

BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA  
COLUMBIA, SOUTH CAROLINA

HEARING #10-11155

NOVEMBER 8, 2010

10:00 A.M.

**ALLOWABLE EX PARTE BRIEFING:**

*REQUESTED BY THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA -  
Tour of Chem-Nuclear Systems Site in Barnwell County, South  
Carolina; Docket No. 2000-366-A*

**TRANSCRIPT OF  
PROCEEDINGS**

**COMMISSIONERS PRESENT:** John E. 'Butch' HOWARD, *CHAIRMAN*,  
David A. WRIGHT, *VICE CHAIRMAN*; and COMMISSIONERS G. O'Neal  
HAMILTON, Randy MITCHELL, Swain E. WHITFIELD, and Nikiya  
'Nikki' HALL

**STAFF:** F. David Butler, Jr., Senior Counsel; James Spearman, Ph.D.,  
Executive Assistant to the Commissioners; Rebecca Dulin, Esq., Legal  
Staff; Lynn Ballentine and William O. Richardson, Advisory Staff; Jo  
Elizabeth M. Wheat, CVR-CM-GNSC, Court Reporter; and Deborah  
Easterling and Patty Sands, Hearing Room Assistants

**APPEARANCES:**

*JAMES LATHAM and MICHAEL BENJAMIN*, representing  
CHEM-NUCLEAR SYSTEMS

*JEFFREY M. NELSON, ESQUIRE, DANIAL SULLIVAN,  
AND JOHN POWERS*, representing the SOUTH CAROLINA OFFICE  
OF REGULATORY STAFF

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***PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA***

101 EXECUTIVE CENTER DRIVE  
COLUMBIA, SC 29210

Post Office Box 11649  
COLUMBIA, SC 29211

[WWW.PSC.SC.GOV](http://WWW.PSC.SC.GOV)

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Please note: PowerPoint and presentation materials attached hereto.

P R O C E E D I N G

1  
2           **MR. LATHAM:** Good morning. We're glad  
3 everyone is here. It's obviously new territory for  
4 us to do a tour, when we're not in the hearing  
5 room. We're used to all the routine in the hearing  
6 room, I think, by ten years into the process now.

7           But let me introduce, first of all, Mike  
8 Benjamin. Mike is a radiation safety officer and  
9 Health Physics manager for Chem-  
10 Nuclear/*EnergySolutions* here at the Barnwell  
11 Complex. Mike will be assisting us on the tour  
12 today. He's got a little bit of administrative  
13 work to do at the front end on the briefing forms  
14 that some of you have been able to fill out. And  
15 let me let Mike start first and then I'll come back  
16 and introduced myself again.

17           **MR. BENJAMIN:** Good morning, everyone.  
18 Everyone should have a visitor's form: Attachment  
19 5.1, Barnwell Complex Restricted Area Visitor's  
20 Form. It's part of our -- one of our regulatory  
21 agencies, South Carolina DHEC, we are required to  
22 monitor for radiation exposure in everyone that  
23 enters our restricted area. Our restricted area is  
24 the 235-acre disposal site. We've given a number  
25 of tours over the year. I feel very confident in

1           saying that you will not pick up any measurable  
2           radiation during the site tour.

3           But if you would, print your name so that I  
4           can read it. The reason for visit, pick one.

5           **MR. LATHAM:** Tour.

6           **MR. BENJAMIN:** Tour. Circle "Other," and then  
7           the company organization, address, city, ZIP, phone  
8           number. And there's a read-and-sign paragraph that  
9           basically declares that you're over 18 years old  
10          and you authorize us to allow you an exposure not  
11          to exceed ten millirem per visit -- "millirem" is a  
12          unit of radiation exposure -- or 100 millirem per  
13          calendar year, which is the regulatory limit for a  
14          member of the public. For the ladies, I provided,  
15          I believe, everyone a copy of the Nuclear  
16          Regulatory Commission's -- the Federal regulatory  
17          group -- instructions concerning prenatal radiation  
18          exposure. If you have questions regarding that,  
19          please feel free to ask me -- probably after the  
20          tour would be easier. I'll be more than glad to  
21          assist in understanding that. It's a good little  
22          paper that explains radiation exposure and the  
23          potential it has concerning prenatal radiation  
24          exposure.

25          After that, I'll collect all of these, because

1 I've got to sign them all. And you should also  
2 have -- in front of you, you have a visitor guide,  
3 which gives a little brief summary of what we  
4 expect as far as safety and radiation exposure.  
5 Real simple. Follow our rules. Jim and I will  
6 tell you what the rules are as we go along. We  
7 will all stay in the van as we go out into the  
8 restricted area, so the need for hard hat, safety  
9 glasses, and steel-toe shoes or hard-toe shoes  
10 isn't required.

11 This might be the first group that has filled  
12 these forms out correctly the first time. This is  
13 pretty amazing.

14 [Laughter]

15 And again, if you have any questions  
16 concerning radiation, radiation exposure, feel free  
17 to ask me.

18 It's all back to you, Jim.

19 **MR. LATHAM:** Thanks, Mike. My name is Jim  
20 Latham. I'm president for Chem-Nuclear Systems  
21 and, at the same time, vice president for Barnwell  
22 Operations. Chem-Nuclear, as most of you know, is  
23 a wholly-owned subsidiary of *EnergySolutions*.  
24 That's the *EnergySolutions* sign out front and the  
25 flag on the flagpole.

1           What I'd like to do today is we have some  
2           PowerPoint slides we can go through very briefly  
3           here in the training room. Hopefully they will  
4           either answer some questions you may have or orient  
5           us so that when we go out on the disposal site,  
6           some of that disposal site trip will make a little  
7           more sense. If not, we'll come back in here after  
8           the trip on the disposal site and we can ask more  
9           questions then.

10           I waited too long on the -- [indicating]. As  
11           long as we don't make anything too dark -- is that  
12           all right? -- the slides are a little bit easier to  
13           see, as long as I don't walk in front of you too  
14           much.

15                           [Reference: PowerPoint Slide 1]

16           We are in the administration building here  
17           [indicating]. This is several years old, but I  
18           show it for a specific reason, and that is because,  
19           when we go on the disposal site, the large trench  
20           that's open in this area here [indicating] with the  
21           concrete disposal vaults that are visible, has been  
22           closed, and you'll see the trench in its closed  
23           configuration, but I wanted you to be able to see a  
24           little bit of what's underneath the closed cap.

25           We have five radioactive material licenses in

1 the Barnwell Complex. Only three of those  
2 radioactive material licenses have to do with  
3 disposal. There's one for the disposal site,  
4 there's one for the environmental lab, and one for  
5 a small calibration facility that we have for  
6 calibrating radiation detection instruments. The  
7 other two licenses at the Barnwell Complex have to  
8 do with other business units for the company. One  
9 is associated with the Nuclear Services Support  
10 Facility that supports field projects, and another  
11 one for a facility that's south of Highway 64 that  
12 you came in on. That facility is for  
13 decontamination, repackaging, and processing of  
14 radioactive materials, mostly for disposal, either  
15 here or at another licensed facility.

16 [Reference: PowerPoint Slide 2]

17 There are some key events in the history of  
18 operating the low-level radioactive waste disposal  
19 site here in Barnwell County. As you can see, in  
20 1969 was a license to store low-level radioactive  
21 waste, in anticipation of the license that was  
22 finally approved in 1971. So we've been in  
23 operation for disposal of low-level radioactive  
24 waste for shallow-trench burial since 1971.

25 There are some other key events and points to

1 be made off of this slide. For example, the  
2 Extended Care Maintenance Fund started at the very  
3 beginning, at the first license. The first license  
4 was granted on 17.2 acres. Five years later that  
5 license was amended to its current 235 acres that  
6 are licensed for disposal. Shortly after that,  
7 about five years afterward, the Decommissioning  
8 Trust Fund was established. I'll spend a little  
9 bit of time talking about the Extended Care  
10 Maintenance Fund and the Decommissioning Trust Fund  
11 in a few moments, but those are both funds that  
12 have been established for a long period of time to  
13 provide long-term financial assurances.

14 The most recent key event was in 2000, with  
15 South Carolina joining the Atlantic Compact, and  
16 everybody in the room knows where we've been since  
17 then. That's the most current broad-based  
18 regulation that's affected us. But overall, 39 --  
19 almost 40 -- years of operation for disposal of  
20 low-level radioactive waste by shallow-trench  
21 burial.

22 [Reference: PowerPoint Slide 3]

23 We have a workforce at the Barnwell Complex --  
24 first of all, those that are associated with the  
25 disposal site, 32 actually here at Barnwell, two

1 others out of the Columbia, South Carolina, office.  
2 There are some additional employees associated with  
3 that Nuclear Services Support Facility at the  
4 processing facility across the road, as well as  
5 some drivers for the Hittmann Transportation  
6 Services subsidiary of EnergySolutions. Altogether  
7 in South Carolina, including our Columbia office  
8 and an Aiken office, we have about 200 employees  
9 that are EnergySolutions employees.

10 For the disposal site, the average length of  
11 employment -- and I have to say -- average length  
12 is a little bit over 20 years. That's kind of the  
13 good news and the bad news. The good news is we  
14 have a lot of experience, a lot of well qualified  
15 and experienced employees handling the waste  
16 materials; the bad news is that we're all getting  
17 old, and we can't do all the things we thought we  
18 could do when we were 25, even though some of us  
19 still try.

20 [Laughter]

21 [Reference: PowerPoint Slide 4]

22 This slide is a little bit busy, and I  
23 apologize for the busyness, but that's the only way  
24 we could get all 235 acres onto one slide. This is  
25 the general configuration. North, of course, is to

1 the left, just to be different.

2 [Laughter]

3 But the 235 acres that are licensed for  
4 disposal are basically inside the heavier dark  
5 line. It comes here [indicating], ducks down this  
6 way [indicating] -- odd shapes, of course -- down  
7 this way and back across this retention pond  
8 [indicating]. The shaded areas are the completed  
9 trenches that have had multilayer caps installed.  
10 Multilayer, being multiple layers of sand, clay,  
11 high-density polyethylene, and top soil, to serve  
12 as an umbrella over the completed trenches to shed  
13 off precipitation or rainwater.

14 We've installed nine phases of capping. We've  
15 installed a few trenches at a time. Nine phases of  
16 capping, which consists of 119 acres that have been  
17 capped or put into a closed configuration. Those  
18 119 acres of capping, over 127 have been completed  
19 trenches. So those areas are generally closed and  
20 now they're being monitored, maintained, and cared  
21 for by funding from the Decommissioning Trust Fund.

22 The stippled area here is the retention pond  
23 to the west. We'll see that when we go out on the  
24 site. We'll come through the gate onto the site  
25 [indicating], come down this direction and look at

1 the retention pond, come back up over top of the  
2 caps [indicating], come off of the capped area on  
3 the east side of the site, come back up this  
4 direction [indicating]. We'll look at the active  
5 trench, and then come back around to come off the  
6 disposal site [indicating]. I think we'll be able  
7 to cover most of it and be able to see most of the  
8 things. and hopefully either we've answered some  
9 questions here or we can answer them when we get  
10 back to the room.

11 [Reference: PowerPoint Slide 5]

12 The current design of disposal trenches, we  
13 have one active trench. We call it the Class A/B/C  
14 disposal trench. It's a two-high, three-across  
15 stack of concrete disposal vaults. These are about  
16 eight feet tall, six feet in diameter, four to six  
17 inches thick of reinforced concrete walls. I'll  
18 show another picture in a few moments about how the  
19 waste is placed in those concrete disposal vaults,  
20 and then when we go out on the site we'll see how  
21 the sand backfill is pushed around the disposal  
22 vaults and then covered with a layer of clay. All  
23 of that is preparatory to the completed trench and  
24 its adjacent trenches then would be covered with  
25 the multilayer cap.

1 [Reference: PowerPoint Slide 6]

2 In 2003, we received one of what we call a  
3 large component. And I showed this one because  
4 it's a little bit different than the large  
5 component of the steam generators I'll show in the  
6 picture that we just disposed of in March. This  
7 was in 2003. It was a reactor pressure vessel  
8 inside a steel can, filled with lightweight grout  
9 material, loaded onto a barge, came down the inland  
10 waterway from Maine, and came across the Savannah  
11 River Site on this heavy-haul transporter with this  
12 cradle arrangement to hold that reactor pressure  
13 vessel in place. We ended up cutting off the front  
14 and the back of it, just because we didn't need  
15 them and we could pack more waste around that  
16 reactor pressure vessel. But that's what one type  
17 of large component -- and this is also another view  
18 of the large trench we call Trench 86, but we'll  
19 see the closed trench configuration just when we go  
20 inside the gate.

21 [Reference: PowerPoint Slide 7]

22 This March, by contrast, was a little bit  
23 different. We still had the same kind of wheeled,  
24 multi-tired, independently steerable wheels on a  
25 heavy-haul transporter that brought in four old

1 steam generators from the Salem plant in New  
2 Jersey. Those steam generators were placed in the  
3 large trench. We'll drive next to that trench and  
4 you'll see how it's been covered and backfilled.  
5 The trench does not have a multilayer cap installed  
6 on it yet, because we're still waiting for large  
7 components that can go in the front half of the  
8 trench that has been backfilled just to manage  
9 storm water.

10 [Reference: PowerPoint Slide 8]

11 When waste is received, it's all received by  
12 truck or some kind of wheeled vehicle. We don't  
13 have any railhead here; we don't have a barge slip  
14 here. It has to come from the barge slip at  
15 Savannah River Site and it comes -- the large  
16 component -- across Savannah River Site by heavy-  
17 haul transporter down into the trench. But more  
18 normally, we receive waste in these transportation  
19 casks. The transportation casks are mounted on  
20 trucks. They have a liner inside of each cask.  
21 The liner contains the waste. So it's not the cask  
22 that gets buried; it's just the liner. The liner,  
23 when the cask is prepared to go to the trench, the  
24 lid is taken off the cask at the trench and then  
25 the crane engages the liner, the liner is picked

1 up, and you can see down here it's placed inside  
2 the concrete disposal vaults [indicating] with the  
3 -- you see the liner is placed inside the concrete  
4 disposal vault. The cream-colored cross-link  
5 polyethylene liner is what we call a high-integrity  
6 container, or a HIC. You'll hear some of us refer  
7 to HICs; that's what we're talking about.

8 The adjacent picture here [indicating] is a  
9 picture of our slit trench. And I kept that in  
10 because every so often -- as it turns out, it's  
11 been two years without a slit trench offload, but  
12 we are in a position where we can receive waste  
13 that's been loaded into a fuel pool. It's not  
14 fuel, but it's structural material: stainless  
15 steel, structural materials. The highest dose  
16 rate, highest activity materials that were  
17 received, we could offload it into the slit trench.  
18 And you can see that it's a little bit different.  
19 It's narrow. Same depth as the trench that we  
20 looked at on the A/B/C trench, but it's narrow so  
21 we can manage the dose rate a little bit better.

22 [Reference: PowerPoint Slide 9]

23 This diagram depicts some adjacent trenches  
24 and the multilayer cap that would be installed over  
25 top of those adjacent trenches. When the trench is

1 filled -- first of all, the trench is constructed  
2 in the natural clay materials that are part of the  
3 geology here at Barnwell. The bottom of the trench  
4 is sloped to one side; it's sloped toward one end  
5 of the trench so that there is what we call a sump  
6 created at one corner of the trench. That's become  
7 important because, when we go out on the site,  
8 you'll see some of the 185 sump standpipes, the  
9 trench standpipes that are configured along the  
10 wall of the trenches. In some cases, those  
11 standpipes come up all the way through the cap; in  
12 other cases, we haven't put the cap on, so it's a  
13 little bit more obvious. But when we look at those  
14 things, you'll see that the sump standpipes are at  
15 an angle, and then we have monitoring wells  
16 adjacent to the trench -- about 85 monitoring wells  
17 on the disposal site -- that are more vertical.  
18 But that's what the sump is. The sump -- the  
19 trench standpipes are there to monitor these sumps  
20 once a quarter when we do the routine environmental  
21 monitoring. We're looking for water. If any water  
22 is detected, is the water radioactive.

23 Structural fill [indicating]. Then you can  
24 see this compacted clay, a bentonite layer  
25 [indicating] or geosynthetic layer, followed by a

1           60-mil-thick high-density polyethylene  
2           [indicating], a foot of sand [indicating], and then  
3           some top soil to hold it all in place. There's  
4           about a one-third scale model back on the back  
5           table, that little plastic column there, that shows  
6           how the layers of the multilayer earthen covers  
7           would be over top of the completed trenches. And  
8           when that's installed, then that puts us in a  
9           closed configuration for that part of the site.

10                           [Reference: PowerPoint Slide 10]

11           Over the life of the site, we've received 28  
12           million cubic feet of waste. The peak year was in  
13           1980 when we received 2.4 million cubic feet. At  
14           the time shortly -- about the same time, 1980, the  
15           Legislature decided to put a limit on the volume  
16           that we were allowed to receive, of 1.2 million  
17           cubic feet. You see that stayed the same until  
18           about 1985, and then it began to decline, the  
19           decline primarily driven by the cost of disposal.  
20           The cost of disposal wasn't necessarily operations;  
21           it was taxes and surcharges that were placed on the  
22           waste that caused the generators of the waste to  
23           think about, "How can we process it, how can we  
24           eliminate waste at the point of generation, how can  
25           we reduce the volume that has to go to Barnwell?"

1                   From 2000 on, of course, it changed a little  
2                   bit, and it's a little difficult to compare to 2.4  
3                   million cubic feet --

4                   [Reference: PowerPoint Slide 11]

5                   -- even if we take the highest volume that we  
6                   received any of those years: 120,000 cubic feet is  
7                   barely a blip on that same bar graph. But this is  
8                   what's happened over the last ten years. We're  
9                   down to -- this year we would project -- I'm sorry,  
10                  the year we just completed, fiscal year '09 and  
11                  '10, we had 34,000, but 27,000 of those cubic feet  
12                  were in those four steam generators. So the  
13                  remaining routine operational disposal waste was  
14                  only about 7,000 cubic feet. We are predicting  
15                  next year, the year we're in right now, to only  
16                  receive about between 7,000 and 11,000 cubic feet,  
17                  based on the contracts with the utilities.

18                  [Reference: PowerPoint Slide 12]

19                  In those 28 million cubic feet of waste, we  
20                  received just a little bit over 14 million curies.  
21                  A curie is a measure of radioactivity. One curie  
22                  is equal to 3.7 times  $10^{10}$  disintegrations per  
23                  second, which doesn't mean much to most of us; it's  
24                  just, that's the way the radioactivity is measured.

25                  14 million curies is what came in the door.

1           That's as received, in the packages that were as  
2           received. But because two-thirds of what we  
3           receive, the radioactivity, is cobalt isotopes in  
4           cobalt and iron that's decayed, so that we only  
5           have as a running inventory closer to 3 million  
6           curies.

7           You can see that last year, the year that was  
8           completed at the end of June, it looks like it has  
9           flattened out because the radioactivity -- the  
10          volume has gone down, the radioactivity in the  
11          steam generators wasn't that much, the amount of a  
12          running inventory also declined slightly. And it  
13          continues that trend a little bit until we level  
14          out at a new normal, if you will.

15                           [Reference: PowerPoint Slide 13]

16          Even though we've continued for 39, almost 40  
17          years, to dispose of waste by shallow-trench  
18          burial, there have been some changes to the method  
19          of trench construction. You can see, there are  
20          several listed here. Most recent was really  
21          changing the backfill material. We had been using  
22          available materials from the site. It created a  
23          circumstance where we had some differential  
24          settlement, and we had some bridging of the clay-  
25          rich materials and bridging between some of the

1 concrete disposal vaults. The change in 2004 was  
2 to use sand, first of all around all of the  
3 disposal vaults, a foot above them, and then to  
4 cover that with some of the natural clay materials  
5 that are here at the disposal site. That,  
6 unfortunately, resulted in a little bit of an  
7 increase in expense, because we had to buy the  
8 sand. We'd used all the sand that would be -- the  
9 geology here at Barnwell is about five or ten feet  
10 of sand followed by clay at various amounts of clay  
11 and sandy material. But we had to go import the  
12 sand, so to speak, bring it in from a sand pit --  
13 one by Orangeburg or one up toward Columbia. So  
14 it's been a combination of places where we've been  
15 able to get it.

16 [Reference: PowerPoint Slide 14]

17 There have been -- as a result of changes in  
18 the regulations, there have also been some changes  
19 in the waste form that we are allowed to accept.  
20 We're only allowed now to take dry, solid  
21 materials. No liquids are accepted; they have to  
22 be solidified. You see that's been a long-standing  
23 requirement. There were, initially, absorbed  
24 liquids, which is like kitty litter absorbing  
25 liquids. But if you put an over-burden of soil on

1 top of that diatomaceous earth or that kitty  
2 litter, it tends to squeeze over a period of time  
3 and squeeze out what has been absorbed. But when  
4 we solidify it in a cement matrix or other  
5 qualified medium, then that problem is eliminated.

6 There were high-integrity containers required,  
7 and then placing slit trench waste in concrete  
8 vaults. And eventually, in 1996, all waste had to  
9 be in vaults that had been approved by the  
10 Department of Health and Environmental Control or,  
11 as was the case in those large components, in an  
12 acceptable alternative. So that provides long-term  
13 trench stability, as well as, in the case of the  
14 HICs, the structural stability for the package of  
15 waste.

16 [Reference: PowerPoint Slide 15]

17 Part of what we do and what has been done here  
18 since the beginning of -- since the first license  
19 is a comprehensive environmental monitoring  
20 program. The sampling and analysis, you can see  
21 the items that are checked. The results get  
22 reported to the Department of Health and  
23 Environmental Control. In fact, we end up  
24 splitting samples with the Department of Health and  
25 Environmental Control, in the case of water samples

1 from the groundwater wells.

2 The sampling is generally on a quarterly  
3 basis, with some samples taken on an annual basis.  
4 And included in the groundwater monitoring is some  
5 monitoring of private drinking water wells in the  
6 area. We would sample, and we have in the past  
7 sampled anybody's well who asks us for it. But we  
8 don't sample for all of the things required --  
9 we're not sampling for coliforms. We're just  
10 looking for radioactivity. We want to make sure  
11 that they understand, that's all we do is the  
12 radioactivity side.

13 Our results of that sampling of private  
14 drinking water wells in the area, as well as the  
15 on-site and off-site monitoring that we do as part  
16 of our comprehensive program, indicates that  
17 there's been no private drinking water wells that  
18 have been affected by the disposal site's  
19 operation.

20 [Reference: PowerPoint Slide 16]

21 Well, Mike wanted me to edit this slide to  
22 eliminate it. He says, "They already know all  
23 that," which was the --

24 [Laughter]

25 -- various regulatory agencies. But I use it

1 as a segue to talk about the Department of Health  
2 and Environmental Control, because I think it's  
3 fair to observe that under the Atlantic Compact  
4 Act, the site is both technically and commercially  
5 regulated, between setting prices and determining  
6 allowable costs and the technical regulation that's  
7 still in place from the Department of Health and  
8 Environmental Control.

9 [Reference: PowerPoint Slide 17]

10 The ways that they exercise that regulation  
11 are several. First of all, we have a license that  
12 has about 108 different license conditions that we  
13 have to comply with. We comply with those license  
14 conditions generally through procedures that  
15 implement the license requirements, as far as the  
16 disposal site. So for example, the license has  
17 certain criteria and we have a waste acceptance  
18 criteria procedure that customers have to comply  
19 with before we can bring the waste in here.

20 The inspections that are done, there is an on-  
21 site inspector here every day that has to look at  
22 each shipment before it's released for disposal.  
23 We'll talk about that a little bit in the parking  
24 lot when we go out, because that's an important  
25 sequence before we can do anything with the

1 shipment that arrives; it has to be inspected by  
2 our health physics technician, it has to be  
3 inspected by the Department of Health and  
4 Environmental Control on-site inspector, and our  
5 Licensing Department has to review the manifest and  
6 the rest of the paper package that comes with that  
7 shipment to assure us that it meets our waste  
8 acceptance criteria.

9 On a weekly basis, one of the engineers from  
10 Columbia will come to the disposal site and take an  
11 overview of what the -- what I would call the civil  
12 engineering conditions, the general conditions of  
13 the site. And if there's any operations in  
14 progress at that particular time, they may observe  
15 that, as well. But it's just a general, week-to-  
16 week overview of how the site conditions are.

17 Then on an unannounced, twice-a-year basis,  
18 the rest of the staff, six or eight people, come  
19 down for about a week to look at our compliance  
20 with all of the license conditions. Is the  
21 documentation correct, are we meeting our  
22 requirements from our procedures, as well as the  
23 requirements from the license conditions.

24 [Reference: PowerPoint Slide 18]

25 I talked earlier about long-term financial

1           assurances, and I've finally come back to that.  
2           The Decommissioning Trust Fund, as of the end of  
3           September, a little bit over \$10 million is the  
4           balance in there. We have used monies from the  
5           Decommissioning Trust Fund to install the  
6           multilayer caps on top of the trenches. We used  
7           money from the Decommissioning Trust Fund for  
8           tearing down and disposing of five different  
9           structures that were previously located on the  
10          disposal site. When we got into the small site  
11          operation, starting July 1, 2008, those were  
12          structures that were no longer being required, and  
13          we removed them as part of what we called Phase 1  
14          decommissioning.

15                 The Extended Care Maintenance Fund at the same  
16          time was about \$136 million, arguably -- and I must  
17          emphasize the word "arguably" -- enough to provide  
18          for long-term care, maintenance, and monitoring of  
19          the closed site after -- this use of the Extended  
20          Care Maintenance Fund kicks in after the post-  
21          closure observation period and when the license is  
22          turned back over to the State. It's a funding  
23          source for that monitoring and maintaining the site  
24          in perpetuity.

25                                 [Reference: PowerPoint Slide 19]

1                   **PSC STAFF DR. SPEARMAN:** A question?

2                   **MR. LATHAM:** Yes, sir.

3                   **PSC STAFF DR. SPEARMAN:** A few years ago -- I  
4                   can't remember how many. but one of the economic  
5                   downturns in the State -- the Legislature took  
6                   money from the fund. Was that put back in?

7                   **MR. LATHAM:** It was. The fund has been  
8                   restored to what it would have been, had that not  
9                   occurred. The unfortunate part about the Extended  
10                  Care Maintenance Fund is it's not a trust fund.  
11                  The Decommissioning Trust Fund, on the other hand,  
12                  is truly a third-party trust. So it's just the way  
13                  that the two different funds were set up. One is a  
14                  result of our license and the other is a special  
15                  trust agreement.

16                  So, we do have a lot of visitors. We're happy  
17                  to have them, because the more that people know who  
18                  we are, what we do, and how we do it, we feel like  
19                  that's better to have an educated public than not.

20                  You can see the statistics here. The  
21                  surprising one is when we went back and looked at  
22                  the last ten years and we have 25 foreign countries  
23                  represented. That probably is an indicator of some  
24                  development going on in other countries. Most  
25                  recently, we've had a couple of delegations from

1           China, because China is trying to develop their mix  
2           of power between eliminating some of their coal and  
3           putting a good mix together. But they want to see  
4           how we've handled waste over the years. We can  
5           show them how we have handled waste here. They'll  
6           look at whatever they can to identify waste and the  
7           handling of waste.

8           Local community leaders' support. I would be  
9           extremely remiss if I didn't recognize the fact  
10          that over the years the strength of our community  
11          support in and around Barnwell County has been  
12          tremendous. If not for that support, I'm sure that  
13          we wouldn't be standing here talking today. That  
14          public support has been overwhelming. But it cuts  
15          both ways. Some of us live in the community.  
16          Mike's currently a Town Council member in  
17          Williston, at least until they run you off, right?

18                   **MR. BENJAMIN:** [Indicating.]

19                                   [Laughter]

20           **MR. LATHAM:** And I'm on a couple of different  
21          boards and the Economic Development Commission here  
22          in Barnwell, for Barnwell County. So our  
23          participation in the County is one of those things  
24          that works out.

25                   We've paid over the years a lot of taxes, both

1 at the local and the State level. We can't run  
2 away from that fact. But having the ability for  
3 local community leaders to feel free to call me up  
4 if they have a question about something they've  
5 seen, or calls I've gotten in the past when they  
6 saw a truck they thought was doing something it  
7 shouldn't be doing through town, maybe driving too  
8 fast, or didn't have some lights on, or whatever  
9 the circumstance, we're happy to take those kind of  
10 calls and have that kind of dialogue with the  
11 community.

12 [Reference: PowerPoint Slide 20]

13 Now this is one you probably know, as well,  
14 but I'm going to leave that as perhaps a way we can  
15 move on. There are other sources of information,  
16 other than Chem-Nuclear Systems, and those sources  
17 could be from the South Carolina Energy Office or  
18 the Budget & Control Board, or from the Department  
19 of Health and Environmental Control. Recently,  
20 Department of Health and Environmental Control has  
21 made a strong effort to make more information  
22 available and to try to make it be as transparent  
23 as possible with information that's on their  
24 website. For example, you can go to their website  
25 through a couple of links, and you get to a point

1 where you can look at a particular monitoring well  
2 on the disposal site and see how the results from  
3 that monitoring well have changed over the years.  
4 It's interesting, and it makes the information more  
5 available. But that's all -- I've found that the  
6 best source are the individuals, so you get the  
7 information and then perhaps you can talk to the  
8 individuals. They have points of contact there, as  
9 well.

10 Now, subject to your questions, I was going to  
11 propose that we try to sneak out onto the site.  
12 I'm assuming we've got our second van.

13 **MR. BENJAMIN:** I hope so.

14 **MR. LATHAM:** If not, we're in trouble. Yes.

15 **PSC STAFF MS. DULIN::** Can I ask a question?  
16 How do you determine what waste to accept? Is that  
17 at your discretion, or --

18 **MR. LATHAM:** No, we're allowed to take waste  
19 only from Connecticut, New Jersey, and South  
20 Carolina. That's by State law.

21 **PSC STAFF MS. DULIN:** Right.

22 **MR. LATHAM:** We're only allowed to take low-  
23 level radioactive waste, which is part of the  
24 regulation, the 61-73 --

25 **PSC STAFF MS. DULIN:** Right.

1                   **MR. LATHAM:** -- regulation. The materials  
2                   that get shipped to us come with a manifest, survey  
3                   records and documents. We verify the survey  
4                   information. We inspect a randomly selected number  
5                   of packages for freestanding liquid. to make sure  
6                   we're only taking dry, solid material.

7                   **PSC STAFF MS. DULIN:** Uh-huh.

8                   **MR. LATHAM:** So once we meet all of those  
9                   requirements and all those criteria, then we would  
10                  accept the waste for disposal.

11                  **PSC STAFF MS. DULIN:** Okay.

12                  **MR. BENJAMIN:** And each possessor of  
13                  radioactive materials in the United States has to  
14                  be licensed by either the Nuclear Regulatory  
15                  Commission or what's called an agreement state.  
16                  South Carolina entered into the agreement state  
17                  status many years ago. So each generator of  
18                  radioactive material has some regulatory oversight,  
19                  typically have a quality program that includes  
20                  their waste management, and so there's a lot of  
21                  oversight, checks and balances in the generation,  
22                  preparation for shipment, and shipment.

23                  **PSC STAFF MR. RICHARDSON:** But you receive  
24                  stuff from hospitals, dental offices, x-rays and  
25                  that kind of stuff? Or is that too low-level?

1                   **MR. BENJAMIN:** X-rays -- once something is x-  
2                   rayed, it is not radioactive. You go get an x-ray,  
3                   and you're not radioactive. The energy from the x-  
4                   ray dissipates and just goes away. Just like a  
5                   flashlight shone down a long, dark hallway, at some  
6                   point all that light energy is dissipated and is no  
7                   longer visible. Same thing with x-rays. We do  
8                   receive a little bit from hospitals. Because of  
9                   the cost of disposal, a lot of hospitals have gone  
10                  with radioisotopes that have a very short half-  
11                  life, so they can store, let the radioactive  
12                  material decay away and then treat it as non-  
13                  radioactive waste.

14                  **MR. LATHAM:** The bulk of our material does  
15                  come from nuclear power plants. We also get  
16                  materials from academic institutions that do  
17                  research with sources and radioactive material. We  
18                  get it from some industries and from hospitals, to  
19                  some degree, as Mike said.

20                  **PSC STAFF MR. BUTLER:** Jim, could you remind  
21                  us about the differences between, say, Class A, B,  
22                  and C?

23                  **MR. LATHAM:** Good point. The easiest way to  
24                  do that -- the classification of the waste depends  
25                  on the radioisotopes and the concentration. The

1           easiest way is to look at some examples. For Class  
2           A, waste would be rags, tags, bags, compactable  
3           material, the lowest of the specific concentrations  
4           of isotopes. Class B waste would likely be some of  
5           the resins: The polystyrene resin beads that are  
6           used to clean up water in a power plant, some of  
7           those resins would be Class B. Class C is  
8           stainless steel components, metal components. It  
9           could be some of the resins, so there's some  
10          overlap. But generally, stainless steel for Class  
11          C, activated metals; resins for Class B; and dry  
12          active waste for Class A.

13                                   [Brief pause]

14                                   If everybody would like to, we'll go.

15                                   **MR. BENJAMIN:** I've got one thing, before we  
16                                   go. We're going to divide up into two vans.  
17                                   Earlier, I talked about monitoring people. These  
18                                   are self-reading pocket dosimeters [indicating].  
19                                   There's a small radiation detection device inside.  
20                                   As radiation enters that, it ionizes, takes an  
21                                   electron, throws it off, there's an electrical  
22                                   pair, and a thin piece of foil discharges and moves  
23                                   away from another piece of foil -- you can see that  
24                                   when you look through this end into a source of  
25                                   light; there will be a scale and you'll see that

1 line -- which measures the amount  
2 of millirem received by whoever is holding it.  
3 Since we're all going to be in two vans, everybody  
4 grouped together, what any one of us gets, everyone  
5 gets.

6 **MR. LATHAM:** I also failed to do one of our  
7 administrative tasks, which was this sheet that's  
8 going around. We'll catch everybody before we  
9 depart. But it's an acknowledgment of the Visitor  
10 Guide. The insurance guy asked me one time, says,  
11 "How do you know everybody's been briefed on this?"  
12 "Here's the Visitor Guide." Then he says, "How do  
13 you know they got it?" "Well, because I tell  
14 them." "Nah, that's not good enough." So I beg  
15 your indulgence for one more piece of paper.

16 **PSC STAFF MS. SANDS:** Jim, where is the  
17 nearest or closest private well, that you have  
18 sampled possibly, to the facility?

19 **MR. LATHAM:** The nearest one is probably St.  
20 Paul's Missionary Baptist Church. We'll see that  
21 when we go out on the site. It's about 100 yards  
22 from the site boundary, if that. Maybe less. When  
23 we go on the site, at one point we'll be able to  
24 see one of the home sites, and then St. Paul  
25 Missionary Baptist Church. Just on the other side

1 of the Missionary Baptist Church is another home  
2 site. So those are probably the nearest ones.

3 **PSC STAFF DR. SPEARMAN:** Have you had to beef  
4 up security at all after 9/11?

5 **MR. LATHAM:** We took some additional measures.  
6 We increased the number of controls, to use kind of  
7 a buzzword. So, we have some changes. I think as  
8 I said in one of the hearings, I won't tell you  
9 what they are.

10 [Laughter]

11 Well, let's -- we'll go -- we'll come back in  
12 here afterward, so we can answer some questions.  
13 Mike and I will have the challenge of driving and  
14 then talking to the points that we had on the sheet  
15 that I showed Jeff earlier in the week. I hope  
16 that's not too stilted, but bear with us; we are  
17 learning.

18 **ORS STAFF MR. NELSON:** You can blame me for  
19 that. I would appreciate it, while we're on the  
20 record still, if you all would please -- if you  
21 have any questions, please try to hold them till we  
22 get back in here, so we can put it on the record,  
23 because, as you all know, this is an allowable ex  
24 parte so we have to have it all on the record. So  
25 if you could just try and hold off, I'd appreciate

1           it.

2           **MR. BENJAMIN:** You can take your Visitor Guide  
3           and pen, and write down your questions, to help  
4           your memories.

5           **MR. LATHAM:** We said earlier that, because  
6           we're all going to be together in the van, you  
7           won't need eyeglass prote- -- or, safety glasses.  
8           You don't need hard hats, and you don't need steel-  
9           toe shoes. We'll all stay together. If I don't  
10          keep my hard hat on, I'll forget it.

11                           [Laughter]

12                           [WHEREUPON, the participants proceeded to  
13                           tour the disposal site in two groups, one  
14                           of which was led by Mr. Latham and  
15                           follows verbatim hereinafter, while the  
16                           other was led by Mr. Benjamin, who  
17                           followed an identical script]

18          **MR. LATHAM:** Can everybody hear? All right.  
19          We are going to start in passenger vans located in  
20          -- this is what we call the Controlled Area parking  
21          lot. Waste shipments that arrive here are parked  
22          here awaiting those two inspections that we talked  
23          about a little bit earlier: one inspection by our  
24          health physics technician, and the other by the on-  
25          site Department of Health and Environmental Control

1 inspector.

2 Before those two inspections can occur, our  
3 Licensing Department has to review the paperwork --  
4 the manifest, shipment manifest; the survey work;  
5 the other documentation that comes with the  
6 shipment -- to verify that it meets our waste  
7 acceptance criteria.

8 After the Licensing Department review and  
9 those two inspections, the waste shipment is  
10 released for movement into the disposal site area.

11 As we move inside the fenced area, we're  
12 generally moving inside the area that's licensed,  
13 the 235 acres that are licensed for disposal. As  
14 we go through that gate, you can see this area  
15 that's directly ahead, that's a closed trench area.  
16 A multilayer cap has been installed and you can see  
17 the gravel toe -- the gravel toe at the edge of the  
18 drain layer.

19 As we move down this gravel road toward the  
20 cask maintenance building off to the right, you can  
21 also begin to see some of the older completed  
22 trenches, the capped trenches, further to the  
23 right. Those are the oldest trenches on the site;  
24 they were capped, starting in 1990.

25 You also can see that the site is generally

1           graded toward the west retention pond. We'll stop  
2           there for a minute.

3           As additional completed trenches are capped,  
4           we have to manage more and more surface-water  
5           runoff. The 23-acre pond to our left is sized to  
6           handle more water than the rainfall from two  
7           consecutive 100-year rain events in a week's  
8           period.

9           The cask maintenance building to the right,  
10          with the large roll-up doors, is the location where  
11          waste shipments are prepared for offloading. After  
12          the CMB -- after the preparation at the CMB, the  
13          transportation cask, flatbed, or closed van would  
14          move to the disposal trench.

15          Now, as we move from this area, we'll move  
16          toward Trench 91, where we disposed of those four  
17          steam generators from the Salem plant in New  
18          Jersey. You can also see some additional closed  
19          trenches to the right, monitoring wells in the  
20          vertical, and standpipes that are located at a  
21          little bit of a slant.

22          Trench 91 is -- this is the location where we  
23          disposed of those four steam generators. As we  
24          move onto the Trench 91 area, you can see the  
25          mounded area directly ahead is the area that has

1           been backfilled over the steam generators. We  
2           don't have the multilayer cap on here yet, because  
3           we have to -- this part of the trench, the flatter  
4           part of the trench, will have to be re-excavated,  
5           filled with waste, and then covered with backfill,  
6           before we can put the multilayer cap on this area.

7           Now, from Trench 91, we move onto the Phase 2  
8           capped area. As we talked about before, we have  
9           119 acres of multilayer caps that have been  
10          installed over 127 completed trenches. Since 1990,  
11          we have completed nine different phases of capping  
12          work.

13          Now, moving from the Phase 2 cap over here  
14          onto Phase 3, we can begin to see more of these  
15          standpipes and monitoring wells. The standpipes  
16          are always at a bit of an angle. They're obviously  
17          labeled, but a bit of an angle for the standpipes,  
18          and the monitoring wells will be more vertical.

19          The other thing that may be instructive is, as  
20          we look around at the tree line, that's about the  
21          235 acres that are licensed for disposal. It gives  
22          us some idea of the site.

23          As we move toward the east here on the Phase 3  
24          cap, over to the left we can see one home site, and  
25          then down to the right, the first structure we can

1 see down to the right is the St. Paul Missionary  
2 Baptist Church. There's another home site just the  
3 other side of that one. You've got to be at the  
4 right angle. Sorry, the sun is kind of in the way;  
5 you can't see the steeple as well, but you can see  
6 the roof of the church down there. The home site  
7 that we can see through the trees over there to the  
8 left was put here several years after the disposal  
9 site was in operation, and the St. Paul Missionary  
10 Baptist Church is the other one down there, so  
11 those are probably the two closest private drinking  
12 water wells, one across the street and one at the  
13 church.

14 Over to the left is one of our perimeter  
15 monitoring stations. Each of those stations -- we  
16 have 11 of them around the site. Each one provides  
17 the ability to monitor for airborne -- in that  
18 little house there's a high-volume air sampler --  
19 airborne direct radiation with the TLD on the  
20 fence, and groundwater monitoring wells inside the  
21 fence, as well as monitoring for vegetation.

22 Now, as we get up here on the Phase 9 cap, you  
23 can see these standpipes a little more closely, and  
24 there are some monitoring well locations, the ones  
25 that are more vertical.

1                   Now, we get at the southern end here of the  
2                   Phase 9 cap, and we can see Trench 98. This is the  
3                   current A/B/C trench. You see the sand, the  
4                   cylindrical disposal vaults, the rectangular vault  
5                   that we've used recently, and then the sand around  
6                   the vaults, and then a little bit of a layer of  
7                   clay over top of the sand. The sand, we talked  
8                   about before, eliminates some of that differential  
9                   settlement and fills in the gaps around the vaults.

10                  Now, as I go back toward the ramp, the trench  
11                  to our right is 150 feet of Trench 99 that's ready  
12                  for use when Trench 98 is full. We would fully  
13                  expect to be using this Trench 99 before the end of  
14                  the fiscal year.

15                  Now along the southern edge of this Trench 86  
16                  area, you can see some more of the cap, what the  
17                  cap configuration is.

18                  At the exit gate here, one of our health  
19                  physics technicians will frisk -- what we call  
20                  frisk -- the tires of the van to ensure there is no  
21                  radioactive contamination on the tires before the  
22                  vehicle leaves the disposal site. That happens for  
23                  every vehicle that comes on the disposal site, we  
24                  frisk the tires and make sure we're not spreading  
25                  any contamination off the site.

1 [WHEREUPON, the site tour was concluded,  
2 followed by the participants returning to  
3 the conference room following a brief  
4 recess]

5 **MR. LATHAM:** Anyhow, I hope that at least got  
6 us around -- I put the configuration slide up here  
7 [indicating]. If there are any questions, we could  
8 perhaps come back to those. It's new territory for  
9 Mike and me to be that quiet for that long.

10 **MR. BENJAMIN:** Do I need to turn in the ones  
11 that asked questions after they were told not to?

12 **MR. NELSON:** I need a list and Social Security  
13 Numbers, yeah.

14 [Laughter]

15 **MR. BENJAMIN:** We did have one question.

16 **MR. LATHAM:** Okay, go ahead.

17 **MR. BENJAMIN:** And I think I wrote this down  
18 correctly. We were on the west side of 86, just as  
19 we ended, and the question was how long has the  
20 trench been filled and capped.

21 **MR. LATHAM:** We finished capping 86 -- we  
22 finished the trench in 2008. The capping came  
23 along after that, so probably about 2009 we  
24 finished. This summer, the challenge was to get  
25 the grass to grow, but -- so it's been a couple of

1 years.

2 **PSC STAFF DR. SPEARMAN:** Is there any intent  
3 to ever use this for something other than growing  
4 grass?

5 **MR. LATHAM:** No. No, I think the issue is  
6 this, that as time goes along -- there's an  
7 institutional control period, but nominally we talk  
8 about 100 years. The Class A waste will decay to  
9 background levels within 100 years, Class B within  
10 300 years, Class C within 500 years. But there  
11 still would be measurable, detectable  
12 radioactivity, so it simply won't be useful for  
13 anything else. There may be some surface  
14 activities that could go on: walking trails.

15 **MR. BENJAMIN:** Golf course.

16 **MR. LATHAM:** There are those who think a golf  
17 course would be right, but even that wouldn't work  
18 very well. So I think the answer is, 235 acres,  
19 for the amount of waste that's here, is a  
20 relatively small investment. This little notch  
21 [indicating], for example, is not part of the  
22 licensed area, just because of the land that was  
23 available when the titles were procured for the  
24 licensed area, but it's unlikely that that is going  
25 to get included. It's the same geology, but it's

1                   unlikely that it will be expanded to include that  
2                   area.

3                   **PSC CHAIRMAN HOWARD:** Well, my question,  
4                   basically, with the -- let's just say with the  
5                   increased interest in nuclear generation and  
6                   particularly the two plants going up in South  
7                   Carolina, and possibly three -- I don't know about  
8                   Connecticut and Massachusetts [sic] -- do you see a  
9                   larger capacity need or do you see more low-level  
10                  waste coming in?

11                  **MR. LATHAM:** The remaining capacity here is  
12                  about a million cubic feet. At 10,000 cubic feet a  
13                  year, which is our current -- it's 100, 150 years  
14                  out the road. But somewhere, somehow along the  
15                  line, as the nuclear renaissance occurs, part of  
16                  that renaissance has to include how we're going to  
17                  handle the waste. It's not just low-level waste;  
18                  how are we going to handle high-level waste? All  
19                  of those questions become very complex,  
20                  particularly when politics is involved.

21                  **PSC CHAIRMAN HOWARD:** We've got high-level  
22                  waste controlled. He's got the answer to that  
23                  [indicating Vice Chairman Wright]. They let you  
24                  handle low-level waste, and he'll handle high-level  
25                  waste. We'll be okay.

1                   **MR. LATHAM:** Sounds like a deal.

2                                   [Laughter]

3                   **PSC COMMISSIONER MITCHELL:** To change just a  
4 little bit of the question --

5                   **MR. LATHAM:** Sure.

6                   **PSC COMMISSIONER MITCHELL:** -- could you just  
7 give me a ballpark figure, since you've been in  
8 operation, as to the amount of funds that might  
9 have been contributed to the State, versus the  
10 amount of funds contributed to the County, or just  
11 -- I know you don't know the exact amount. Just  
12 curious.

13                   **MR. LATHAM:** No, for a number of years the  
14 amount of taxes that we paid that ended up coming  
15 back to the County was about 15 percent of the  
16 County's budget. It's not that way this year. It  
17 dropped off severely. But prior to that, the  
18 amount of money that went to the State was much  
19 more than that. For the ten years between 1995 and  
20 2005, we've contributed a little bit over \$450  
21 million to the Children's Education Endowment Fund.  
22 Then there was a time when it wasn't earmarked  
23 exactly for that, and continued to go into the  
24 State coffers, but it was at a lower amount because  
25 the volumes had continued to decline.

1                   **PSC COMMISSIONER MITCHELL:** So that was as of  
2                   last year, \$450 million?

3                   **MR. LATHAM:** Yes, sir.

4                   **PSC COMMISSIONER MITCHELL:** Thank you.

5                   **PSC STAFF MR. BUTLER:** I have a question.

6                   **MR. LATHAM:** Sure.

7                   **PSC STAFF MR. BUTLER:** We passed a number of  
8                   trenches, most of which had the monitoring pipes,  
9                   the PVC, coming up. How are those used? In other  
10                  words, what are you monitoring for and how do you  
11                  go about monitoring?

12                  **MR. LATHAM:** For the standpipes that are kind  
13                  of at an angle --

14                  **PSC STAFF MR. BUTLER:** Yeah.

15                  **MR. LATHAM:** -- we monitor those once a  
16                  quarter, looking for water in the sump: Is there  
17                  water that's accumulated in the sump; and if there  
18                  is any water, is it radioactive?

19                  **PSC STAFF MR. BUTLER:** I see.

20                  **MR. LATHAM:** So kind of a twofold question.  
21                  But it's looking for radioactive -- the performance  
22                  of the closed trench, including the tap. Most of  
23                  those we see nothing, no water. And we'll see no  
24                  radioactivity if there's no water.

25                  The vertical standpipes that are in the

1 groundwater, at different levels of the  
2 groundwater, monitor for much the same thing, but  
3 they can also monitor for non-radiological  
4 contamination, looking for metals, volatile  
5 organics, those kind of things. But that's part of  
6 the quarterly monitoring program, as well.

7 **PSC STAFF MR. BUTLER:** Okay. Another question  
8 for you: They checked our tires as we came back  
9 out, I assume for radiation levels?

10 **MR. LATHAM:** Looking for surface contamination  
11 on the tires, if there were any. We have every  
12 confidence that there isn't any, but it's part of  
13 our normal procedures to frisk -- frisk the  
14 tires or surveying the tires of every vehicle that  
15 comes off the site at least provides us that  
16 additional assurance that there isn't any spread of  
17 contamination off the site. Had we gotten out of  
18 the vehicle and walked around, we would have had to  
19 go through much the same thing for our hands and  
20 feet and through a portal monitor for personnel  
21 monitoring.

22 **PSC STAFF MR. BUTLER:** What would you have  
23 done, say, just for example, if he had found an  
24 unusual amount of radiation on the tires coming  
25 out? Is there some procedure you follow?

1                   **MR. LATHAM:** First of all, we would have all  
2 immediately exited the vehicle, to make sure none  
3 of us were contaminated. Secondly, we would go  
4 back over the path of where we went, take a lot of  
5 surveys, to figure out where was the contamination,  
6 compare that to records that we had from routine  
7 surveys, and try to isolate the source of the  
8 contamination.

9                   **PSC STAFF MR. BUTLER:** Okay, thank you.

10                  **PSC CHAIRMAN HOWARD:** On your monitoring of  
11 the wells, have you ever had -- is that voluntary  
12 or is it EPA-required for you to monitor the  
13 drinking wells?

14                  **MR. LATHAM:** No, it's just what we do; it's  
15 the right thing.

16                  **PSC CHAIRMAN HOWARD:** Well, have you ever  
17 found any -- has any wells ever indicated there was  
18 any kind of radiation?

19                  **MR. LATHAM:** No -- well, yes, we had one.  
20 There was a lady here in Snelling that had a single  
21 well providing several trailers with drinking  
22 water. That well came up positive for radon. It  
23 wasn't from us. It was naturally occurring radon,  
24 and she had to put a new well in.

25                  **PSC CHAIRMAN HOWARD:** How far away do you have

1 to monitor or do you all voluntarily monitor? A  
2 mile? Or two miles out?

3 **MR. LATHAM:** The furthest away that we have --  
4 we have, like one of those perimeter environmental  
5 stations, basically that same configuration, at the  
6 airport. That's nine miles?

7 **MR. BENJAMIN:** Something like that.

8 **MR. LATHAM:** About nine miles away. Then,  
9 obviously, we compare notes with -- our neighbor  
10 going to the west is Savannah River Site, so we  
11 sometimes compare notes with them.

12 Yes, sir.

13 **PSC COMMISSIONER MITCHELL:** Yes, I have one  
14 more. As we're sitting here today, we know the  
15 intake is growing smaller and smaller. If no law  
16 changes, what is the exact forecast as far as the  
17 future, as far as a year, or two, three from now?

18 **MR. LATHAM:** The forecast for --

19 **PSC COMMISSIONER MITCHELL:** As far as the  
20 operation of the facility.

21 **PSC COMMISSIONER HAMILTON:** Life expectancy.

22 **MR. LATHAM:** I would anticipate that if we  
23 continue to operate for the three-state Atlantic  
24 Compact --

25 **PSC COMMISSIONER MITCHELL:** Right.

1                   **MR. LATHAM:** -- that, based on what the  
2                   utilities have been telling us on this 7-10,000 --  
3                   maybe every now and again, a large component or two  
4                   -- you know, there may be some things come down  
5                   like that -- that we still have on the order of 100  
6                   years of capacity. Now, some of that capacity is  
7                   going to require us to construct some trenches in  
8                   between other trenches. So it's not a trivial  
9                   construction or civil engineering matter, but we  
10                  just completed an estimated -- re-estimated the  
11                  site capacity, and we're looking at just a little  
12                  bit over a million cubic feet, so that would be in  
13                  the 100 to 150 years.

14                  **PSC COMMISSIONER MITCHELL:** But I guess what I  
15                  was specifically saying -- I understand that's the  
16                  operation that you could operate. But the actual  
17                  intake that's coming in, do you foresee -- what do  
18                  you foresee three years from now, as far as the  
19                  actual intake to the operation?

20                  **MR. LATHAM:** About the same, between 7,000 and  
21                  10,000 cubic feet each year, basically because  
22                  that's what we call routine operational waste from  
23                  the power plants.

24                  **PSC COMMISSIONER MITCHELL:** And that should  
25                  continue --

1           **MR. LATHAM:** As long as the power plants are  
2           operating, it's --

3           **PSC COMMISSIONER MITCHELL:** Okay, I got you.

4           **MR. LATHAM:** -- likely to continue.

5           **PSC CHAIRMAN HOWARD:** I was also expecting --  
6           you know that trench where you have five or six  
7           canisters where we stopped and looked at, I guess  
8           in my mind I was expecting to see some kind of a  
9           liner in there, but there was no liner.

10          **MR. LATHAM:** No, there's no liner for a couple  
11          of reasons. One is that the clay in which the  
12          material is placed is fairly -- it doesn't perk  
13          very well through the clay. But more importantly,  
14          we don't want water to bathtub up around the waste,  
15          because the only credible way for the waste -- for  
16          the radioactivity to move from where we place it,  
17          since it's all dry, solid material, is to move into  
18          water. So if we can keep it to the point where it  
19          either slowly percolates out, or ultimately doesn't  
20          get in there to begin with, that's where we've gone  
21          with that. But there's not a liner -- there are no  
22          liners on any of the trenches, on the bottom. The  
23          liner comes on the other end, to keep the cap dry.

24          **PSC STAFF MS. BALLENTINE:** What is the closest  
25          facility similar to this? Where would it be, in

1           this State or --

2           **MR. LATHAM:** No, there's none other east of  
3           the Mississippi. There are a couple -- the closest  
4           is probably something that they've done at Savannah  
5           River Site. But there are no other commercial low-  
6           level radioactive waste disposal sites.

7           **MR. BENJAMIN:** The closest one would be  
8           Washington State.

9           **MR. LATHAM:** Yeah. And the company runs a  
10          facility at Clive, Utah, that's 60 miles west of  
11          Salt Lake City, but that's a different -- it takes  
12          only Class A waste, and it's a different  
13          arrangement. Instead of the caps with grass on top  
14          of it, it's done with rock.

15          **PSC STAFF MS. BALLENTINE:** So the states on  
16          the East Coast that aren't part of this compact,  
17          what do they --

18          **MR. LATHAM:** The generators in those states  
19          have to store the waste at their location. There  
20          are some that are now moving toward beginning to  
21          look at can they store it in Texas. There's a site  
22          in Texas that hasn't been built yet but is in the  
23          last stages -- I guess last stages, fair enough to  
24          say?

25          **MR. BENJAMIN:** Uh-huh.

1                   **MR. LATHAM:** -- of licensing, so they have  
2 begun to store some waste there.

3                   **VICE CHAIRMAN WRIGHT:** Is that the salt mines?

4                   **MR. LATHAM:** No, it's going to be shallow-  
5 trench burial. A little deeper than these  
6 trenches, but shallow-trench burial, nonetheless.

7                   **MR. BENJAMIN:** Waste Control Specialists, in  
8 Andrews, Texas. They just got their radioactive  
9 materials license, and I think they got their bond  
10 referendum passed, so they're starting -- they have  
11 started or will soon start construction.

12                   **PSC CHAIRMAN HOWARD:** Is there any chance of  
13 any other states joining the Atlantic Compact, or  
14 is that pretty well limited?

15                   **MR. LATHAM:** Well, they could, but the  
16 provision is that, if another state joins, they  
17 have to immediately begin a siting effort for a  
18 low-level radioactive waste disposal site in their  
19 borders.

20                   **PSC CHAIRMAN HOWARD:** In their state?

21                   **PSC VICE CHAIRMAN WRIGHT:** That's what  
22 happened with this one. North Carolina never did  
23 build.

24                   **MR. LATHAM:** Yes, sir.

25                   **PSC COMMISSIONER WHITFIELD:** I think you

1 probably answered this question, that maybe jog my  
2 memory. Before the Atlantic Compact was signed  
3 with the three states -- and I saw the dip on your  
4 graph; I think you said you're getting about 7-  
5 10,000 a year now -- what was your volume before  
6 that? That was signed in 2000, right?

7 **MR. LATHAM:** Right, it was signed in 2000.  
8 Before that, we were in the ballpark of 170-200,000  
9 cubic feet a year.

10 **PSC COMMISSIONER HAMILTON:** North Carolina  
11 basically killed the compact, didn't they?

12 **MR. LATHAM:** Well, they didn't make any  
13 progress.

14 [Laughter]

15 And so that created a circumstance where South  
16 Carolina pulled back out of that, and on it went.  
17 So it's an interesting social studies exercise, but  
18 it doesn't seem to -- there haven't been very many  
19 sites developed since the compact thing. Texas is  
20 the first one to come along.

21 **PSC CHAIRMAN HOWARD:** Will your PowerPoint be  
22 available for us, or is that confidential?

23 **MR. LATHAM:** Yes. In fact -- well, I'll give  
24 a copy to Jeff and a copy to Jo on a disc, and see  
25 if we can't -- I think he's got it, anyway.

1                   **ORS STAFF MR. NELSON:** I think we already have  
2                   it. Mr. Chairman, I think Jo has a copy, and I  
3                   have a copy.

4                   **PSC VICE CHAIRMAN WRIGHT:** One last question.

5                   **MR. LATHAM:** Yes, sir.

6                   **PSC VICE CHAIRMAN WRIGHT:** If the PFS facility  
7                   in Utah is ever built and used -- because I know  
8                   it's not dead, even though there's still a lot of  
9                   politics at play -- is that all greater than Class  
10                  C waste for that facility?

11                  **MR. LATHAM:** For Yucca Mountain?

12                  **PSC VICE CHAIRMAN WRIGHT:** For any waste. I  
13                  mean, obviously, for Yucca Mountain. For stuff  
14                  designated to go there, if it's ever opened. I  
15                  know it's got its license, but politics are  
16                  stopping it.

17                  **MR. LATHAM:** Yeah, I don't know. I assumed it  
18                  was always greater than Class C. Fuel and greater-  
19                  than-Class-C materials. But I don't know if  
20                  there's any provision for something else.

21                  **MR. BENJAMIN:** Which site are you talking  
22                  about?

23                  **PSC VICE CHAIRMAN WRIGHT:** The PFS facility  
24                  that was -- it's a private facility --

25                  **MR. BENJAMIN:** In Utah.

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**PSC VICE CHAIRMAN WRIGHT:** -- in Utah.

**MR. BENJAMIN:** All right. That was for used nuclear fuel.

**PSC VICE CHAIRMAN WRIGHT:** So all greater than Class C.

**MR. BENJAMIN:** Yes.

**PSC VICE CHAIRMAN WRIGHT:** Okay.

[Brief pause]

**MR. LATHAM:** Well, I'd like to say thank you again. I appreciate your time and making the trip here. You see we're not on the way to anywhere.

[Laughter]

But, you know, there are a lot of things good about that.

**PSC CHAIRMAN HOWARD:** Thank you, Jim.

**MR. LATHAM:** I went to New York a couple weeks ago, and I'm glad I'm back here.

[Laughter]

**PSC COMMISSIONER HAMILTON:** We enjoyed it. Thank you, sir.

[WHEREUPON, at 11:35 p.m., the allowable ex parte proceedings in the above-entitled matter were adjourned.]

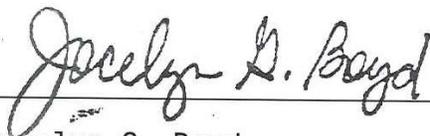
C E R T I F I C A T E

I, Jo Elizabeth M. Wheat, CVR-CM-GNSC, do hereby certify that the foregoing is, to the best of my skill and ability, a true and correct transcript of all the proceedings had in an allowable ex parte briefing held in the above-captioned matter before the Public Service Commission of South Carolina.

Given under my hand, this the 10th day of November, 2010.

  
\_\_\_\_\_  
Jo Elizabeth M. Wheat, CVR-CM-GNSC

ATTEST:

  
\_\_\_\_\_  
Jocelyn G. Boyd,  
CHIEF CLERK/ADMINISTRATOR