. FLETCHER:
                     -- the --
20
     MS. JONES:
                 -- think --
21
     MS. FLETCHER:
                    -- contaminate --
22
     MS. JONES:
                 -- your well --
23
     MS. FLETCHER:
                    -- levels --
24
     MS. JONES:
                 -- will be --
25
     MS. FLETCHER: -- might be?
```

- 1 MS. JONES: It's located in an area that we want to -- we
- want to see those levels decreasing, so your well
- $^3$  would be --
- 4 MS. FLETCHER: Right.
- 5 MS. JONES: -- very valuable when we are monitoring.
- 6 MS. FLETCHER: Okay. Well -- and so, really, you don't
- really want us to top off our well to close it; is
- 8 that correct?
- 9 MS. JONES: That's -- that's an option. It's a personal
- choice.
- MS. FLETCHER: Okay. Well, I mean, is it even possible
- 12 -- and I don't know anything about city water,
- getting connected to it. This is my first house I
- purchased. And, you know, everything else was an
- apartment, so I just dealt with, you know, whatever
- water was there.
- MS. JONES: Uh-huh.
- MS. FLETCHER: But is it -- is it even possible to
- connect onto city water for just drinking and like,
- out of my, say, my refrigerator water, my sink
- water, and then still use well water for, like, my
- outside spigots, my --
- MR. FLETCHER: -- or showering or --
- MS. FLETCHER: -- or showering, or, you know, something
- that does not involve consuming the water --

#### Page 54 1 MS. JONES: Right. 2 -- in any form, as -- like I say, the MS. FLETCHER: 3 kitchen sink, the -- I mean, you know, the 4 refrigerator. Is that even possible? I don't know. 5 MS. JONES: I'm going to defer to my expert over here --6 MS. FLETCHER: Okav. 7 MS. JONES: -- who can answer that question. 8 MS. VINCENT: Who happened to be helping us set up the 9 meeting and part of our sound-system crew. 10 State your name, please. 11 MR. MORRIS: I'm Larry. I have it a little bit hot for 12 y'all. I'm wearing two hats tonight. I'm running 13 your sound. But I'm Larry Morris. I'm the director 14 of public works for the city. 15 MS. FLETCHER: Okay. 16 MR. MORRIS: And the water system is under me. 17 MS. FLETCHER: Uh-huh. 18 To answer your question, no, it is not MR. MORRIS: 19 possible to connect your house up just strictly for 20 drinking water. Your pipes in your house are all 21 interconnected. Think of it like a spiderweb.

- MS. FLETCHER: Okay.
- MR. MORRIS: And that would be one thing: If you

go all the way through it.

once you connect up the house, then the water will

22

```
Page 55
 1
          connected to the city water, you would have to
 2
          disconnect your well. And again, it's a personal
 3
          choice whether or not you would cap that well, but
          certainly, it would be very valuable to Emerson and
 5
          to DHEC to be able to still use that well to test
 6
          and make certain that what they're doing is an
          appropriate treatment.
 8
     MR. FLETCHER:
                    So it would be, actually, like a test
          well --
10
     MR. MORRIS:
                  It would be --
11
     MR. FLETCHER: -- so to speak.
12
     MR. MORRIS: -- more like a test well --
13
     MR. FLETCHER:
                    So it --
14
                 -- than --
     MR. MORRIS:
15
     MR. FLETCHER: -- would be --
16
     MR. MORRIS:
                 -- anything else --
17
     MR. FLETCHER: -- valuable.
18
     MR. MORRIS:
                 -- at that --
19
     MR. FLETCHER:
                    Yeah.
20
     MR. MORRIS:
                 -- point.
     MR. FLETCHER:
                    Right?
22
     MR. MORRIS: It'd be very valuable to them.
23
     MS. JONES: Would she be able to use that well for
24
          irrigation?
25
                  The materials that are being found in the
     MR. MORRIS:
```

```
Page 56
 1
          water, if you use it for irrigation, once the water
 2
          is sprayed up in the air, those materials are going
 3
          to -- for lack of a better term or not, and I --
 4
     MS. CARTER: -- dissipate.
 5
                  They volatilize.
     MR. MORRIS:
 6
     MS. CARTER:
                  Fall apart.
     MR. MORRIS:
                         They're -- they're going to go --
                  Okay.
     MS. CARTER:
                  Break down.
 9
     MR. MORRIS:
                  -- into the air; they're not really going to
10
          hurt you.
11
                  Uh-huh.
     MS. CARTER:
12
     MR. MORRIS:
                  Now, there are some other by-products in
13
          there that we won't get into a whole lot because
14
          they're not in levels that are going to hurt you.
15
          For irrigation, yes. For car washing, you could.
16
               But the -- the main thing you want to -- to
17
          remember is that once the water is sprayed up into
18
          the air -- as you saw, that's one of the preferred
19
          treatments, is an air-type stripping unit that will
20
          help strip the -- the materials out of it, and then
21
          it goes harmlessly into the air.
22
               So irrigation, probably not a problem.
23
          certainly don't want to pay me to throw water on the
24
          ground to keep your grass green. That'd be one
25
          thing.
```

- MS. FLETCHER: Well, so that's what -- what -- that was
- my question, though. I mean, if we get hooked onto
- city water, then we will no longer use the well
- water for anything.
- <sup>5</sup> MR. MORRIS: You could use it for irrigation because
- 6 your --
- MS. FLETCHER: Where would it come from? Out of the
- 9 outside spigots --
- 9 MR. MORRIS: Well --
- MS. FLETCHER: -- or --
- MR. MORRIS: -- the -- it all depends on what type of
- irrigation system you have.
- MS. FLETCHER: All right.
- MR. MORRIS: If you have an -- an inground irrigation
- system with -- with pipes with the pop-off --
- MS. FLETCHER: Uh-huh.
- MR. MORRIS: -- heads --
- 18 MS. FLETCHER: I see. Okay.
- MR. MORRIS: -- then, where that connects to your -- your
- current water pipe, you would --
- MS. FLETCHER: Uh-huh.
- MR. MORRIS: -- disconnect it and then connect it to your
- well, because that water pipe would then be
- connected to the city.
- MS. FLETCHER: Okay.

```
Page 58
 1
     MR. MORRIS:
                  So you just interrupt the spiderweb at that
 2
          point.
 3
     MS. FLETCHER:
                    Okay. Okay.
 4
     MR. MORRIS:
                  And again, that -- that's a very simple
 5
          thing to do --
 6
     MS. FLETCHER: Uh-huh.
7
                  -- when it's done that way.
     MR. MORRIS:
8
     MS. FLETCHER:
                    Okay.
 9
     MS. CARTER:
                  What is -- what is the average cost to tap
10
          onto city water?
11
     MR. MORRIS:
                  I knew that question would come up.
12
     MS. CARTER: Well, . . .
13
     MR. MORRIS: You're looking right now -- you're looking
14
          right now at $1,050 for the tap and meter. There is
15
          a $750 impact fee. So right at -- let's say right
16
          at $1800 to tap on.
17
               The other thing, though, that -- that is a
18
          requirement that was set by the city back in about
19
          1992 -- so it's been in place many years -- is that
20
          we require anyone that is in the county that taps on
21
          to have to sign an annexation agreement. Now, what
22
          that says is: If you become contiguous, you will
23
          agree to annex.
24
               What our council has done in many cases is not
25
          exercise that. A good for-instance is the South
```

Page 59 1 Meadows Subdivision. When Whiskey Road was annexed all the way down to Talatha Church Road for 3 different reasons, South Meadows has these 4 agreements in place. South Meadows has not been 5 annexed. 6 MS. CARTER: "Annexed" -- you mean city taxes and all. 7 UNKNOWN FEMALE: That's right. 8 That's --MS. CARTER: MR. MORRIS: Correct. 10 MS. CARTER: -- what you're saying. 11 MR. MORRIS: You would become a member of the city. 12 UNKNOWN MALE: They're not going to isolate and pick out 13 a place to do that. I mean, that wouldn't make any 14 sense. 15 MR. FLETCHER: What about people that aren't in the city 16 limits? 17 MR. MORRIS: The --18 MS. CARTER: They would put us in --19 MR. MORRIS: -- you'd have to be contiguous to the city 20 before the annexation --21 MS. VINCENT: Explain what --22 MR. MORRIS: -- agreement --23 MS. VINCENT: -- contiguous --24 MR. MORRIS: -- would even --MS. VINCENT: -- is too.

```
Page 60
     MR. MORRIS: -- kick in.
 2
               Contiguous means immediately adjacent to the
 3
          city limits -- touching. Now, you can be across the
 4
                 The road right-of-way -- if you're across the
 5
          road right-of-way, we still consider that touching
 6
          then.
                 That's -- that's part of the state law that
 7
          it can -- it can jump a roadway.
 8
               But we could not, for -- for instance, if your
          property was not in the city and your neighbor's
10
          property -- and I realize you don't live to get
11
          next to each other -- but your neighbor's property
12
          wasn't and he wanted to annex and you were between
13
          him and the city limits, he could not annex because
14
          he was -- he was not touching; he's not contiguous.
15
         VINCENT: Any other questions?
16
     MR.
        FOSTER:
                  One of the alternatives to the air stripper
17
          is a carbon filtration system.
18
     MS. JONES:
                 Correct.
19
     MR. FOSTER:
                  And it would seem to me that if I had -- if
20
          I had limited contamination, just adding a simple
21
          carbon filtration system on an individual basis
22
          might render that cleaned below standards for a much
23
          more minimal cost than tying up to city water.
24
     MS. JONES:
                 And that option has been presented as an
25
          alternative, either public water or the carbon unit.
```

- 1 MR. FOSTER: -- carbon unit.
- <sup>2</sup> MS. JONES: Yes.
- MR. FOSTER: Because rather than the carbon unit being
- the central unit cleaning up the whole site, it
- 5 could be used on an individual basis, I would
- assume, if you can find a carbon-based unit.
- MS. JONES: Oh, yes. We -- we've looked into individual
- units at the individual properties.
- 9 MS. VINCENT: Any other questions? Will you state your
- name, please.
- MS. BARNHILL: My name is Cassie, and I also live on
- Rodgers Road. And when we just got our letter in
- the mail, we have the two chemicals. We have the
- $^{14}$  DCE and the PCE.
- MS. JONES: Uh-huh.
- MS. BARNHILL: And I understand both of them right now
- are below the level, but combined -- I found on the
- internet where combined with a toxicity that they
- can still pose the same threat as just one by
- itself.
- MS. JONES: Uh-huh.
- MS. BARNHILL: So is that going to be a concern for us
- now that we're -- combined, we are at the -- the
- highest level?
- MS. JONES: I don't know how to answer that question.

Page 62 1 Someone else posed that question to me earlier this 2 week and I'm trying to research that and find out. 3 All I know is that I am required -- I look at the 4 contaminates individually, so I look at that PCE has 5 to be under 5. That's all that my part of DHEC 6 does. But looking at it from a risk standpoint and 7 the toxicity, that's the part I'm researching. And 8 I haven't gotten an answer yet, but I am looking 9 into that. 10 MS. VINCENT: Any other questions? 11 Well, I know we have given you handouts of the 12 presentation today. We have provided you the 13 proposed plan that is a little technical but might 14 help you to understand some things. If you have 15 some questions later, please feel free to call 16 Ms. Jones. Her information is on some of the 17 information provided to you. 18 And again, submit those comments to us by 19 If you have already recorded your 20 comments, I have a box out in the back of the -- the 21 sanctuary in which you can leave those comments with 22 And you can still submit additional comments if 23 you think of some others. 24 We thank you for coming out today. And we're 25 going to go ahead and close our public meeting.

```
Page 63
          you would like to talk with anybody directly
          afterwards, that is fine. We have the maps, again,
 3
          if you want to review those.
                We thank you for coming out. Thanks.
 5
                           (Whereupon, at 7:43 p.m., the meeting
 6
                           of the above-entitled matter was
                           concluded.)
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