

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF DEP

ENVIRONMENTAL QUALITY BOARD

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IN RE: PROPOSED RULEMAKING

BENEFICIAL USE OF COAL ASH

* * * * *

BEFORE: Michael G. Forbeck, Chair

HEARING: Monday, December 7, 2009

1:00 p.m.

LOCATION: DEP Southwest Regional Office

400 Waterfront Drive

Pittsburgh, PA 15222

WITNESSES: Steve Dixon, Richard Shaffer, Joe Osborne,
John Foreman, Randy Francisco, Lisa Graves-
Marcucci, Jeff Chesler, Russ Forsythe,
Rachel Martin, Phil Coleman

Reporter: Diana L. Inquartano

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NONE OFFERED

P R O C E E D I N G S

CHAIR MICHAEL G. FORBECK:

Okay. Let's get started. Welcome everybody, this afternoon. I would like to welcome you. This is Environmental Quality Board's Public Hearing on the proposed regulations regarding the beneficial use of coal ash. My name is Mike Forbeck. I'm the environmental program manager here for Waste Management in the Southwest Regional office. I'm here representing the EQB today at today's hearing. And I officially call this hearing to order at one o'clock p.m.

The purpose of this hearing is for the EQB to formally accept testimony on the proposed regulations concerning the beneficial use of coal ash. In addition to this hearing, the EQB will also hold hearings on this proposal on Tuesday, December 8th, 2009 in Ebensburg; Wednesday, December 9th, 2009 in Pottsville; and Thursday, December 10th, 2009 in Harrisburg. The proposed rule making includes amendments to 25 PA code Chapter 287 and the addition of Chapter 290 for the establishment standards, procedures and requirements through the beneficial use of coal ash. Provisions of the proposal address the

1 operating requirements necessary for the beneficial
2 use of coal ash, including certification guidelines
3 for the chemical and physical properties of coal ash.
4 Water quality monitoring at sites for coal ash is
5 beneficially used, requirements for the storage of
6 coal ash in piles and surface of impoundments and
7 improvements in reporting requirements to track
8 volumes at the locations of sites where coal ash is
9 beneficially reused.

10 The Department initiated extensive
11 outreach to the development of this proposed
12 rulemaking, including presenting the rulemaking for
13 review and comment, the Solid Waste Advisory Committee
14 in March of 2009, and the Mining and Reclamation
15 Advisory Board in April of 2009. Okay. In order to
16 give everyone an equal opportunity to comment on this
17 proposal, I would like to establish the following
18 ground rules.

19 I would first call upon the witness. The
20 witness is pre-registered to testify for this hearing.
21 After hearing from these witnesses, I will provide any
22 other interested parties the opportunity to testify as
23 time allows. The testimony is limited to ten minutes
24 for each witness. Organizations are requested to
25 designate one witness to present testimony on its

1 behalf. Each witness is asked to submit three written
2 copies of his or her testimony to aid in the
3 transcribing of the hearing. And, please, I would
4 appreciate it if you would hand me those copies prior
5 to presenting your testimony. When you come up for
6 testimony, please state your name, address and
7 affiliation for the record, prior to presenting
8 testimony. The EQB would appreciate your help by
9 spelling names and terms that may not be generally
10 familiar, so that the transcript will be as accurate
11 as possible.

12 Because the purpose of the hearing is to
13 receive comments on this proposal, the EQB or DEP
14 staff question witnesses. However, the witnesses may
15 not question the EQB or the DEP staff. In addition,
16 we'll replace the oral testimony presented at today's
17 hearing. Interested persons may also submit written
18 comments on this proposal. All comments must be
19 received by the EQB on or before December 22nd, 2009.
20 Comments should be addressed to the Environmental
21 Quality Board, P.O. Box 8477, Harrisburg, PA,
22 17105-8477. I'll have this available if you haven't
23 written this down. Comments may also be emailed to
24 GregComments@state.pa.us. All comments received at
25 this hearing, as well as written comments received by

1 December 22nd, 2009, will be considered by the EQB and
2 will be concluded in a comment in response to
3 occupant. This will be prepared by the Department and
4 reviewed by the EQB prior to the board taking its
5 final action on this regulation. Anyone interested in
6 receiving a copy of the transcript of today's hearing
7 may contact the EQB for further information. Okay.
8 With that, I would like to call upon the first witness
9 who signed up; it is a Steve Dixon.

10 MR. DIXON:

11 My name is Steve Dixon. I'm employed by
12 RRI Energy and work in Canonsburg, Pennsylvania. I
13 have over 20 years of experience in the management of
14 coal combustion products. I am the current chair of
15 the EPGA's solid waste subcommittee, who I represent
16 today. The EPGA, which is the Electric Power
17 Generation Association, is a regional trade
18 association of electric generating companies with
19 headquarters in Harrisburg.

20 The EPGA members own and operate tens of
21 thousands of megawatts of coal and waste coal
22 generating capacity in Pennsylvania. And I have
23 decades of experience managing, including beneficially
24 using millions of tons of ash and other coal
25 combustion products each year. Although my

1 reclamation is the dominant beneficial use of coal ash
2 in the Commonwealth, members have also beneficially
3 used coal use and applications such as in the
4 manufacture of cement and concrete, and the
5 development of grouts used for mine subsidence
6 control. Two recent mine subsidence control projects
7 in Westmoreland County include using a grout mix that
8 incorporated coal ash to fill an old deep mine under a
9 section of the Pennsylvania Turnpike, while the other
10 project will stabilize an underground mine so that a
11 community can construct a new sewage treatment plan.

12 In Washington County, coal ash was used
13 to stabilize an old mine under the site where my son's
14 middle school was constructed. In another beneficial
15 use project, coal ash was used to control an
16 underground mine fire in Fayette County. Lastly, coal
17 ash was beneficially used in Westmoreland County to
18 construct a safety area at the end of an airport
19 runway. The reason I selected the above projects is
20 to demonstrate that there is a wide range of
21 applications of which coal ash can be beneficially
22 used.

23 So the proposed regulations, particularly
24 those relating to coal ash certification, must reflect
25 the diversity of the actual beneficial use.

1 Certainly, ash to be incorporated into a product such
2 as concrete should not be assessed in the same manner
3 as ash being directly placed on the ground such as in
4 a large structural fill or a mine reclamation project.
5 As noted above, using coal ash for mine reclamation is
6 the dominant beneficial use in Pennsylvania.
7 Logically, if opposed regulations mirror this fact and
8 considerable attention is dedicated to the portions of
9 Chapter 290 that pertain to this practice. Therefore
10 much of my remaining comments will address these
11 particular regulations.

12 Clearly, the proposed regulations reflect
13 the findings and recommendations contained in the
14 March 1st, 2006, National Academy of Sciences Report
15 on managing coal combustion and residues in mines.
16 This report concludes that the main advantages of
17 beneficially using coal ash in mine reclamation are;
18 they can assist in meeting reclamation goals, such as
19 remediation of abandoned mine lands, and it avoids the
20 need relevant to landfills and impoundment, to disrupt
21 undisturbed sites.

22 I'd like to add to the above findings
23 that in the case of our State, coal ash is derived
24 from a fuel that is home-grown, provides reliable and
25 low cost energy, thousands of jobs, and the byproduct,

1 coal ash, can be safely used to address the most wide
2 spread water pollution problem in the state, acid mine
3 drainage. There are also safety benefits derived from
4 using coal ash to address the dangerous conditions
5 that can exist at abandoned mine sites, both surface
6 and underground. So there are many positives to
7 beneficially using coal ash in Pennsylvania. It's
8 clearly sound public policy to encourage the
9 beneficial use of these materials wherever and
10 whenever possible.

11 Returning to the NAS report, I'd like to
12 note that in the report they refer to coal combustion
13 products as CCRs, or coal combustion residues. There
14 are several recommendations of those. CCRs should be
15 characterized prior to significant line placement and
16 with each new source of CCRs. Another recommendation
17 is that there should be a comprehensive site
18 characterization, subject to CCR placement, or
19 specific to CCR placement, to be conducted in all mine
20 sites prior to substantial placement of CCRs.

21 CCR placement in mines would be designed
22 to minimize reactions with water and the flow of water
23 through CCRs. The number and location of monitoring
24 wells of frequency and duration of sampling and the
25 water quality parameters selected for analysis be

1 carefully determined for each site in order to
2 accurately assess the present potential movement of
3 CCR associated contaminates. We support these
4 recommendations, and I think it's important to note
5 that virtually all of these recommendations are
6 already present in the existing beneficial use
7 regulations. We also support those regulations that
8 are being proposed in Chapter 290 that are designed to
9 address the above recommendations and were necessary
10 to strengthen the existing beneficial use reductions.

11 But once again, this must be done in a
12 manner that recognizes the specific characteristics of
13 ash to be beneficially used how the ash is intended to
14 be used, and the specific characteristics of the site
15 where the material is to be placed. We also support
16 regulations that reflect the relative risk in the
17 constituent or a particular beneficial use
18 application. For example, a constituent for which
19 neither the State-wide health standard nor maximum
20 contaminate level has been established to be treated
21 in the same manner as one for which such limits
22 exists.

23 We are now seeing what can happen when
24 political intervention fails to target a specific
25 risk. I'm speaking of the impoundment failure that

1 occurred at TVA's Kingston Station in Tennessee. EPA
2 has been directed to re-evaluate how coal ash is
3 regulated. Clearly, what occurred in last December in
4 Kingston was a tragedy. However, what happened was a
5 structural failure of a poorly constructed
6 impoundment. What this event should have triggered
7 was a focused evaluation of existing regulations in
8 order to address and prevent structural failures of
9 dams associated with such structures. Instead, we are
10 now facing potential regulations that go far beyond
11 the physical or structural concerns associated with
12 safety risks posed with large impoundments.

13 Before leaving the topic of structural,
14 physical considerations, I'd like to briefly mention
15 another organization that was formed early last year.
16 The Pennsylvania Coal Ash Research Group or PCARG.
17 PCARG is comprised of generators and consumers of coal
18 ash as a self-initiated endeavor that was formed prior
19 to the TVA incident. The primary mention of PCARG is
20 to support research being conducted at Penn State to
21 evaluate and identify appropriate physical and
22 structural tests to help ensure that ash is
23 beneficially used in a safe and environmentally
24 responsible manner.

25 My last comment on the proposed

1 regulations is that discreet changes in chemical
2 characteristics of coal ash or in water quality cannot
3 serve as the basis for making operational and
4 regulatory decisions. Such decisions must be based on
5 statistically significant changes that are supported
6 by clear trends.

7 I appreciate the efforts of the
8 Department in developing beneficial use regulations.
9 This is a management option that makes sense and can
10 be done in a manner that is protective of human health
11 and the environment. Thank you for the opportunity to
12 provide comments today on the proposed beneficial use
13 regulations, and we will be providing detailed written
14 comments on the proposed beneficial use regulations in
15 the near future.

16 CHAIR:

17 Thank you, Mr. Dixon. Next person to
18 provide testimony, Richard Shaffer, Jack Egley.

19 MR. SHAFFER:

20 Richard J. Shaffer representing
21 Scrubgrass Generating Company in Kennerdell,
22 Pennsylvania. I am the environmental manager at the
23 Scrubgras generating plant located in Venango County
24 in Senator Mary Jo White and Representative Scott
25 Hutchinson's districts. I'm here today to provide my

1 company's comments on the proposed changes to the
2 Pennsylvania code, Chapters 287 and 290 of the
3 beneficial use of coal ash. First I'd like to give a
4 little bit of a background about the power plant,
5 which I work with the coal actually generated in
6 Scrubgrass. The plant is actually located in southern
7 Venango County. It is fueled by 100-percent
8 bituminous coal, also known as gob. The plant is
9 relatively new. It started operations in June of
10 1993. The plant sells power to Penelec, or
11 FirstEnergy, pursuant to a long term power purchase
12 agreement, which does not allow us to adjust the price
13 of power to reflect the cost increases associated with
14 the regulatory changes discussed today.

15 Currently the Scrubgrass power project
16 employs a total of 52 people. Additionally, with the
17 trucking firm that employs approximately 61 people.
18 So the total for the employment with the two firms,
19 the power plant and the trucking industry, is about
20 113 full-time family wage jobs, which also come with
21 great benefits and hopefully long-term security. The
22 waste coal that the power plant burns comes from a
23 variety of sites located in Clearfield, Allegheny,
24 Armstrong, and Butler Counties. The Scrubgrass
25 project currently owns and operates its own coal

1 surface mine in Clearfield County.

2 A little bit about the plant and the
3 pollution controls; the plant, in addition to
4 utilizing the waste coal to produce clean and
5 efficient energy, also uses crushed limestone to
6 control the emission of sulfur dioxide. The plant
7 currently permeates at 95 percent as to poor sulfur
8 dioxide with little efficiency all of the time. That
9 is where the linesman comes into the equation. Just
10 for an example, the power plant burns approximately
11 75,000 to 78,000 tons --- or 75,000 to 78,000 pounds
12 per hour of waste coal and about 30,000 pounds per
13 hour of limestone for boiling.

14 The plant utilizes selective non-
15 catalytic reduction for nitrogen oxide control. And
16 we have baghouses, which are 99.8 percent efficient at
17 removing particular matter. Government investment,
18 along with state and local support and PUC regulations
19 helped start our industry. And when I say industry,
20 I'm referring to the waste coal industry. In fact,
21 the state has been a great working partner over the
22 years. They have recognized the benefit projects like
23 Scrubgrass provides in cleaning up abandoned mine
24 sites, improving the environment, and in providing
25 clean, reliable electricity. We continue to work with

1 the Oil Region Alliance, including the potential on
2 developing various areas around our facility using and
3 utilizing the Keystone Opportunity Zone to develop
4 future biofuel facilities to create potential green
5 fuel for utilization at the power plant cells.

6 We look forward to working with the state
7 and DEP to grow this industry. A couple facts about
8 the Scrubgrass project as a whole; Scrubgrass has
9 removed approximately 9.6 million tons of waste coal
10 during the first 16 years of commercial operation.
11 Scrubgrass has utilized approximately 7.7 million tons
12 of beneficial use ash for reclamation, which contained
13 2.4 million tons of limestone. Of these 7.7 million
14 tons that has been utilized as beneficial use of coal
15 ash over the last 16 years, there have been zero NOVs
16 or zero ground water impairments, as a result of the
17 placement of this beneficial use coal ash under the
18 current 30 older regulations.

19 I'd like to talk about --- I'm just going
20 to touch on a couple environmental awards that
21 Scrubgrass has been involved with. We won the 2000
22 Governor's award for environmental excellence for the
23 reclamation of the former Leechburg mine site, located
24 in Armstrong County. In 2005, we won the Governor's
25 award for the reclamation of the Benjamin 6 mine site

1 located in Clearfield County. I'd like to just talk a
2 little about the 2000 Governor's award. In 2004 we
3 actually wrapped up the cleaning of the Leechburg coal
4 site near Apollo, Pennsylvania. And it was the worst
5 coal --- one of the worst waste coal sites in
6 Pennsylvania from a pollution reaching standpoint.
7 I don't know how many people have seen that down there
8 at the Kiskiminetas River, but it was red.

9 There are now currently fish there, and
10 that is entirely because of the Scrubgrass project,
11 and more directly, the beneficial use of coal ash.
12 Also this work was all done without any tax payer
13 dollars. The cleanup of this site allows the Roaring
14 Run Watershed Association to develop a recreation
15 area, which is enjoyed by an estimated 50,000 people
16 per year for biking, walking, fishing, and boating.
17 In Butler and Venango Counties, we have worked with
18 Slippery Rock Watershed and the DEP Bureau of
19 Abandoned Mine Reclamation in the cleanup of the
20 DeSale I, II and III projects. All of which use the
21 beneficial use of ash generated at the Scrubgrass
22 plant.

23 These are just a few of the reclamation
24 projects that have benefited from the use of the
25 beneficial coal ash generated at Scrubgrass. By

1 complying with the current regulations regarding the
2 beneficial use, we have been able to accomplish the
3 above efforts. Monitoring of these sites has
4 demonstrated clearly that the ground water has not
5 been adversely impacted by our operations. In short,
6 the current program has worked very well. What we are
7 concerned with is that opponents to a well designed
8 program are trying to force us to prove the negative.
9 I'd like to talk a little bit now, just touch briefly
10 on a couple of the concerns that we have with the new
11 regulations.

12 The first one I'd like to touch on is
13 water monitoring and the length of the monitoring. As
14 I stated before, we've operated 16 years and
15 beneficially placed millions of tons of ash and won
16 Governor's awards for environmental excellence for it.
17 And we have never had any NOVs or any ground water
18 impairments. So the new length of the monitoring is
19 definitely concerning to us, which leads into the
20 cost. The additional cost of monitoring will add
21 \$163,800 to each monitoring point. The groundwater
22 monitoring cost will increase by 433 percent per
23 sample event.

24 I'd also like to touch upon the annual
25 permit filing fee. This is definitely a new fee. The

1 current practice is there was a one time \$250 permit
2 filing fee. The proposed regulations requiring a
3 \$2,000 filing fee is nonrefundable, and annual filing
4 fee of \$2,000 per year for that which we are
5 processing or holding a permit. This new fee adds
6 \$20,750 to any project, no matter the size. The main
7 concern with that issue is that's going to greatly
8 impact the ability of Scrubgrass to take on smaller
9 projects locally that you'd like to clean up. In
10 closing, that's pretty much it. I'd like to just
11 thank the Environmental Quality Board today for
12 listening to us and giving us the opportunity to
13 testify.

14 CHAIR:

15 Thank you. Joe Osborne?

16 MR. OSBORNE:

17 Good afternoon. My name is Joe Osborne,
18 and I'm the legal director of the Group Against Smog
19 and Pollution. I apologize in advance for my lapse to
20 comment at the hearing, because nobody told us. I
21 want to thank the DEP for providing this opportunity
22 to speak today regarding the proposed regulations for
23 the beneficial use of coal. I also want to commend
24 the DEP for choosing to incorporate its coal ash
25 technical guidance documents into enforceable

1 regulations. However, in their current form, we
2 believe these regulations remain inadequate to protect
3 human health and the environment. Most notable, GASP
4 questions the safety of coal ash disposal in mines. A
5 2007 Clean Air Task Force study of Pennsylvania coal
6 ash mine fills determined that 10 of 15 randomly
7 selected mine fill sites exhibited degraded
8 groundwater quality as a result of coal ash disposal.
9 Ground and surface water contamination resulting from
10 mine fill operations at these and similar sites
11 constitute potential violations of the Resource
12 Conservation and Recovery Act, the Surface Mining
13 Control and Reclamation Act, and the Clean Water Act.

14 Concern over the health and environment
15 impacts of coal ash mine disposal prompted Congress to
16 ask the National Academy of Sciences to prepare a
17 report on the safety of the practice. This report,
18 released in 2006, states that sizable uncertainty is
19 associated with our current understanding of coal
20 combustion residue behavior in the mine environment.
21 And few, if any, studies have analyzed the long term
22 behavior of coal combustion residue in the mine
23 setting. An earlier commenter mentioned that the
24 proposed regulations incorporate the academy's
25 recommendations. I have to respectfully disagree, at

1 least in part as ---. We're becoming all too familiar
2 with the dangers of coal combustion waste disposal in
3 landfills and surface impoundments. In addition to
4 the TVA-Kingston spill in 2008 and the 2005 coal ash
5 landslide in Forward Township here in Allegheny
6 County, the EPA has documented at least 67 coal
7 combustion waste landfills and surface impoundments
8 where disposal resulted in environmental damage.

9 If we can't keep coal combustion's waste
10 contained in a relatively simple structure, like a
11 landfill or a holding pond, how can we possibly
12 predict the environmental effects of coal combustion
13 waste in the complex hydrology and geochemistry of
14 mine sites? GASP remains uncertain that mine site
15 disposal can ever be performed in a manner that poses
16 an acceptably low long-term risk to human health and
17 the environment.

18 The National Academy of Sciences report
19 states that there are no known methods that will
20 totally prevent coal combustion waste from coming into
21 contact with infiltrating water. However, if the
22 practice is to continue, we believe at a minimum the
23 following recommendations must be incorporated into
24 DEP's coal ash beneficial use regulations.

25 First, the DEP must require ground water

1 monitoring at all coal ash disposal sites to ensure
2 coal ash contaminants do not migrate off-site. As
3 currently written, DEP may, but need not require
4 ground water monitoring for disposal operations at
5 abandoned ground sites. Further, according to DEP
6 regulations, ground water monitoring is typically only
7 required for ten years after final coal ash placement.

8 However, the National Academy of Sciences
9 suggest that more than 10 years of post-closure
10 monitoring is necessary to accurately characterize the
11 coal ash behavior and notes that changes in ground
12 water quality resulting from coal ash placement can
13 take several decades, and a longer field monitoring
14 period will likely be needed in some situations.
15 Thus, DEP should extend the duration of post-closure
16 monitoring beyond ten years, particularly in cases
17 where site characteristics, such as relatively large
18 distance between the disposal area and down gradient
19 monitors increases the likelihood of delayed
20 groundwater contamination detection.

21 Second, DEP allows coal ash
22 characterization based on short term single point
23 batch leaching tests, like the TCLP or SPLP. The
24 National Academy of Sciences has concluded that these
25 tests do not accurately estimate disposal site

1 leaching behavior, do not use leaching solutions that
2 are representative of the large range of geochemical
3 conditions likely to be encountered in mines, do not
4 assess potential slower dissolution reactions, and may
5 greatly underestimate the actual leaching that will
6 occur. Instead, the academy recommends the
7 development of more rigorous leach tests that
8 incorporate the wider range of leaching conditions
9 likely to be encountered at a mine disposal site.
10 If mine site disposal is to continue on such a large
11 scale in Pennsylvania, the Commonwealth should also
12 take the lead in developing a more representative
13 leach test.

14 Finally, given the numerous damage cases
15 resulting from coal ash disposal, the uncertainties
16 related to the long term behavior of coal ash placed
17 in mines and the lengthy periods between placement and
18 contaminate arrival at receptor points, these
19 regulations must require owners or operators of coal
20 ash disposal sites to secure adequate financial
21 insurance to cover long-term monitoring costs and all
22 reasonably foreseeable remediation costs that could
23 result from placement operations contaminating ground
24 or surface water.

25 The bond requirements for Pennsylvania

1 residual waste facilities could serve as a model.
2 Thank you for the opportunity to speak today. I hope
3 my comments, as well as more detailed written comments
4 that will be provided later were useful as the
5 Department works to finalize the coal ash beneficial
6 use regulations. Thank you for tolerating my
7 unpleasant voice.

8 CHAIR:

9 Thank you, Mr. Osborne, I appreciate it.
10 Is John Foreman here? John Foreman?

11 MR. FOREMAN:

12 I guess that's for you.

13 CHAIR:

14 Thank you.

15 MR. FOREMAN:

16 I'll try and speak up so everybody can
17 hear. I know some of the people in the back are
18 having trouble hearing some of the other speakers. My
19 name is John G. Foreman, and I'm a professional
20 geologist. I should be frowning right now. Traffic
21 was terrible, my clients kept me way behind, but I'm
22 thrilled to be Pittsburgh. I'm always thrilled to be
23 in Pittsburgh even though the Steelers let me down
24 yesterday. One of the reasons I'm thrilled to be here
25 is because as a young man, I was put on a bus every

1 Friday all through elementary school and driven to the
2 old planetarium as a result of testing well in math
3 and science in the elementary level. And when brought
4 to the old planetarium, along with other people who
5 tested well, we were exposed to some things that most
6 school-aged kids aren't exposed to; cosmology,
7 physics, chemistry, geology, and systems analysis. So
8 I went through the elementary school having concepts
9 that most people frankly don't get until college, and
10 maybe that gave me a unique perspective on how to view
11 things.

12 The other thing that I want to say in the
13 introduction is that, you know, a lot of discussion is
14 brought about, about environmentalists and
15 environmentalism. And environmentalism really, at the
16 individual level, comes down to three things. You
17 have a philosophy, that's the easy part. You have
18 personal responsibility, that's almost impossible.
19 And then if you can achieve those two things, you
20 still need to have some level of public works to show
21 that it isn't just about yourself. I'd like to say,
22 to front qualifications, that none of this is
23 testimony that should be construed to be a position of
24 my corporation, or of any client, or any other
25 affiliation I have as a business. This is just my

1 testimony as a citizen. And invoking the principle of
2 full disclosure, I've assisted and am currently
3 assisting many Pennsylvania estate owners in
4 reclaiming abandoned surface mine lands across the
5 Commonwealth. While I do a lot of this as a
6 compensated professional design consultant, I've also
7 personally donated very substantial commitments in
8 time, field reconnaissance, systems analysis,
9 hydrogeologic monitoring assessments and design and
10 field construction services to watershed associations.

11 And one of the things that I'm trying to
12 do --- I'm going to skip over the perspective and time
13 stuff because I know my time is limited --- one of the
14 things that I've tried to do, and this was to just
15 come with a simple method to get a broader perspective
16 of all of this. And to do that, the first thing I did
17 was I dared to stand on the shoulder of all of the
18 giants in science that went before us to try and get a
19 better view of a larger picture.

20 The second thing is I dared to step back
21 in time to try and gain a perspective of how we got
22 here, and how this subject has evolved. Third, I
23 dared integrate the view of the shoulders and the
24 perspective in time to try and come up with a bigger
25 picture of this. And finally, I dare to stand before

1 you and present these findings. To start, I want just
2 the simple definition of ash. Any of you can look
3 this up in a dictionary. I'm excluding definitions of
4 the ash tree from the olive family, genus fraxinus,
5 and moving on to the other definitions. And
6 basically, in most dictionaries, it breaks down to
7 three things. One is ash is a colored powder
8 remaining after something is burned. Two is fine,
9 volcanic lava, or three, it is a silvery-gray color of
10 wood ash.

11 So from that point, I am trying to step
12 back and get the broadest perspective. I'm going to
13 take some time to bore you guys with cosmology over
14 time because it's important to our understanding of
15 ash. And I picked the time period 1904 for two
16 reasons. It's when my grandmother graduated from
17 college; imagine a woman graduating from college in
18 1904. And also it was a year before Einstein
19 published the Theory of Special Relativity. At that
20 point, everything was plutonium and ash was
21 insignificant other than something that people put on
22 roads and they had to deal with because it came out of
23 the furnaces they used to heat their house.

24 Einstein moved us forward hugely because
25 he published the Theory of Relativity linking space

1 and time. He incorporated gravity into that by
2 publishing the general relativity. Einstein however
3 had a problem. His personal philosophy was that the
4 universe was infinite and eternal, but his mathematics
5 had no chance. The universe has to be contracting or
6 moving due to gravity. Einstein thought well, maybe I
7 can budge my way around this by proposing a
8 cosmological concept of balance gravity. And one of
9 the things Einstein politically said was that even
10 light could not escape the effects of gravity.

11 Eddington, in his famous experiment in
12 1999, verified that Einstein was right; mass in fact
13 bends light. And Einstein received a Nobel Prize in
14 1920. In 1921, Lemaitre, looking at his math, said,
15 Einstein, you're right. The universe must be
16 expanding. And at the same time, another fellow by
17 the name of Hoyle said, no, the universe is a steady
18 state and one of the things that happens is all matter
19 is created inside stars except for hydrogen and
20 helium.

21 So we went to the point where now we have
22 an Einsteinian understanding of the universe, but ash
23 was still insignificant. Edwin Hubble, in 1925,
24 changed everything by postulating a standard candle
25 and using that to observe the distance of stars, and

1 therefore could about back-calculate the age. His
2 instruments were a little bad. He at first thought
3 the universe was only two-billion years old. We now
4 know it's about 14 billion. Gamow and Alpher later
5 came along; we agree with Lemaitre, things were
6 expanding. This went unresolved for a long time until
7 1965 when Penzias and Wilson accidentally discovered the
8 latent-heat from the big bang. At that point and from
9 that point forward, when you look at science it became
10 pretty clear that while we're in a universe that's
11 expanding, all matter, except for hydrogen and helium,
12 is created in stars.

13 And when you look at this, you might say,
14 well, all of these scientists received Nobel Prizes
15 and world-wide acclaim. And it's really difficult to
16 look at each one of these and say, okay, who was
17 wrong? Who of these guys was wrong, because there was
18 a lot of competing things. Well, when we start to try
19 and track who the big loser is, Einstein was a big
20 loser because he thought that the universe was steady
21 and unchanging even though its mass is different.
22 Lemaitre had it right about the universe's standing,
23 but he thought it all came from one primeval atom.
24 Hubble blew his measurement of the age of the universe
25 and stars initially; that's since been corrected.

1 Gamow and Alpher thought the universe was
2 dynamic, it was expanding, but that everything was
3 created at once while conversely, Hoyle took the
4 opinion that no, everything's created in stars and at
5 a steady state. Hoyle was probably, from a
6 cosmological standpoint, the big loser, but he's the
7 big winner when it comes to defining the physics of
8 the creation of matter. Hoyle's nucleosynthesis
9 theory is now the understanding for the creation of
10 all matter.

11 Nucleosynthesis theory is validated by
12 math, experience, and observations critical to our
13 understanding of the physics of ash, particularly at
14 first definition. Ash is a powder remaining after
15 something has been burned. Three simple analogies to
16 this; if you burn a campfire on a wooden stove it
17 emits light, heat, particulates and wood ash. If you
18 burn something at a power plant it emits light, heat,
19 particulates and fossil fuel ash. If you burn
20 something in a star it emits light, heat, particulates
21 as plasma and stellar ash.

22 So Hoyle had it right. And what Hoyle
23 essentially said was all matter, with the exception of
24 hydrogen and helium, is ash. So if we look at that
25 and pull up our standard periodic table of elements,

1 what do we see? All of the elements on that with the
2 exception of hydrogen and helium are stellar ash.
3 Chemistry comes down simply to the study of properties
4 and interaction of stellar ash. The conclusion that
5 our universe, galaxy, and solar system and all organic
6 and inorganic matter on our planet is ash best
7 represents our common cosmology. So those people that
8 want to demonize ash fail to understand the
9 unalterable basics of our common cosmology or they
10 choose to ignore reality because they're blinded by
11 unrealistic activists.

12 CHAIR:

13 Two minutes.

14 MR. FOREMAN:

15 Two minutes. Thank you, sir. So moving
16 forward a little quickly here, after the expansion of
17 the universe, we saw the same type of thing happen.
18 Protostars were formed. They blew up, they spread ash
19 around. After a while they got far enough apart that
20 galaxies were formed. Stars within them blew up and
21 spread ash around. In the end, when you look at what
22 happened here, you can come down to one simple common
23 factor with nature. Everyone has heard the saying
24 that dilution is not the solution to pollution. That
25 may be a common belief, but reality clearly

1 demonstrates that dilution is nature's ultimate
2 solution for pollution. When we look at the geology
3 of our planet we see, again going back to the second
4 definition of ash, fine volcanic lava. In fact, our
5 planet, which is one big ball of ash, is constantly,
6 because of the dynamics, moving material around,
7 spewing it out from volcanoes, spreading and
8 dispersing it everywhere, and then diluting it as time
9 goes on.

10 There's been much media sensation made
11 regarding the engineering failure of the ash
12 containment system in Tennessee. When Leslie Stahl
13 from CBS interviewed two local women, they were
14 appalled that mercury and thallium were present.
15 Don't want to beat too bad on Leslie, but if a fair
16 and balanced and knowledgeable reporter was present,
17 she would have informed these women that these ash
18 elements are everywhere. They're ubiquitous. You can
19 go to the White House garden and find them if you look
20 hard enough. You can find them in the soil of the
21 Governor's mansion.

22 So I have a set of conclusions. I'm down
23 to one minute. I'll just try and get through it real
24 quick. All heavy matter is ash created by
25 nucleosynthesis and stars and dispersed in space. All

1 of the elements in the Periodic Table are stellar ash.
2 Chemistry is the study of ash. Nothing in a proposed
3 rule-making acknowledges and promotes the undeniable
4 benefits of ash as it should. The benefits for
5 resulting from long term ash use's amendment is pretty
6 well understood. Clearly the focus of this rule-
7 making by some appears to be the demonized mash based
8 on political science where the emphasis is heavy on
9 politics and the emphasis in science is generally
10 lacking. Those who demonize ash just fail to grasp
11 their common cosmology and reality.

12 And I would like to suggest also, there's
13 a few more here, I'll let you read them on your own.
14 I will print the --- this is a philosophy and
15 discussion. I'm trying --- I had my smiley face on
16 today. Tomorrow I will be having and presenting to
17 you specific detail stuff at the Ebensburg meeting
18 regarding the components of the proposed rule-making.
19 Thank you so much for your time, and I appreciate you
20 putting ---.

21 CHAIR:

22 Thank you, Mr. Foreman. The next person
23 to speak is Randy Francisco. We did mention in the
24 beginning to say your name and affiliation and address
25 so --- okay. Thank you.

1 MR. FRANCISCO:

2 My name is Randy Francisco. I work for
3 the Sierra Club, and I represent the Sierra Club and
4 as for their personal comments, the Sierra Club
5 comments will come at a later date. I'm here today to
6 testify before the Environmental Quality Board in
7 opposition to the Draft Rule and the quote, unquote,
8 beneficial use of coal ash. I don't believe there is
9 a beneficial use for this toxic industrial waste
10 produced by coal burning power plants in the first
11 place.

12 Coal ash is filled with toxic chemicals
13 and heavy metals such as aluminum, fluoride, iron,
14 manganese, sulfate, and toxic trace elements such as
15 arsenic, selenium, lead, mercury, cadmium, nickel,
16 copper, chromium, boron, and zinc. And being that
17 Pennsylvania is the third largest US producer of this
18 waste, generating over nine million tons per year, I
19 don't think we should allow this toxic substance
20 anywhere near our drinking water. And this rule
21 proposed in no way assures me of that.

22 I am a community organizer who works in
23 areas of the state affected by coal combustions
24 wastes, and those communities depend on the Department
25 of Environmental Protection to protect their health

1 and well being by protecting the water that they
2 drink. And for reasons I'll go into in this
3 testimony, I don't believe this draft rule does
4 anything to protect these communities, and in fact,
5 could do serious damage to their water supplies. This
6 has the continued effect of seriously eroding the
7 trust these communities hold in a Department that was
8 set up to protect them. I also don't see why the
9 Department should begin this process just ahead of
10 another rule-making process on coal combustion wastes
11 slated to be announced by the Environmental Protection
12 Agency of the Federal Government later this month.

13 In fact, there are two coal ash hearings
14 being held in the U.S. House of Representatives this
15 week. One in the Energy and Environment Committee and
16 the other in the Water and Resources Environmental
17 Subcommittee. During the extensive debate this summer
18 over the Pennsylvania state budget, the Department of
19 Environmental Protection's budget was cut by a
20 significant amount, more than any other department in
21 the state. Therefore giving the federal rule-making
22 process that is about to start, we should most likely
23 have to go through this process, the process we are
24 going through today, another time, following the
25 establishment of that federal rule, adding work to an

1 already overextended department and wasting taxpayers'
2 money.

3 But given the Department is insisting on
4 moving forward with this process, I will direct the
5 remainder of my testimony to the deficiencies
6 contained in the draft rule. Throughout the proposed
7 guidelines, I see phrases such as, at the discretion
8 of, with the Department approval, or if the Department
9 so chooses. These phrases leave significant loop
10 holes in the guidelines and leave enforcement up to
11 discretion of the DEP. We have seen in many instances
12 enforcement action is significantly lacking in this
13 Department and with the significant budget cuts to the
14 Department, we can only expect enforcement to become
15 more inferior as we move into the future.

16 One of the instances where the phrase,
17 the Department may waive or modify this requirement
18 occurs in the section devoted to how closely coal ash
19 can be placed to ground water. This is particularly
20 disturbing considering that the majority of
21 Pennsylvanians get their water from ground water
22 sources such as private wells. I grew up on a farm in
23 Northwestern Pennsylvania where we got our water from
24 a well. If coal combustion wastes would have come
25 into contact with our water supply, I don't know that

1 we ever actually would have known it until it was too
2 late. Most folks I know in Pennsylvania have an
3 innate trust that the water in their wells is clean,
4 and that they most likely do not test as often as they
5 should. In all the years I've lived on that farm, I
6 don't remember ever getting our water tested. If our
7 well would have become contaminated with toxic
8 chemicals and heavy metals that are contained within
9 coal combustion waste, it could have taken years
10 before we would have become aware, and it may have
11 been too late. And we would have been dealing with
12 the consequences.

13 This, to me, is unacceptable. Anywhere
14 that toxic waste is placed for a long term storage
15 should be lined with synthetic composite liner and
16 should be placed so that there is no possible way that
17 it could come in contact with Pennsylvania's drinking
18 water supply. Another place where the draft rule is
19 seriously lacking is in its monitoring requirements.
20 The rule should require a comprehensive long-term
21 water quality monitoring that at all coal ash mine
22 placement sites, at least 30 years of quarterly
23 monitoring after the ash placement is finished, should
24 be required.

25 Currently, the draft rule only requires

1 ten years of monitoring and after the ash placement is
2 finished at mine sites, with the latter five years of
3 it being only annually. This more comprehensive
4 monitoring would ensure that if something were to go
5 wrong at the site, the public would have ample time to
6 take the necessary measures to protect themselves from
7 these toxic contaminates contained within an exposed
8 site. If there is corrective action needed because of
9 toxic chemicals leaking from the site, leaving the
10 judgment up to the Department staff to decide when a
11 significant change in the quality of ground water or
12 surface water from background levels occurs, will not
13 ensure the communities are protected from pollution
14 and sites of leakage.

15 These points of leakage should be
16 investigated and there should be triggers in place for
17 that to happen. This will ensure the groundwater
18 degradation will be promptly investigated. The
19 objective should be investigated and address increases
20 of contaminates onsite before offsite public or
21 private water supplies are contaminated. The way the
22 rule is currently written is while taxpayers are at
23 significant risk, taxpayers should also
24 not be saddled with potential cleanup costs nor
25 residents victimized by contamination while those who

1 profited from the placement are shielded by premature
2 release of bonds, corporate dissolution or bankruptcy.
3 Financial assurance should be required to be posted by
4 operators before a permit can be issued. And it
5 should be maintained throughout prior monitoring at
6 the site in amounts sufficient to monitor and abate
7 pollution from the ash.

8 We are already dealing with the cleanup
9 of acid mine drainage of mine sites throughout the
10 state from the days of unregulated coal mining. Don't
11 make the problem worse and leave the taxpayers picking
12 up the tab again. In conclusion, I'm very concerned
13 about the weaknesses in these guidelines as well as
14 the fact that the entire rule-making process seems
15 ill-timed and frivolous and is a frivolous use of
16 resources. The process is also denying people in
17 affected communities that have jobs that cannot get
18 away from them at 1:00 p.m. on a weekday, from
19 participating.

20 I would like to ask that future hearings
21 be conducted at a time and date to allow maximum
22 participation so that you may hear from more of the
23 people who will be affected by the policy that you are
24 setting. I believe that the rule you are proposing in
25 this draft will have a detrimental affect on millions

1 of Pennsylvania citizens, and they should be allowed
2 to be heard openly at this hearing. Thank you.

3 CHAIR:

4 Thank you, Mr. Francisco. Lisa
5 Graves-Marcucci?

6 MS. GRAVES-MARCUCCI:

7 My name is Lisa Graves-Marcucci, and I am
8 a resident of the Commonwealth of Pennsylvania, and I
9 also am here representing the Environmental Integrity
10 Project. Pennsylvania Administrative Law Judges and
11 the US Department of the Interior Board of Land
12 Appeals has found the Pennsylvania DEP coal
13 combustions waste mine filling programs deficient.
14 The PA Environmental Hearing Board invalidated the PA
15 DEP coal combustion waste monitoring plant. Saying,
16 quote, the system is simply not capable of detecting
17 contaminates that leave the site. If the project
18 results in groundwater pollution, no one will know it.
19 The monitoring plan merely creates the illusion of
20 protection, which is arguable worse than no monitoring
21 at all. This is truly unacceptable and the Department
22 acted unreasonably and in violation of the law in
23 concluding otherwise, end quote.

24 Similarly, the US Interior Board of Land
25 Appeals ruled that the DEP's failure to properly

1 monitor ash contamination threatened the public water
2 supply while in the Borough of Tremont, Pennsylvania.
3 Coal combustion waste is contaminating water sources
4 across America, including sites in Pennsylvania.
5 However, in an effort to preserve the so-called
6 beneficial use status of these wastes, citizens
7 believe the PA DEP is ignoring its own data, refusing
8 to even consider the possibility that coal combustion
9 wastes dumped at mine sites has already degraded water
10 sources and will continue to do the same.

11 The DEP has proposed regulations in
12 Chapter 290 that would replace existing Chapter 287
13 with some improved safeguards and would incorporate
14 other provisions that are now only administrative
15 guidance. We thank you for that. Unfortunately, the
16 Pennsylvania DEP steadfastly continues to protect the
17 short-term economic interests of the waste coal
18 industry under the guides of beneficial use of toxic
19 wastes. The DEP coal mine operators, along with their
20 networks of supporting industries, believe coal
21 combustion wastes are quote, beneficial.

22 Pennsylvania citizens remain concerned
23 that the so-called benefits address only the economics
24 of the operation and do little or nothing to protect
25 public health or the environment, especially water

1 sources. The proposed regulations lack basic
2 safeguards such as liners, corrective action
3 standards, and requirements for mine operators to post
4 bonds or other funds to clean up the pollution their
5 ash causes. Furthermore, the improvements that
6 regulations do make in testing and monitoring of the
7 ash are riddled with loopholes that allow the DEP to
8 waive them. The fundamental deficiencies that allow
9 the power industry to pollute ground water, while
10 escaping responsibility for it through deficient
11 permits issued by the DEP, will continue in these
12 regulations unless the loopholes are closed and less
13 discretion is granted to the Department to waive the
14 key safeguards.

15 We seek enforceable standards via the
16 following improvements to the proposed Chapter 290
17 regulations. Isolation requirements; at no time
18 should coal ash be placed within the water table in an
19 active or abandoned coal mine. The proposed
20 regulations tighten up the separation of ash from
21 groundwater for soil amendments and structural fills,
22 but is similar to the current PA regulations for
23 groundwater separation from ash in mines and abandoned
24 mines, which give the Department discretion to allow
25 unlimited quantities of coal combustion waste to be

1 dumped into the water table at mine sites, a practice
2 that is commonly sanctioned in current mine permits.
3 The demonstration in these permits is not
4 substantiated by any site-specific data. We believe
5 this discretion is being abused, and it should not be
6 allowed.

7 Monitoring requirements; monitoring
8 should be required of mine placement, structural
9 fills, or soil amendments involving more than 10,000
10 tons of ash. Monitoring of surface water drainages
11 and plant uptake of metals should also be required for
12 projects using coal ash as soil amendments or soil
13 additives. Currently, Chapter 290 waives monitoring
14 for projects involving less than 100,000 tons of coal
15 ash or 10,000 tons per acre of coal ash. We ask this
16 waiver be removed. Baseline monitoring of ash sites
17 in monitoring plans should be completed and projected
18 to the Department's scrutiny and public input prior to
19 any project approvals or the issuance of mining
20 permits involving ash placement.

21 At least a year of monthly sampling
22 should be required to collect enough baseline data to
23 characterize water quality in ash sites before permits
24 are issued. Discretion to allow less than a year of
25 monthly sampling prior to the permit should be

1 eliminated. A frequency of no less than quarterly
2 monitoring should be required during ash placement.
3 Discretion to allow less than that should be
4 eliminated. Up-gradient monitoring that measures the
5 affects of mining without ash placement should always
6 be required. Permits should never allow ash to be
7 placed in locations that hamper the effectiveness of
8 full monitoring systems. At least 30 years of
9 quarterly monitoring data after ash placement is
10 finished should be required.

11 Currently the proposed regulations
12 require only ten years of monitoring with the latter
13 five years of it being only annual. Thirty (30) years
14 of monitoring after ash placement insures monitoring
15 will continue for a period long enough to
16 differentiate contamination by ash from impacts of
17 mining. Thirty (30) years is the duration of
18 monitoring after closure at more hydrogeologically
19 stable and less fractured municipal solid waste
20 landfills. Groundwater in mined areas can require
21 considerable time to recharge due to major disruption
22 of aquifers from the mining, which supports longer
23 monitoring, not less.

24 Corrective action requirements; a
25 groundwater assessment plan should be submitted within

1 60 days after the concentration of a toxic metal or
2 other ash constituent exceeds the highest baseline
3 concentration at a down-gradient monitoring point.
4 The objective should be to investigate and address
5 increases of contaminates on-site before off-site
6 public or private well supplies are contaminated.
7 The submission of the assessment plan should not be
8 waived by re-sampling or demonstrations asserting
9 seasonal variations or sources other than ash are
10 responsible.

11 Regulations; they should require that all
12 of the monitoring plans be submitted that includes
13 criteria that defines material damage to offsite
14 hydrogeological balance. Any violation of
15 applications, surface water, quality standards, or
16 groundwater standards in waters draining beyond the
17 mine permit boundary should be considered prohibited
18 material damage to the offsite hydrogeological
19 balance.

20 And finally, financial assurance; a new
21 section requiring financial assurance in the form of
22 bonds or similar instruments should be included in
23 these regulations. This section should require such
24 financial assurance to be posted by operators before
25 permit issuance and maintained throughout required

1 monitoring at site it amounts sufficient to monitor
2 and abate pollution from the ash. Such assurance
3 should not be released until monitoring has verified
4 that ground waters and surface waters have been
5 contaminated by ash placement and are not likely to be
6 contaminated by that placement. This ensures the
7 adequate monitoring systems will be in place and
8 taxpayers, as was previously mentioned, will not be
9 saddled with any cleanup costs or victimized by the
10 contamination.

11 As residents of the Commonwealth, we
12 fully understand the impacts of acid mine drainage to
13 our streams and other waterways. However, we strongly
14 disagree that using toxic coal ash in a cavalier
15 manner will do nothing but create further degradation
16 to our water, health, and overall environment.
17 Taxpayers are still paying the cost left to us by the
18 wealthy coal robber barons. And the last thing we
19 need is another deadly and costly cleanup. We urge
20 the Department to remove all loopholes from the
21 proposed Chapter 290 regulations and provide this
22 Commonwealth and its residents with fully enforceable
23 regulations to protect us all. Thank you.

24 CHAIR:

25 Thank you. Is Michael Nixon here? Bruce

1 Golden?

2 MR. GOLDEN:

3 I have no comments at this time.

4 CHAIR:

5 Jeff Chesler?

6 MR. CHESLER:

7 My name is Jeff Chesler, and I am the
8 Regional Vice-President for Savage Services
9 Corporation. The company which I represent today is a
10 contractor to the Scrubgrass Generating Station. The
11 services that we provide to the Scrubgrass Generating
12 Station are primarily the transportation of waste coal
13 from various sites, limestone deliveries to the plant
14 and beneficial use ash from the plant back to various
15 coal mine reclamation sites. My comments today will
16 be --- are not technical in the manner that you've
17 heard from many of the past speakers, but from the
18 experiences we have seen as we've served these power
19 plants.

20 We also, in addition, Savage Services
21 provides similar services for the Northampton
22 Generating Station located in Eastern Pennsylvania.
23 Savage has been providing these services since the
24 commercial operation of both of these plants. My
25 comments today are to point out the concerns that we

1 have as they relate to proposed changes to the
2 Pennsylvania Codes on the Beneficial Use of Ash.
3 I would like to begin by pointing out that Savage
4 Services and both Scrubgrass and Northampton
5 Generating Stations have worked together for more than
6 15 years in developing a safe and reliable method of
7 transporting waste coal and beneficial use ash with
8 minimal impact to the community within which we work.

9 Some of the methods implemented include
10 utilizing equipment that minimizes the number of
11 trucks on the haul routes, utilizing equipment that is
12 able to safely contain both waste coal and beneficial
13 use ash, extensive training of our drivers including
14 safety and environmental procedures, strict hiring
15 practices to help ensure the most qualified drivers
16 will be operating equipment on the haul routes,
17 installation of GPS systems in each haul unit and
18 developing the use of GPS systems to insure proper
19 routing, speeds and delivery to the intended
20 reclamation sites, use and installation of drivers
21 through wash systems at the plants after dumping waste
22 coal and loading beneficial ash.

23 These are just a few of the examples of
24 the ways that Savage and the Generating Stations have
25 worked together in developing processes that are safe

1 and environmentally responsible to the communities
2 that we work within. As mentioned, Savage provides
3 transportation services for Scrubgrass and Northampton
4 Generating Station. And as a contractor, we have
5 found that both Generating Stations insist upon Savage
6 providing our services in the utmost responsible
7 manner that meet all state, federal and local
8 regulations. And in some cases, we go above and
9 beyond as I've mentioned.

10 As a transportation provider for these
11 Generating Stations, I can attest to the benefits
12 these waste coal plants have provided to the
13 communities in which they operate. First, I'd like to
14 point out that no one would argue with the fact that
15 our past generations' understanding and knowledge of
16 environmental impacts was very limited as compared to
17 today. Therefore, the method used to discard the
18 waste coal was not done in the most responsible manner
19 and that over the past several decades, we as a
20 society have learned much as it relates to the proper
21 handling and disposal of these types of materials.

22 The fact remains that many of these waste
23 coal sites exist today, but with the technological
24 improvements within our society, the Energy Industry
25 has found a way to reduce the number of previously

1 unusable waste coal sites, thus enabling us to turn
2 sites that were disturbed generations ago into usable
3 sites or bringing them back closer to their original
4 natural state. As we have provided our transportation
5 services over the past 15 years to these Generating
6 Stations, we have witnessed this first hand.

7 The next point I would like to make is
8 the basic fact that these Generating Stations provide
9 us with an economical and reliable source of power
10 available today. Therefore, the Energy Industry has
11 found a way to clean up the waste coal sites
12 throughout the state while providing us with a cost
13 efficient source of energy that's reliable for its end
14 users and employing many individuals with full-time
15 jobs in these local areas. As stated, there are many
16 individuals, families, and local businesses within
17 close proximity to these Generating Stations that are
18 dependant upon the continued operation of these
19 plants, which themselves are dependant upon the
20 ability to continue the reclamation of these waste
21 coal sites.

22 The Scrubgrass Generating Station is
23 located in a very rural location with limited
24 industries within a close proximity of the area. If
25 the financial burden through governmental regulations

1 increases to the point that these types of plants
2 cannot operate, it will truly devastate the local
3 economies due to the loss of these jobs. The combined
4 employment specifically relating to the
5 transportation, and this again is just related to the
6 transportation services for the Scrubgrass and
7 Northampton Generating Stations, is 104 full-time
8 jobs. Each of these jobs currently provides an
9 employee and their family with health care benefits,
10 employee time off, and employee retirement plan. The
11 total wages and benefits associated with these
12 transportation jobs is approximately \$6 million per
13 year for these workers that reside in the State of
14 Pennsylvania.

15 Local vendors that support our
16 transportation services will receive approximately
17 \$1.6 million in revenues per year from services
18 provided. Some examples are tire vendors, parts
19 suppliers and maintenance service shops, all which are
20 local service providers. In addition, Savage Services
21 will pay annual highway use taxes each year of
22 approximately \$1.2 million which provides for the
23 ongoing maintenance and upkeep of state and federal
24 highways and their related infrastructure.

25 In conclusion, Savage Services is very

1 concerned with additional regulations that are
2 proposed upon these types of Generating Stations.
3 These regulations will in no doubt place an additional
4 financial burden upon an already heavily regulated
5 industry. As the review process continues for these
6 proposed regulations, it is our contention that if
7 past reclamation results are looked at closely, it
8 will be found that our communities have already
9 benefited without these additional requirements.

10 As stated previously, there are many
11 families dependant upon the jobs provided by the
12 reclamations of these waste coal sites and it would be
13 very difficult to replace in the rural communities if
14 they were to discontinue operation. At this time, I'd
15 like to thank you for letting me have this opportunity
16 to provide you with our views on this matter.

17 CHAIR:

18 Thank you, Mr. Chesler. Thank you. Russ
19 Forsythe?

20 MR. FORSYTHE:

21 I don't have any written comments. I
22 really wasn't intending on commenting other than the
23 written comment we will send in to the DEP before the
24 22nd. But I did want to go on the record here. I'm
25 Russ Forsythe, general manager of AES Beaver Valley,

1 LLC. We're a part of the AES Corporation. We have
2 over 40,000 megawatts of generating capacity around
3 the world, approximately 13,000 megawatts of
4 generating capacity in the United States, in North
5 America. We have about --- roughly, 4,000 megawatts
6 of generating capacity in coal, fire generating
7 capacity in the United States. Our plants in New
8 York, Connecticut and Pennsylvania burn approximately
9 six million tons a year of Western Pennsylvania mine
10 coals.

11 We have several sites that have
12 participated in beneficial uses of our waste material
13 or byproduct materials. We have participated with the
14 DEP, Bureau of Mines, in several acid mine drainage
15 cleanup projects using our by-products, and we support
16 the State and their efforts to develop these
17 regulations. I think that there are so many
18 beneficial materials in coal combustion byproducts
19 that we're not utilizing them the way that they should
20 be or could be to beneficially help the environment
21 and the people. And I think this is a step in the
22 right direction that we support them, and we'll have
23 further comments.

24 CHAIR:

25 Thank you, Mr. Forsythe. Rachel Martin?

1 MS. MARTIN:

2 Hi, my name is Rachel Martin. I reside
3 at 311 Pitt Street in Pittsburgh, Pennsylvania, 15221.
4 And first I would like to thank you for this
5 opportunity to testify today. Coal combustion waste
6 disposal is a serious problem throughout the U.S. and
7 certainly right here in Pennsylvania. Currently state
8 and federal regulations are inadequate to address the
9 dangers posed by coal ash, which can and often does
10 leach substances such as aluminum, arsenic, selenium,
11 lead, cadmium, mercury, and other heavy metals that
12 endanger local stream ecosystems, as well as
13 groundwater and drinking water supplies.

14 The dangers posed by coal ash are brought
15 to national attention with the devastating Kingston
16 coal ash spill in Tennessee last year. Here in
17 Pennsylvania, we've seen several coal ash spills, and
18 have also seen documented stream and groundwater
19 contamination as a result of so-called beneficial use
20 of coal ash in active and abandoned mines. Clearly,
21 much stronger safeguards are needed to protect our
22 streams, groundwater, and drinking water from
23 dangerous contamination from coal ash, but I have
24 concerns with the process the Department of
25 Environmental Protection has chosen to undertake.

1 The US Environmental Protection Agency is
2 set to begin federal rule-making on coal ash disposal
3 this month, which calls into the question the
4 justification for proposing regulations at the state
5 level at this time. In addition, I am disappointed
6 that the Department has chosen to hold this hearing on
7 a weekday afternoon, when many concerned citizens and
8 potentially impacted individuals are unable to attend.
9 The Chapter 290 regulations proposed by the Department
10 of Environmental Protection fall far short of the
11 protection needed in order to minimize the threats
12 from the practice of coal ash disposal in mine fills.

13 Over all, the proposed regulations
14 provide far too many loopholes and too much agency
15 discretion. The regulations need to be strengthened
16 to include enforceable standards, to close loopholes,
17 and to allow less discretion for the Department to
18 waive critical safeguard. Over 978,000 Pennsylvania
19 households still get their drinking water from private
20 wells. It is critical that coal ash be isolated from
21 groundwater in order to protect our groundwater from
22 toxic leaching. The proposed regulations as written
23 would allow the continued dumping of coal ash in
24 unlined mine sites within the water table. This is a
25 dangerous and unacceptable practice.

1 These regulations need to be strengthened
2 to require the use of the composite liner for coal ash
3 waste sites and to disallow any dumping of coal ash
4 within the water table of an active or abandoned coal
5 mine. The monitoring requirements in the proposed
6 regulations also need to be strengthened. The
7 proposed regulations allow two higher sites special to
8 trigger monitoring; an adequate requirement for a
9 baseline measurement and an adequate post placement
10 monitoring. The regulations should require baseline
11 monitoring of the sites prior to a permit being
12 issued, a requirement for at least quarterly
13 monitoring during placement, and a requirement for at
14 least 30 years of post placement quarterly monitoring.

15 The proposed regulations also do not
16 provide sufficient requirements for corrective action
17 should monitoring indicate degradation of groundwater
18 or surface water. The proposed regulations provide
19 far too much latitude in triggering assessment and
20 statement plans. The regulations need to be
21 strengthened to include clearer enforceable standards
22 for when protective action is required. Considering
23 the dangers posed by coal combustion waste, operators
24 must be held accountable for any resulting
25 contamination and cleanup costs. The regulations

1 should include a requirement for financial assurance
2 be posted by operators before permits are issued,
3 maintained throughout the required monitoring period
4 at the site, and should not be released until
5 monitoring results verify that no contamination to
6 ground water and surface waters has occurred or is
7 likely to occur.

8 Again, while I question the process, the
9 Department is undertaken of opposing these regulations
10 and also questions whether there is anything such as
11 base coal ash disposal in mines. Should the
12 Department proceed, these regulations must be
13 significantly strengthened to close loopholes,
14 decrease discretion, and provide enforceable
15 standards. Thank you.

16 CHAIR:

17 Thank you, Ms. Martin. Phil Coleman?

18 MR. COLEMAN:

19 I do not have written comments. I'll
20 speak very briefly. I'm here representing the Pigeon
21 Creek Poets. Pigeon Creek is a little stream in
22 Washington County, and we sit around in Washington
23 County reading each other's poems. And we're here to
24 complain about the abuse of the English language. We
25 recognize that a group of people making coal ash sat

1 around and said, what are we going to do with this
2 harmful stuff? But they couldn't figure out anything,
3 so they said, we'll call it beneficial use. And we've
4 heard the word beneficial use numerous times today.
5 It's not beneficial. You're trying to find some way
6 to dispose of the stuff that's not too expensive.
7 And there isn't any way. I will say one more thing.
8 I heard one gentleman tell you about how much his
9 industry created in terms of jobs. Pigeon Creek Poets
10 do not hire anyone, we do not pay anyone, we do not
11 benefit anyone except possibly the brewery industry of
12 Pennsylvania. Thank you.

13 CHAIR:

14 Thank you, Mr. Coleman. Is Michael Nixon
15 here? Mr. Nixon --- did he come in? Okay. Is there
16 anyone here who would like to present oral testimony
17 at this point any further? Okay. No other witness
18 present on behalf of the EQB. I hereby adjourn this
19 meeting at 2:12 p.m. today. And remember, December
20 22nd you have to submit your comments to the EQB
21 either by mail or by e-mail. If you need that
22 address, come on and see me, I'll give it to you.
23 Thank you all for coming in, and I hope you have great
24 holidays. Thank you.

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HEARING CONCLUDED AT 2:12 P.M.

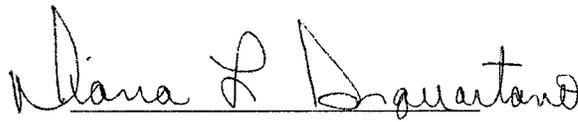
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CERTIFICATE

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I hereby certify that the foregoing proceedings, hearing held before Chair Forbeck was reported by me on 12/07/2009 and that I Diana L. Inquartano read this transcript and that I attest that this transcript is a true and accurate record of the proceeding.


Court Reporter