From: Sharon Barbour [sharon@epga.org]
Sent: Tuesday, December 22, 2009 3:01 PM
To: EP, RegComments
Cc: Biden, Doug L.
Subject: EPGA Comments on Proposed Rulemaking, Environmental Quality Board [25 PA. CODE CHS. 287 AND 290], Beneficial Use of Coal Ash [39Pa.B. 6429]
Attachments: Final Draft Beneficial Use Coal Ash Regs 122209.doc; EPGA One Page Summary_Coal Ash Regs.doc

Environmental Quality Board,

Please find attached a copy of the comments of Douglas L. Biden, President, Electric Power Generation Association on the Proposed Rulemaking, Environmental Quality Board [25 PA. CODE CHS. 287 AND 290], Beneficial Use of Coal Ash, [39 Pa.B. 6429] [Saturday, November 7, 2009]. We are also attaching a one page summary for distribution to the Environmental Quality Board.

If there is a problem with transmission, please contact me. Thank you.

Regards,

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December 22, 2009

RECEIVED

DEC 23 REC'D

INDEPENDENT REGULATORY
REVIEW COMMISSION

Environmental Quality Board
P.O. Box 8477
Harrisburg, PA 17105-8477

Subject: Proposed Rulemaking, Environmental Quality Board [25 PA. CODE CHS. 287 AND 290], Beneficial Use of Coal Ash, [39 Pa.B. 6429] [Saturday, November 7, 2009]

Environmental Quality Board:

Following are the comments of the Electric Power Generation Association (EPGA) to the Proposed Rulemaking, Environmental Quality Board [25 PA CODE Chapters 287 and 290], Beneficial Use of Coal Ash, [39 Pa.B. 6429] [Saturday, November 7, 2009].

EPGA is a regional trade association of electric generating companies with headquarters in Harrisburg, Pennsylvania. Our generating members include the following companies:

AES Beaver Valley, LLC
Cogentrix Energy, Inc.
Dynegy Inc.
Exelon Generation
LS Power Associates, L.P.
RRI Energy, Inc.
Tenaska, Inc.
Allegheny Energy Supply
Constellation Energy
Edison Mission Group
FirstEnergy Generation Corp
PPL Generation
Sunbury Generation
UGI Development Company

These 14 members own and operate a diverse mix of more than 145,000 megawatts of electric generating capacity in the U.S., approximately half of which is located in Pennsylvania and surrounding states. These comments represent the views of EPGA as an association of electric generating companies, not necessarily the views of any individual member with respect to any specific issue.

EPGA appreciates the opportunity to express its views to the Environmental Quality Board on the proposed coal ash rulemaking. Pennsylvania has come a long way with regard to beneficial use of CCPs in general and coal ash in particular. There was a time when beneficial use of coal ash was an elusive goal because a solid waste disposal permit was required for every such use which frustrated many potential projects.

In the mid-1980s, however, it was recognized by the Pennsylvania General Assembly that millions of tons of coal ash could be recycled and productively used rather than buried and wasted in disposal sites. It was further recognized that as electricity demand grew and air quality regulations trended ever more stringent, the volume of coal ash would grow as the generation industry removed more and more particulates from the air. Also, available "green field" space was becoming increasingly scarce and as more and more environmentally sound uses for these materials were being developed by industry, it made far more sense from a public policy perspective to funnel these large volume CCPs to beneficial use applications rather than to disposal sites where they consume valuable land that could be put to better use.

And for a state like Pennsylvania, where the material derived from a fuel that was home-grown, provided reliable and low-cost energy and tens of thousands of jobs, and the by-product - coal ash - could be safely used in a number of applications including addressing the most chronic water quality problem in the state (acid mine drainage), it was clear to the General Assembly that encouraging beneficial use of this material was in the public interest.

In 1986, after hearings in the Pennsylvania House of Representatives, HB 2274, commonly referred to as "the coal ash bill", emerged. This bill removed coal ash that is beneficially used in certain applications from the definition of solid waste. It had widespread bipartisan support, passed the House Mines and Energy Management Committee 24-0, passed the full House 195-2, passed the Senate Committee on Environmental Resources and Energy and the full Senate by unanimous votes. After thorough legal and environmental research by his staff, Governor Thornburgh signed HB 2274 into law as Act 168 of 1986.

From the bill sponsorship memo, through the legislative hearings, committee and floor discussions, and a special all-day seminar on beneficial use that was held prior to consideration of this bill, the record is clear regarding the intent of this legislation – to amend the language of the Pennsylvania Solid Waste Management Act to remove unnecessary impediments to the beneficial use of coal ash.

Many of the issues that have been raised over the years by opponents of beneficial use (and continue to be raised by some), for example, the potential for possible groundwater contamination, were raised at the hearings in 1986 and were answered to legislators' and other policymakers' satisfaction. As recently as 2004, the Pennsylvania

General Assembly reviewed Pennsylvania's beneficial use at mine sites program and concluded that it was a model for the rest of the nation, and that the use of coal ash for mine reclamation has environmental and economic benefits for the Commonwealth.

The sponsors of Act 168 never contemplated the unfettered sham disposal of coal ash throughout the state masquerading as beneficial use. In fact, language was inserted in the bill granting the Department the discretion to establish siting criteria, design and operating standards, certification standards, etc. - the very subject of many of the provisions which are already in the residual waste regulations and additional provisions that are being adopted into the regulations with this proposed rulemaking.

EPGA cites this brief history of some of the issues surrounding beneficial use so that the Board is aware of the overwhelming support demonstrated for beneficial use of coal ash by the Pennsylvania General Assembly, and to highlight some of the environmental, economic and political issues that converge in this proposed rulemaking. Although we have some suggested changes to the proposed rule, and have concerns about how some provisions may be implemented, in general we believe the Department has struck a fair balance of the issues involved.

The Department clearly recognizes that the largest volume beneficial use of coal ash by far is currently in mine reclamation projects. The language in the proposed rule's background and purpose section very persuasively states the environmental, economic and safety benefits associated with using coal ash at abandoned mines.

With proper regulation and oversight by DEP, beneficial use of coal ash at abandoned mines is a sound environmental solution to the hundreds of thousands of acres of mine lands that need to be reclaimed. This task, as DEP notes, is so large, that it cannot be accomplished with federal and state funding alone. Thus, beneficial use of coal ash helps fill the gap between available and needed resources. Also, use of coal ash at abandoned mines is one way to help eliminate the dangers associated with open pits and dangerous highwalls which have claimed the lives of hunters, hikers, and other outdoor enthusiasts over the years.

PART I

Introduction and General Comments on the Proposed Regulations

Although mine reclamation is the dominant beneficial use of coal ash in the Commonwealth, EPGA members have also beneficially used coal ash in other applications, such as:

- In the manufacture of cement and concrete.

- In the development of grouts used for mine subsidence control. Two recent mine subsidence control projects in Westmoreland County include using a grout mix that incorporated coal ash to fill an old deep mine under a section of the Pennsylvania turnpike while the other project will stabilize an underground mine so that a community can construct a new sewage treatment plant. In Washington County, coal ash was used to stabilize an old mine under the site where a middle school was constructed.

- In another beneficial use project, coal ash was used to control an underground mine fire in Fayette County.

- Lastly, coal ash was beneficially used in Westmoreland County to construct a safety area at the end of an airport runway.

The reason for highlighting the above projects is to emphasize that there is a wide range of applications in which coal ash can be beneficially used. So, the proposed regulations, particularly those relating to coal ash certification, must reflect the diversity of the actual beneficial use. Certainly, ash to be incorporated into a product, such as concrete, should not be assessed in the same manner as ash being placed directly on the ground – as in large structural fills and mine reclamation projects.

As noted above, using coal ash for mine reclamation is the dominant beneficial use in Pennsylvania. Logically, the proposed regulations mirror this fact and considerable attention is dedicated to portions of Chapter 290 that pertain to this practice.

Clearly, the proposed regulations reflect the findings and recommendations contained in the March 1, 2006, National Academy of Sciences ("NAS") report on *Managing Coal Combustion Residues in Mines*. This report concludes that the main advantages of beneficially using coal ash in mine reclamation are:

"(1) [I]t can assist in meeting reclamation goals (such as remediation of abandoned mine lands), and

(2) [I]t avoids the need, relative to landfills and impoundments, to disrupt undisturbed sites."

The report (note that in the report coal combustion products are referred to as "CCRs", Coal Combustion Residues) includes several recommendations:

- CCRs should be characterized prior to significant mine placement and with each new source of CCRs. [*Id.* At 5.]

- [C]omprehensive site characterization specific to CCR placement be conducted at all mine sites prior to substantial placement of CCRs. [*Id.* At 6.]

- CCR placement in mines be designed to minimize reactions with water and the flow of water through CCRs. [*Id.* At 7.]

- [T]he number and location of monitoring wells, the frequency and duration of sampling, and the water quality parameters selected for analysis be carefully determined for each site, in order to accurately assess the present and potential movement of CCR-associated contaminants. [*Ibid.*]

We support these recommendations, and it is important to note that virtually all of these recommendations are already present in the existing beneficial use regulations.

We also support those regulations that are proposed in Chapter 290 that are designed to address the above recommendations and, where necessary, strengthen the existing beneficial use regulations. But, once again, this must be done in a manner that recognizes the specific characteristics of the ash to be beneficially used; how the ash is intended to be used; the specific characteristics of the site where the material is to be placed; and the overall environmental and public safety improvements resulting from the beneficial use of coal ash.

We also support regulations that reflect the relative risk of a constituent or a particular beneficial use application. For example, a constituent for which neither a Statewide Health Standard nor Maximum Contaminant Level has been established, whether associated with ash characteristics or water quality, should not be treated in the same manner as one for which such limits exist.

We are now seeing what can happen when political intervention fails to target a specific risk - the impoundment failure that occurred at TVA's Kingston Station in Tennessee. EPA has been directed to re-evaluate how coal ash is regulated. Clearly, what occurred

last December at Kingston was a tragedy. However, what happened was a structural failure of a poorly constructed impoundment. What this event should have triggered was a focused evaluation of existing regulations in order to address and prevent structural failures of dams associated with such structures. Instead, we are now facing potential regulations that go far beyond the physical or structural concerns associated with the safety risks posed with large impoundments.

Before leaving the topic of structural/physical considerations, it is important to mention another organization that was formed early last year - the Pennsylvania Coal Ash Research Group (PCARG). PCARG is comprised of generators and consumers of coal ash and is a self-initiated endeavor that was formed prior to the TVA incident. The primary mission of PCARG is to support research being conducted at Penn State to evaluate and identify appropriate physical/structural tests to help ensure that ash is beneficially used in a safe and environmentally responsible manner.

Discrete changes in the chemical characteristics of the coal ash or in water quality cannot serve as the basis for making operational or regulatory decisions. Such decisions must be based on statistically significant changes that are supported by clear trends.

Throughout the proposed regulations there are no provisions for transitioning many of these requirements to those sites that have been previously approved to store or use coal ash and are actively in the process of doing so - prior to the adoption of these regulations. There is also no indication as to the effective date on which all of the new requirements of the proposed regulations are applicable (i.e. "within x of the regulations becoming final").

Lastly, since this chapter of the residual waste regulations is being modified on a separate track from the other solid waste regulations, we are concerned that there could be references in the proposed regulations to other chapters or requirements of the solid waste regulations that could be modified or developed at a future date (such as the anticipated merging of the residual and municipal waste regulations). This same concern holds for missed cross references to either newly defined terms or the new Chapter 290. For example, 287.101(b)(3) [General Requirements for Permit] acknowledges that no permit is required for the beneficial use of coal ash under Subchapter H (relating to beneficial reuse.) At a minimum, this regulation should be modified to acknowledge the new Chapter 290. To the extent that the term coal ash is further modified, additional changes might be appropriate.

We appreciate the efforts of the Department in developing beneficial use regulations - this is a management option that makes sense and can be done in a manner that is protective of human health and the environment.

PART II

Specific Comments on the Proposed Regulations

This section provides specific comments on the proposed regulations - beginning with proposed definitions in Chapter 287 that are applicable to Chapter 290. Generally, this section is presented by providing a copy of te specific proposed regulation; followed by a comment on the proposed regulation and then finally, suggested regulatory language that reflects the comment.

CHAPTER 287. RESIDUAL WASTE MANAGEMENT—GENERAL PROVISIONS

Proposed Regulation:

§ 287.1. Definitions.

Coal ash—Fly ash, bottom ash or boiler slag resulting from the combustion of coal, that is or has been beneficially used, reused or reclaimed for a commercial, industrial or governmental purpose. The term includes such materials that are stored, processed, transported or sold for beneficial use, reuse or reclamation. [For purposes of this article, the term also includes fly ash, bottom ash or boiler slag resulting from the combustion of coal, that is not and has not been beneficially used, reused or reclaimed for a commercial, industrial or governmental purpose.]

Comment:

The proposal to carve out coal ash that is NOT beneficially used from the definition of coal ash creates potential confusion. In many instances, the term coal ash means coal combustion material that is disposed and not beneficially used. It appears that the DEP has defaulted to the term used in the statute, which is usually a safe approach in rulemaking. However, it should be noted that the term is used sparingly in the Solid Waste Management Act to carve out a distinct category of beneficially used material from classification as solid waste. By comparison, the term is used extensively within the residual waste regulations to describe both ash that is beneficially used as well as disposed. Hence, the defined term in the regulations should recognize both possibilities. The current definition of coal ash should remain unchanged.

Suggested Language:

Coal ash—Fly ash, bottom ash or boiler slag resulting from the combustion of coal, that is or has been beneficially used, reused or reclaimed for a commercial, industrial or governmental purpose. The term includes such materials that are stored, processed, transported or sold for beneficial use, reuse or reclamation. ***{For purposes of this article, the term also includes fly ash, bottom ash or boiler slag resulting from the combustion of coal, that is not and has not been beneficially used, reused or reclaimed for a commercial, industrial or governmental purpose.}***

Proposed Regulation:

Structural fill—The engineered use of **[coal ash]** **material** as a base or foundation for a construction activity that is completed promptly after the placement of the **[coal ash]** **material**, including the use **[of coal ash]** as **[a]** backfill **[material]** for retaining walls, foundations, ramps or other structures. The term does not include valley fills or the use of **coal ash or** solid waste to fill open pits from coal or noncoal mining.

Comment:

The DEP has proposed to replace the term "coal ash" within the revised definition of structural fill with the undefined term "material". This may have been done as a consequence of the agency's narrower proposed definition of coal ash. If so, the DEP has been inconsistent in replacing the term in the structural fill definition. The DEP has proposed in this definition to insert a new reference to coal ash as being equivalent to "solid waste" with coal ash. In particular, the proposed new definition provides that "The term [Structural fill] does not include valley fills or the use of coal ash or solid waste to fill open pits from coal or noncoal mining". The current definition of "structural fill "should be restored.

Suggested Language:

Structural fill—The engineered use of **{coal ash}** ~~**material**~~ as a base or foundation for a construction activity that is completed promptly after the placement of the **{coal ash}** ~~**material**~~, including the use **{of coal ash}** as **{a}** backfill **{material}** for retaining walls, foundations, ramps or other structures. The term does not include valley fills or the use of ~~**coal ash or**~~ solid waste to fill open pits from coal or noncoal mining.

Proposed Regulation:

Water table—the top of the saturated zone. The term includes the regional groundwater table, perched water tables, seasonal high water table, and the surface of mine pools.

Comment:

The term should not include isolated saturated zones that do not interact with the regional groundwater table.

Suggested Language:

Water table—the top of the saturated zone. The term ***may*** includes ~~the regional groundwater table,~~ perched water tables, seasonal high water table, and the surface of mine pools ***that interact with the regional groundwater table.***

CHAPTER 290. BENEFICIAL USE OF COAL ASH

Subchapter A. GENERAL

Proposed Regulation:

§ 290.1. Scope.

(b) If coal ash is mixed with residual waste or ash produced by co-firing coal or waste coal with an alternative fuel, the beneficial use must be authorized by a permit issued under this article and the requirements of this chapter must be met.

Comment:

Provided that ash is generated by coal or waste coal serving as the predominant fuel, ash meeting qualification/certification limits should be authorized for beneficial use, without a permit.

Suggested language:

~~If~~ *Ce*oal ash ~~is mixed with residual waste or ash~~ produced by co-firing coal or waste coal with an alternative fuel ***is authorized to be beneficially used, provided that coal or waste coal is the predominant fuel and the ash meets applicable ash qualification or certification requirements in § 290.201.*** ~~the beneficial use must be authorized by a permit issued under this article and the requirements of this chapter must be met.~~

Suggested Language to be Added to § 290.1:

Coal ash that has been stored or impounded and meets the applicable ash qualification or certification requirements is authorized for beneficial use without a permit.

The above addition could be inserted in this section prior to the current" (e)".

Subchapter B. BENEFICIAL USE OF COAL ASH

Proposed Regulation:

§ 290.101. General requirements for the beneficial use of coal ash.

(b) Chemical analysis must demonstrate that the coal ash does not exceed any of the maximum acceptable leachate levels in § 290.201(a) (relating to coal ash qualification). The minimum sampling and analysis procedures must satisfy the requirements in § 290.201(c) (relating to coal ash qualification). The Department may waive or modify this requirement for uses under § 290.106(b)(1)-(3) (relating to other beneficial uses of coal ash).

Comment:

Coal ash is beneficially used throughout the Commonwealth in a wide range of applications. Therefore, the constituents to be assessed – or even the need to conduct chemical analyses - must reflect the ultimate beneficial use of the coal ash. The comprehensive chemical analyses should only be required in those instances where coal ash is to be placed directly in contact with the ground and for those applications for which no other restrictions are called out in § 290.106 (Other beneficial uses of coal ash).

Therefore, the use or incorporation of ash into a product - such as cement, concrete, and flowable fill/grouts (such as in mine subsidence control), should not be subject to the comprehensive chemical analyses noted in § 290.201 (Coal ash qualification). However, ash used in such applications must still be done in a manner consistent with the restrictions noted in the regulations for such beneficial uses (i.e. written notification to the Department; using coal ash within 24 hours of its delivery to the site unless stored in accordance with Subchapter E (relating to coal ash storage); and the pH of the coal ash is in a range that will not cause or allow the ash to contribute to water pollution).

Suggested Language:

Chemical analysis must demonstrate that the coal ash does not exceed any of the maximum acceptable leachate levels in § 290.201(a) (relating to coal ash qualification). The minimum sampling and analysis procedures must satisfy the requirements in § 290.201(c) (relating to coal ash qualification). The Department ~~may~~ waives ~~or modify~~ this requirement for ***the following uses listed under*** § 290.106(b)(1)-(3), ***(5), (7), and (8)*** (relating to other beneficial uses of coal ash).

Note - "(8)" is an additional beneficial suggested for inclusion in this section - the use of coal ash as a fuel, provided that it has a minimum heating value of 5,000 BTU/pound.

Proposed Regulation:

§ 290.101. General requirements for the beneficial use of coal ash.

(d) A water quality monitoring plan in accordance with § 290.301 (relating to water quality monitoring) and, if applicable, Chapters 86—90 must be developed and implemented if either more than 10,000 tons of coal ash per acre is to be used on a project or more than 100,000 tons of coal ash in total will be used at a project. Contiguous projects will be considered a single project for purposes of this section. The Department may require a water quality monitoring plan for projects involving lesser quantities of coal ash where site conditions warrant. The Department may waive or modify this requirement for uses under § 290.106(b)(1)-(6) (relating to other beneficial uses of coal ash).

Comment:

The proposed regulations require the development and implementation of a water quality monitoring plan for all beneficial uses listed in § 290.106 that exceed certain quantities. As noted earlier, there are a variety of beneficial use applications in which such a plan is not needed. Similar to the requirement to conduct chemical analyses of ash, this requirement, provided the quantity of ash used for the project triggers the specified quantity, should be limited to those applications in which the ash is to be beneficially used in a manner that will result in the ash being placed in direct contact with the ground. Beneficial uses not meeting this condition should be specifically waived from this requirement. Examples would be the beneficial use of ash in the production of cement, concrete, flowable fill, and grout.

Suggested Language:

A water quality monitoring plan in accordance with § 290.301 (relating to water quality monitoring) and, if applicable, Chapters 86—90 must be developed and implemented if either more than 10,000 tons of coal ash per acre is to be used on a project or more than 100,000 tons of coal ash in total will be used at a project. Contiguous projects will be considered a single

project for purposes of this section. The Department may require a water quality monitoring plan for projects involving lesser quantities of coal ash where site conditions warrant. The Department ~~may~~ waive~~s or modify~~ this requirement for uses under § 290.106(b)(1)-~~(6)~~ ***(3), (5), (7), and (8)*** (relating to other beneficial uses of coal ash).

Note - "(8)" is an additional beneficial use suggested for inclusion in this section - the use of coal ash as a fuel, provided that is has a minimum heating value of 5,000 BTU/pound.

Proposed Regulation:

§ 290.102. Use of coal ash as structural fill.

(a) At least 60 days before using coal ash as structural fill, the person proposing the use shall submit a written notice to the Department. The notice must contain, at a minimum, the following information:

Comment:

This section should only be applicable to new projects or active projects that will extend beyond two years from the effective date of publication.

Suggested Language:

(a) ***For new or active projects that will extend beyond two years from the effective date of publication of these regulations, (a)***~~A~~t least 60 days before using coal ash as structural fill, the person proposing the use shall submit a written notice to the Department. The notice must contain, at a minimum, the following information:

Proposed Regulation:

§ 290.104. Beneficial use of coal ash at coal mining activity sites.

(f)(3) The coal ash shall be spread and compacted within 24 hours of its delivery to the site unless stored in accordance with Subchapter E (relating to coal ash storage).

Comment:

The 24-hour limit is too restrictive and does not allow for operational considerations (e.g. weather) or for weekends/holidays.

Suggested Language:

The coal ash shall be spread and compacted ***promptly*** ~~within~~ 24 ~~hours~~ ***after*** ~~of~~ its delivery to the site unless stored in accordance with Subchapter E (relating to coal ash storage).

Proposed Regulation:

§ 290.104. Beneficial use of coal ash at coal mining activity sites.

(4) Coal ash must achieve a minimum compaction of 90 % of the maximum dry density as determined by the Modified Proctor Test, or 95 % of the maximum dry density as determined by the Standard Proctor Test. Ash from each source must be tested individually. The Proctor Test must be conducted by a certified laboratory on a semiannual basis unless the Department requires more frequent testing.

Comment:

It is agreed that periodically evaluating compaction may provide useful feedback for certain sites where coal ash is being beneficially used. However, the requirement that ash from each source be tested individually is problematic for a reclamation site receiving ash from multiple generators, especially if those sources vary throughout the calendar year. Compaction testing should be conducted on a semiannual basis, but at a time and in locations at the site where the ash is being placed that will yield data that is representative of compaction being achieved at the site.

Suggested Language:

Coal ash must achieve a minimum compaction of 90 % of the maximum dry density as determined by the Modified Proctor Test, or 95 % of the maximum dry density as determined by the Standard Proctor Test. ~~Ash from each source must be tested individually.~~ ***The test must be conducted at a time and in site location(s) that are representative of conditions at the site.*** The Proctor Test must be conducted by a certified laboratory on a semiannual basis unless the Department requires more frequent testing.

Proposed Regulation:

§ 290.104. Beneficial use of coal ash at coal mining activity sites.

(h)(2)(i) *Additional coal ash sampling.* A person using coal ash at a coal mining activity site shall, each quarter that coal ash is being used at the site, sample the ash after it has been placed at the site and such sample shall be analyzed in accordance with section 290.201(b)(5). The results of the analysis shall be submitted quarterly to and in the format required by the Department.

Comment:

This requirement is duplicative of the requirement for generators to complete quarterly chemical analyses of ash to be used for mine reclamation.

Suggested Language:

Strike this proposed requirement.

~~(h) *Additional coal ash sampling.* A person using coal ash at a coal mining activity site shall, each quarter that coal ash is being used at the site, sample the ash after it has been placed at the site and such sample shall be analyzed in accordance with section 290.201(b)(5). The results of the analysis shall be submitted quarterly to and in the format required by the Department.~~

Proposed Regulation:

§ 290.105. Coal ash beneficial use at abandoned coal surface mine sites.

(e)(1) The pH of the coal ash as placed must be in the range of 6.0 to 9.0, unless otherwise approved by the Department. Lime may be added to raise pH.

Comment:

The acidic conditions at mine sites benefit from the alkaline nature of coal ash, especially that generated at CFB waste coal-fired stations. In other words, the intent should be to restrict the placement of materials at such sites (i.e. mine reclamation sites) that are acidic in nature - that is, materials having a pH of less than 7. This is already reflected in Technical Guidance Document 563-2112-224 and Form 5600-PM-MR0012.

Suggested Language:

The pH of the coal ash as placed must be ***greater than 7*** ~~in the range of 6.0 to 9.0~~, unless otherwise approved by the Department. Lime may be added to raise pH.

Proposed Regulation:

§ 290.105. Coal ash beneficial use at abandoned coal surface mine sites.

(e)(3) Coal ash shall be spread uniformly and compacted in layers not exceeding 2 feet in thickness. The coal ash shall be spread and compacted within 24 hours of its delivery to the site unless stored in accordance with Subchapter E (relating to coal ash storage).

Comment:

The 24-hour limit is too restrictive and does not allow for operational considerations (e.g. weather) or for weekends/holidays.

Suggested Language:

Coal ash shall be spread uniformly and compacted in layers not exceeding 2 feet in thickness. The coal ash shall be spread and compacted ***promptly*** ~~within 24 hours~~ of ***after*** its delivery to the site unless stored in accordance with Subchapter E (relating to coal ash storage).

Proposed Regulation:

§ 290.106. Other beneficial uses of coal ash.

(b)(1) The use of coal ash in the manufacture of concrete. The coal ash shall be utilized within 24 hours of its delivery to the site unless stored in accordance with Subchapter E (relating to coal ash storage).

Comment:

The description needs to be expanded to include the use of coal ash as a feedstock in the manufacture of cement and to provide clarification that the term "concrete" includes flowable fill.

Suggested Language:

The use of coal ash in the manufacture of ***cement and*** concrete, ***including flowable fill and grout.*** The coal ash shall be utilized within 24 hours of its delivery to the site unless stored in accordance with Subchapter E (relating to coal ash storage).

Proposed Regulation:

§ 290.105. Coal ash beneficial use at abandoned coal surface mine sites.

(b)(4) The use of bottom ash or boiler slag as an antiskid material or road surface preparation material, if the use is consistent with Department of Transportation specifications or other applicable specifications. The use of fly ash as an antiskid material or road surface preparation material is not deemed to be a beneficial use.

Comment:

The restriction of complying with Department of Transportation specifications should only apply to the use of this material when it is placed on public roads.

Suggested Language:

The use of bottom ash or boiler slag as an antiskid material or road surface preparation material. ***Bottom ash or boiler slag to be used on public roads must be consistent*** with Department of Transportation specifications or other applicable specifications. The use of fly ash as an antiskid material or road surface preparation material is not deemed to be a beneficial use.

Suggested Additions to § 290.106:

Comment:

Some coal ashes that are generated can be high in unburned carbon and can be beneficially used (combusted) as fuel.

Suggested language:

The use of coal ash as a fuel, provided it has a minimum heating value of 5,000 BTU/pound.

This language should be added to the section and be identified as "(8)".

Comment:

Natural gas exploration in the Commonwealth has created challenges for treating and discharging waters from this activity. Beneficially using fly ash to stabilize this material allows this material to be managed in landfills permitted to handle such material.

Suggested Language:

Use of ash to stabilize liquids generated from the exploration, development, and operation of natural gas operations. This language should be added to the section, following the above addition, and be identified as "(9)".

Subchapter C. COAL ASH QUALIFICATION

Proposed Regulation:

§ 290.201. Coal ash qualification.

(a)(1)(ii) For contaminants other than metals and cations, the waste classification standard for a contaminant.

Comment:

Consistent with the health risks posed by such constituents, and the requirements for Class III residual wastes placed directly in contact with the ground, the Department should allow, in certain instances, leachable values that are greater than the associated waste classification standard.

Suggested Language:

For contaminants other than metals and cations, ***the Department may approve ash with leachable concentrations for those contaminants that are up to 10 times*** the waste classification standard for a contaminant.

Proposed Regulation:

§ 290.201. Coal ash qualification.

(b)(1) The coal ash will be used only at a specified mine site(s). The coal ash qualification is limited for use only at the specified site.

Comment:

This provision should not be limited to "specified mine site(s").

Suggested Language:

The coal ash will be used only at a specified ~~**mine**~~ site**(s).** The coal ash qualification is limited for use only at the specified site.

Proposed Regulation:

§ 290.201. Coal ash qualification.

(b)(2) Only standards based on secondary MCLs (aluminum, chloride, iron, manganese, sulfate, silver and zinc) are exceeded. All other limits shall be met.

Comment:

Constituents designated as having secondary MCLs may change over time. Therefore, it is unnecessary to list specific constituents.

Suggested Language:

Only standards based on secondary MCLs ~~**(aluminum, chloride, iron, manganese, sulfate, silver and zinc)**~~ are exceeded. All other limits shall be met.

Proposed Regulation:

§ 290.201. Coal ash qualification.

(b)(3) The mine site operator can demonstrate that use of the coal ash at these levels will not adversely impact the surface water or groundwater quality and that the use of the coal ash will achieve an overall benefit in groundwater quality.

Comment:

This provision should not be limited to "mine site operators". In addition, the Department should approve those coal ashes that exceed the secondary MCLs, provided the operator or generator can demonstrate that any potential increase in concentrations of those constituents in surface and groundwater would be inconsequential, regardless of baseline levels.

Suggested Language:

The ~~***mine***~~ site operator can demonstrate that use of the coal ash at these levels will ***have inconsequential impacts*** ~~not adversely impact~~ on surface water or groundwater quality. ~~and that the use of the coal ash will achieve an overall benefit in groundwater quality.~~

Proposed Regulation:

§ 290.201. Coal ash qualification.

(c) A request for coal ash qualification must contain the following information on a form provided by the Department:

Comment:

The need to complete the coal ash qualification should be limited to non-cementitious beneficial uses in which the ash is placed in direct contact with the ground.

Suggested Language:

This requirement is only applicable to non-cementitious beneficial uses in which the ash is placed in direct contact with the ground.

Proposed Regulation:

§ 290.201. Coal ash qualification.

(c)(3) A description of the coal ash generation process specific to the generator, including the combustion and pollution control processes, the fuel sources utilized, and the expected percentages of coal ash derived from different processes that will be incorporated into the final coal ash stream to be delivered to the beneficial use site.

Comment:

There are numerous "pollution control processes" at a generating station whose operation does not impact the chemical or physical characteristics of the ash.

Suggested Language:

A description of the coal ash generation process specific to the generator, including the combustion and ***air*** pollution control processes, the fuel sources utilized, and the expected percentages of coal ash derived from different processes that will be incorporated into the final coal ash stream to be delivered to the beneficial use site.

Proposed Regulation:

§ 290.201. Coal ash qualification.

(c)(5)(i) Total and leachable concentrations for aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, potassium, selenium, silver, sodium, sulfate, thallium, vanadium and zinc and leachable concentrations for ammonia, chloride, fluoride, nitrate and nitrite using methods found in EPA's ''Test Methods for Evaluating Solid Waste, Physical/Chemical Methods'' (EPA Publication No. SW-846) or comparable methods approved by the Department. Leachate concentrations shall be determined using EPA Method

1312, the Synthetic Precipitation Leaching Procedure, or another leaching procedure approved

Comment:

Nitrite is not associated with coal ash and should not be listed as a constituent of interest.

Suggested Language:

Total and leachable concentrations for aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, potassium, selenium, silver, sodium, sulfate, thallium, vanadium and zinc and leachable concentrations for ammonia, chloride, fluoride, nitrate ~~and nitrite~~ using methods found in EPA's ''Test Methods for Evaluating Solid Waste, Physical/Chemical Methods'' (EPA Publication No. SW-846) or comparable methods approved by the Department. Leachate concentrations shall be determined using EPA Method 1312, the Synthetic Precipitation Leaching Procedure, or another leaching procedure approved.

Proposed Regulation:

§ 290.201. Coal ash qualification.

(c)(6) A laboratory analysis for optimum moisture content and dry density (Standard or Modified Proctor Test).

Comment:

Determining optimum moisture content and dry density shall be completed for those beneficial uses for which such data is appropriate.

Suggested Language:

A laboratory analysis for optimum moisture content and dry density (Standard or Modified Proctor Test) ***for beneficial uses where such testing is applicable.***

Proposed Regulation:

§ 290.201. Coal ash qualification.

(c)(7) An analysis of permeability reported in cm/sec.

Comment:

Calculating permeability is appropriate when the ash is to be used as a low-permeability material.

Suggested Language:

An analysis of permeability reported in cm/sec ***when the ash is to be used as a low-permeability material.***

Proposed Regulation:

§ 290.201. Coal ash qualification.

(c)(8) A determination of neutralization potential as determined by the Neutralization Potential Test in the Department's *Overburden Sampling and Testing Manual* (Noll, et al., 1988) or other method approved by the Department.

Comment:

The neutralization potential shall be calculated when the ash is to be used as a liming agent, soil substitute or additive.

Suggested Language:

A determination of neutralization potential as determined by the Neutralization Potential Test in the Department's *Overburden Sampling and Testing Manual* (Noll, et al., 1988) or other method approved by the Department ***when the ash is to be used as a liming agent, soil substitute or additive.***

Proposed Regulation:

§ 290.201. Coal ash qualification.

(e)(2) A representative sample analysis collected whenever there is a change in operation of the combustion unit generating the coal ash or a significant change in the fuel source.

Comment:

Additional ash sampling should only be undertaken in the event that there is a significant change in the fuel source or the operation of the generating unit (i.e. a change that can be reasonably expected to alter the characteristics of the ash to the extent it may no longer meet qualification limits).

Suggested Language:

A representative sample analysis collected whenever there is a ***significant*** change in operation of the combustion unit generating the coal ash or a significant change in the fuel source.

Proposed Regulation:

§ 290.201. Coal ash qualification.

(f) The coal ash generator and the person beneficially using the coal ash must notify the Department of any changes to the information filed in the qualification application or of any evidence that the coal ash may not meet qualification requirements.

Comment:

Either party, but not both, should notify the Department.

Suggested Language:

The coal ash generator ***or*** ~~and~~ the person beneficially using the coal ash must notify the Department of any changes to the information filed in the qualification application or of any evidence that the coal ash may not meet qualification requirements.

Subchapter D. Water Quality Monitoring

Proposed Regulation:

§ 290.301. Water quality monitoring.

(a)(2) A minimum of 12 background samples from each monitoring point taken at monthly intervals prior to placement of coal ash, unless a different number or frequency is approved by the Department.

Comment:

There are really two considerations associated with this section – the development of a water quality "baseline "and the sampling period to accomplish this.

Often, at sites where ash is to be beneficially used, particularly sites where mining operations have previously occurred, the hydrogeology and water quality have been

significantly impacted. Therefore, it should be monitoring points located hydraulically downgradient of the site where the ash is to be placed that will serve to establish the "baseline" for water quality at the site.

At this point, it is important to note that the primary function of upgradient monitoring point(s) is not necessarily to serve as a comparison to the downgradient monitoring point in order to determine potential impacts from the placement of ash. Instead, the primary function of the upgradient monitoring point(s) is to detect impacts to water quality that have occurred from activities conducted upgradient of the site where ash is to be placed.

As a side, this is just one of many requirements in the proposed regulations that fail to consider the many sites throughout the Commonwealth where ash is already being beneficially used to reclaim sites. How does one collect a year's worth of samples "prior to the placement of ash" if ash has already been placed at the site? The added complication is that previous water quality monitoring did not include all of the constituents proposed for monitoring in order to establish a water quality baseline for a site.

If a provision is to be made for mine sites that have previously accepted ash - and the site is active after the adoption of these regulations - then it is suggested that the baseline be established while ash continues to be placed at the site and the baseline will be comprised of: 1. previous analytical results (for constituents previously monitored over a historic period that reflects conditions that exist at the site and continued to be required to be monitored by the proposed regulations) and 2. the "new" constituents not previously monitored but now required by the proposed regulations.

Now to address the issue of the sampling period needed to establish a baseline for the water quality at a site. In either of the cases outlined above, 12 months may be insufficient to establish a true baseline for the site since there can be significant seasonal variations along with year to year variations in overall precipitation and temperature. Therefore, the baseline should be based on 3-5 years of sampling. If data must be collected at "new" sites (i.e. prior to placement of ash) 12 months of data can still be collected prior to the placement of ash, but that data should be incorporated into the minimum of three years of water quality data to be collected in development of the baseline. In situations where the site will be completed in less than 3 years, the 12-month period will be applicable.

In all cases, the baseline to be established for each constituent will be the maximum dissolved value recorded from the downgradient monitoring point(s) during the baseline establishment monitoring period.

Suggested Language:

A minimum of 12 ~~background~~ samples from each monitoring point taken at monthly intervals prior to placement of coal ash, unless a different number or frequency is approved by the Department. A minimum of 12 background samples from each monitoring point taken at monthly intervals prior to placement of coal ash, unless a different number or frequency is approved by the Department. ***For such sites, the baseline will be established using at least two additional years of monitoring (i.e. a minimum of a total of 36-months of monitoring data). For sites that have not yet received ash, but that are anticipated to be completed/reclaimed prior to two years, shall use the data from the 12-month water quality monitoring collected prior to the-placement of ash as baseline.***

For sites where ash has been previously placed, the water quality baseline will be established through monthly sampling over the 36-month period after these regulations become effective (starting with the beginning of the next full calendar month). For sites that are anticipated to be completed/reclaimed prior to three years shall monitoring data collected over a 12-month period.

This requirement is waived for sites that have already received ash and that will cease to receive ash beyond a period of 12 months from the date these regulations become effective.

Proposed Regulation:

§ 290.302. Number, location and depth of monitoring points.

(a)(1) At least one monitoring well at a point hydraulically upgradient from the coal ash placement area in the direction of increasing static head that is capable of providing representative data of groundwater not affected by placement of coal ash, except when the coal ash placement area occupies the most upgradient position in the flow system. In that case, sufficient downgradient monitoring points shall be placed to determine the extent of adverse effects on groundwater from the coal ash placement.

Comment:

The monitoring point is not required to be a "well".

Suggested Language:

At least one monitoring ***point*** ~~well~~ ~~at a point~~ hydraulically upgradient from the coal ash placement area in the direction of increasing static head that is capable of providing representative data of groundwater not affected by placement of coal ash, except when the coal ash placement area occupies the most upgradient position in the flow system. In that case,

sufficient downgradient monitoring points shall be placed to determine the extent of adverse effects on groundwater from the coal ash placement.

Proposed Regulation:

§ 290.302. Number, location and depth of monitoring points.

(b) The upgradient and downgradient monitoring wells shall be:

Comment:

The monitoring point is not required to be a "well".

Suggested Language:

The upgradient and downgradient monitoring ***points*** ~~wells~~ shall be:

Proposed Regulation:

§ 290.304. Groundwater assessment plan.

(a)(1) Data obtained from monitoring by the Department or the person indicates a significant change in the quality of groundwater or surface water from background levels determined under § 290.301(a)(2) (relating to water quality monitoring) at any downgradient monitoring point.

Comment:

As noted previously, the characteristics and relative risks posed by an individual constituent - coupled with the likelihood that the constituent is present in coal ash and the existence of a human receptor near a particular site - should dictate whether or not that constituent should be monitored and whether or not the presence of that constituent and the concentration at which it is present should trigger the need to conduct an "assessment".

Historically, environmental agencies have expended considerable resources assessing the risks posed by various constituents present in coal ash. The studies associated with the risks presented by the inorganic constituents present in coal ash are reflected in drinking water standards and associated maximum contaminant levels. Those constituents (e.g. mercury) that have been determined, through intensive study and evaluation, to have the potential to present such significant risks are assigned a primary MCL. Constituents not deemed to present such risks (e.g. iron) are given secondary MCLs. The regulatory treatment of these constituents reflects this

relationship. Primary MCLs serve as enforceable limits while secondary MCLs function as general guidelines.

Act 2 reflects the very relationship described above. Therefore, the inorganic constituents found in Appendix A, Table 2 of Title 25 Chapter 250 should dictate which of the monitored constituents be considered for the completion of an assessment. These are referred to as "specified constituents", which is described below. In summary, some constituents should be monitored and reported - while others require more than just monitoring, they may require the need for assessment and abatement.

The other component of determining whether to complete an assessment is to consider whether a change in water quality in a downgradient monitoring point is considered statistically significant. The determination as to whether such changes are statistically significant should be through the use of methods approved for such evaluations, such as EPA's document titled "Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities - Unified Guidance".

So, in conclusion, the triggers for completing a groundwater assessment must be based on the risks posed by a specific constituent and whether such a constituent has degraded in a statistically significant manner.

Suggested Language:

Data obtained from monitoring by the Department or the person indicates a *statistically* significant **degradation** ~~**change**~~ in the quality *of specified constituents (dissolved) monitored in the* ~~**of**~~ groundwater or surface water *as compared to* ~~*from background*~~ *baseline* levels determined under § 290.301(a)(2) (relating to water quality monitoring) at any downgradient monitoring point. ***The specified constituents are those included in 290.301 (d) and (e) AND which appear in Appendix A, Table 2 of Title 25 Chapter 250 and have a designated maximum contaminant level for non-residential, non-use aquifers..***

Proposed Regulation:

§ 290.305. Abatement plan.

(a)(1) The groundwater assessment plan prepared and implemented under § 290.304 (relating to groundwater assessment plan) shows the presence of groundwater degradation for one or more contaminants at one or more monitoring points and the analysis under § 290.304(c) indicates that an abatement standard under subsection (c) will not be met.

Comment:

Consistent with conducting assessments, reference should be made to statistically significant changes to specified constituents at one or more downgradient monitoring points.

Suggested Language:

The groundwater assessment plan prepared and implemented under § 290.304 (relating to groundwater assessment plan) shows the presence of ***statistically significant*** groundwater degradation for one or more ***of the specified constituents*** ~~contaminants~~ at one or more ***of the downgradient*** monitoring points and the analysis under § 290.304(c) indicates that an abatement standard under subsection (c) will not be met.

Proposed Regulation:

§ 290.305. Abatement plan.

(a)(2) Monitoring by the Department or person shows the presence of an abatement standard exceedance from one or more compliance points as indicated in subsection (c) even if a groundwater assessment plan has not been completed. The person is not required to implement an abatement plan under this paragraph if the following apply:

Comment:

Consistent with conducting assessments, reference should be made to statistically significant changes to specified constituents at one or more downgradient monitoring points.

Suggested Language:

Monitoring by the Department or person shows the presence of an abatement standard exceedance ***of a specified constituent*** from one or more ***downgradient*** compliance points as indicated in subsection (c) even if a groundwater assessment plan has not been completed. The person is not required to implement an abatement plan under this paragraph if the following apply:

Proposed Regulation:

§ 290.305. Abatement plan.

(a)(2)(i) Within 10 days after receipt of sample results showing an exceedance of an abatement standard at a point of compliance described in subsection (c), the person resamples the affected monitoring points.

Comment:

It should be specified that the abatement standard relates to the compliance point downgradient of the area where ash is placed.

Suggested Language:

Within 10 days after receipt of sample results showing an exceedance of an abatement standard at a ***downgradient*** point of compliance described in subsection (c), the person resamples the affected monitoring points.

Proposed Regulation:

§ 290.305. Abatement plan.

(c) If abatement is required in accordance with subsection (a), the person shall demonstrate compliance with one or more of the following standards at the identified compliance points:

Comment:

It should be specified that the abatement standard relates to the compliance point downgradient of the area where ash is placed.

Suggested Language:

If abatement is required in accordance with subsection (a), the person shall demonstrate compliance with one or more of the following standards at the identified ***downgradient*** compliance point***(s):***

Proposed Regulation:

§ 290.305. Abatement plan.

(c)(1) For constituents for which statewide health standards exist, the statewide health standard for that constituent at and beyond 500 feet of the perimeter of the permitted coal ash placement area or at and beyond the property boundary, whichever is closer.

Comment:

It should be specified that the abatement standard relates to the compliance point downgradient of the area where ash is placed.

Suggested Language:

For constituents for which statewide health standards exist, the statewide health standard for that constituent at and beyond 500 feet ***downgradient*** of the perimeter of the permitted coal ash placement area or at and beyond the property boundary, whichever is closer.

Proposed Regulation:

§ 290.305. Abatement plan.

(c)(2) The background standard for constituents at and beyond 500 feet of the perimeter of the permitted coal ash placement area or at and beyond the property boundary, whichever is closer. Load-based standards at groundwater discharge points are acceptable if the permit was issued under Chapter 87, Subchapter F or Chapter 88, Subchapter G (relating to surface coal mines: minimum requirements for remining areas with pollutional discharges; and anthracite surface mining activities and anthracite bank removal and reclamation activities: minimum requirements for remining areas with pollutional discharges).

Comment:

"Baseline" should be substituted for "background" and it should be noted that this requirements pertains to specified constituents.

Suggested Language:

The ***baseline*** ~~**background**~~ standard for ***specified*** constituents at and beyond 500 feet of the perimeter of the permitted coal ash placement area or at and beyond the property boundary, whichever is closer. Load-based standards at groundwater discharge points are acceptable if the permit was issued under Chapter 87, Subchapter F or Chapter 88, Subchapter G (relating to

surface coal mines: minimum requirements for remining areas with pollutional discharges; and anthracite surface mining activities and anthracite bank removal and reclamation activities: minimum requirements for remining areas with pollutional discharges).

Proposed Regulation:

§ 290.305. Abatement plan.

(c)(3) For constituents for which no primary MCLs under the Federal and State Safe Drinking Water Acts (42 U.S.C.A. §§ 300f—300j-18; and 35 P. S. §§ 721.1—721.17) exist, the risk-based standard at and beyond 500 feet of the perimeter of the permitted coal ash placement area or at and beyond the property boundary, whichever is closer, if the following conditions are met:

Comment:

Reference should be to "specified" constituents.

Suggested Language:

For ***specified*** constituents for which no primary MCLs under the Federal and State Safe Drinking Water Acts (42 U.S.C.A. §§ 300f—300j-18; and 35 P. S. §§ 721.1—721.17) exist, the risk-based standard at and beyond 500 feet of the perimeter of the permitted coal ash placement area or at and beyond the property boundary, whichever is closer, if the following conditions are met:

Subchapter E. COAL ASH STORAGE

Proposed Regulation:

§ 290.402. Duration of storage.

(c)(1) For more than 1 year unless a minimum of 75% of the volume of the ash being stored is processed for beneficial use in the previous year.

Comment:

Clarify the requirement by specifying "twelve calendar months", rather than "year".

Suggested Language:

For more than 1 year unless a minimum of 75% of the volume of the ash being stored is processed for beneficial use ***during the previous twelve calendar months.***

Proposed Regulation:

§ 290.404. Areas where coal ash storage is prohibited.

(a) Coal ash storage areas, other than storage impoundments, may not be operated as follows, unless otherwise authorized by the Department in writing:

Comment:

Ash stored in an enclosed facility with an impermeable floor should be specifically exempt from this requirement.

Suggested Language:

Coal ash storage areas, other than storage impoundments ***and ash stored in an enclosed facility with an impermeable floor***, may not be operated as follows, unless otherwise authorized by the Department in writing:

Proposed Regulation:

§ 290.404. Areas where coal ash storage is prohibited.

(a)(2) Within 300 feet of a groundwater water source.

Comment:

It should be specified that "groundwater water source" refers to groundwater that is serving as a source of drinking water.

Suggested Language:

Within 300 feet of a groundwater ***source of drinking*** water ~~source~~.

Proposed Regulation:

(b) Coal ash storage impoundments may not be operated as follows:

Comment:

This requirement fails to consider the existence of previously approved /permitted storage impoundments.

Suggested Language:

After the effective date of these regulations, ~~C~~coal ash storage impoundments may not be ***located*** ~~**operated**~~ as follows:

Proposed Regulation:

§ 290.405. Storage piles—general requirements.

(a) A person storing coal ash in piles shall prevent the dispersal of coal ash by wind or water erosion.

Comment:

It is impractical to "prevent" the dispersal of material at all times, especially under abnormal weather conditions.

Suggested Language:

A person storing coal ash in piles shall ***minimize*** ~~**prevent**~~ the ***offsite*** ~~**dispersal**~~ ***dispersion*** of coal ash by wind or water erosion.

Proposed Regulation:

§ 290.405. Storage piles—general requirements.

(a) The coal ash being stored shall be separated from the water table by at least 4 feet without the use of a groundwater pumping system. The Department may waive, in writing, this requirement.

Comment:

This requirement should be specifically waived for storage piles placed on an impermeable pad or liner.

Suggested Language:

Unless stored on an impermeable pad or liner, *t*~~T~~he coal ash being stored shall be separated from the water table by at least 4 feet without the use of a groundwater pumping system. The Department may waive, in writing, this requirement.

Proposed Regulation:

§ 290.407. Storage piles—leachate and runoff control.

(a) A person that installs a storage pad or liner system shall collect leachate and runoff from the coal ash pile and divert it into a leachate storage system.

Comment:

This requirement should reflect that the collected leachate can be directed to a storage or treatment system.

Suggested Language:

A person that installs a storage pad or liner system shall collect leachate and runoff from the coal ash pile and divert it into a leachate storage ***or treatment*** system.

Thank you for your consideration of our comments on this proposal.

Regards,

Douglas L. Biden, President
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One-page Summary of Electric Power Generation Association Comments on Proposed Coal Ash Regulations – 25 PA Code CHS 287 and 290

EPGA is a trade association of 14 electric generating companies with headquarters in Harrisburg, Pa. Our members own and operate more than 145,000 megawatts of electric generating capacity in the US and have decades of experience managing millions of tons of coal combustion products annually, including coal ash, in an environmentally responsible manner.

Act 168 of 1986 established the clear intent of the PA General Assembly – to encourage the beneficial use of coal ash rather than consume increasingly scarce "greenfield space" to dispose of this material.

As recently as 2004, the PA General Assembly concluded that the use of coal ash for mine reclamation has environmental and economic benefits for the Commonwealth.

With proper regulation and oversight by DEP, beneficial use of coal ash at abandoned mines is a sound environmental solution to the hundreds of thousands of acres of mine lands that need to be reclaimed.

The proposed regulations, particularly those relating to coal ash qualification/certification, must reflect the diversity of the actual beneficial use. Ash to be incorporated into a product, such as concrete, should not be assessed in the same manner as ash being placed directly on the ground – as in large structural fills and mine reclamation projects.

The definition of coal ash must reflect this range of management options (disposal AND beneficial use) and the current definition of coal should remain unchanged.

EPGA supports those proposed regulations in Chapter 290 that are designed to address the NAS recommendations. However, this must be done in a manner that recognizes the specific characteristics of the ash to be beneficially used, how the ash is intended to be used, the specific characteristics of the site where the material is to be placed, and the overall environmental and public safety improvements that will result from the beneficial use of coal ash.

We also support regulations that reflect the relative risk of a constituent or a particular beneficial use application. For example, a constituent for which neither a Statewide Health Standard nor Maximum Contaminant Level has been established should not be regulated in the same manner as one for which such limits exist - whether associated with ash characteristics or water quality.

Discrete or isolated changes in the chemical characteristics of coal ash or water quality cannot serve as the basis for making operational or regulatory decisions - such as triggering the need to complete an assessment or corrective action; or the revocation of ash qualification. Such decisions must be based on statistically significant changes that are supported by clear trends.

The proposed regulations do not consider the need to address or transition the many sites throughout the Commonwealth where coal ash has already been placed or where beneficial use projects have already begun – prior to the adoption of these regulations. There is also no indication as to the date on which all of the new requirements of the proposed regulations will become effective.