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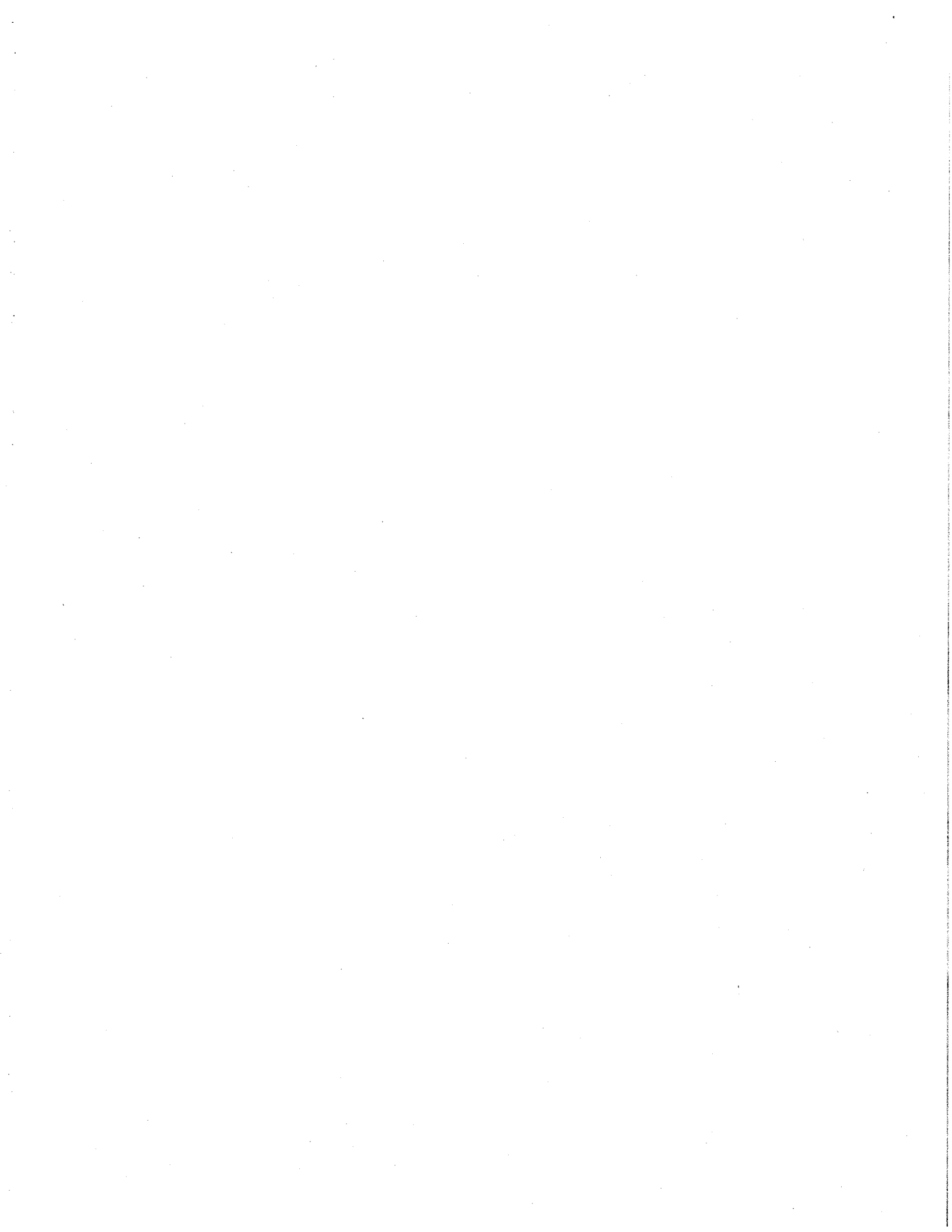
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Sent: Monday, November 09, 2009 1:49 PM
To: EP, RegComments
Subject: Coal Ash comments

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INDEPENDENT REGULATORY
REVIEW COMMISSION

Coal ash comments attached as related to draft Chapter 290 regulations.



The following comments and suggestions have been provided for draft **Chapter 290 Beneficial Use of Coal Ash**

Comment No. 1

290.104(f)(4)

This paragraph indicates that “Ash from each source must be tested individually”

Question: Unless the ash from each source is segregated (that is normally not common practice), how can this be done?

Comment No. 2

290.104(f)(6)(iii)

This paragraph indicates that “The total cubic yards of coal ash placed on the sites **is less than** the total cubic yards of refuse, culm, or silt removed from the sites”.

This statement should be revised to indicate: “The total cubic yards of coal ash placed on the sites **is equal to, or less than** the total cubic yards of refuse, culm, or silt removed from the sites”.

Comment No. 3

290.104(h)(2)(i)

This paragraph indicates that “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.....(etc)..

Based on the fact that ash sampling will be conducted at the plant for chemical and leachate analysis, and if the permittee can demonstrate that no chemical or physical changes will result due to the power plant being in close proximity to the permit site, the wording can be revised to read as follows:

“At the discretion of the PA DEP, 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...(etc)

Comment No. 4

290.201(b)(2)

“Qualification may be granted for use of coal ash not meeting all the appropriate standards in subsection (a) if the following conditions are met”

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

The statement should be revised in such a manner to allow primary standards to be exceeded, only after (and to the departments satisfaction) a complete risk based analysis has been completed for human and environmental receptors (or other approved method) and this analysis indicates the exceedence will have no detrimental effects. (Similar to methods utilized in the Act 2 program)

Comment No. 5

290.201(c)(7) and 290.201(c)(8)

These requirements state: "A request for coal ash certification must contain the following information on a form required by the department"

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

(c)(8) "A determination of neutralization potential as determined...(etc)

Why are these tests being required for coal ash qualification if the coal ash is not being utilized for low permeability or acid neutralization? Clarification should be added that these requirements are only necessary when the coal use being requested includes low permeability or acid neutralization.

Comment No. 6

290.302(a)(1)

This paragraph indicates that: "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**"

This should be revised to indicate: "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 or it can be demonstrated that no additional outside influences upgradient of the site will require an upgradient monitoring point**"

Comment No. 7

290.302(a)(2)

The first two sentences of this paragraph should be deleted and replaced with the following:

“The number of downgradient monitoring points and their locations will depend upon the configuration of the coal ash placement area, the volume of coal ash placed, the size of the ash placement area, and the hydrogeologic conditions at the site”.

It is acknowledged by this respondent that the Pennsylvania Residual Waste Regulations normally require a minimum of three downgradient monitoring wells for the permitting of residual waste disposal facilities. However, it is stressed that the “quality” of the downgradient monitoring wells (i.e. proper placement within the target monitoring zone) is the more important factor than the “quantity” of downgradient monitoring wells. For example, in the anthracite region of Pennsylvania, the majority of coal ash placement sites are abandoned mine lands located directly above “mine pool” groundwater systems. These systems are dominated by “conduit” or “channelized” groundwater flow paths created by past deep mining activities. Therefore, these types of groundwater flow systems normally exhibit quite different characteristics than the types of groundwater flow systems encountered under the majority of permitted residual waste disposal facilities in Pennsylvania. In this regard, one well, if properly placed within the dominant flow path of the mine pool system, can detect contamination as efficiently as three wells that have been placed to simply satisfy a quantity requirement.

At the same time, it is acknowledged by this respondent that some coal ash placement sites are underlain by mine pool flow systems that contain more than one dominant flow path, and as such, additional downgradient wells will be required at these types of sites.

Finally, a concern arises in that DEP regulatory staff will require three downgradient wells to be installed simply to satisfy the regulation even if it can be shown to the departments satisfaction that less than three wells can adequately monitor groundwater conditions downgradient of the site.

Comment No. 8

290.302(a)(3)

Starting at subparagraph (a) and skipping to subparagraph (3), it indicates

- (a) “The system must consist of the following”:
- (3) Surface water monitoring points approved by the department

There should not be a requirement for surface water monitoring points, especially if none are within any reasonable range of the ash placement site. This should be re-worded to include surface water monitoring points at the department’s discretion, but again not be a requirement.

Comment No. 9

290.302(b)(3)

This paragraph indicates that wells are to be “Located within 200 feet of the coal ash placement area, except as necessary to comply with subsection (c), and located at the points of compliance”

It should be noted that in some specific instances, it will not be probable to locate wells within 200 feet of the coal ash placement area, especially those instances in which abandoned underlying mine workings directly downgradient of the site may not be flooded, but are in fact “dry” thus making a well within this zone useless. This paragraph should be revised to allow discretion in where permittees will place the points based on approval by the Department.

Comment No. 10

290.303(a)(4)

This paragraph indicates: “The well shall be filter-packed with chemically inert clean quartz sand, silica, or glass beads. The material shall be well-rounded and dimensionally stable”.

Please note that this should be deleted as this can not be done with a well screen in which the target zone being monitored is within a mine void. Well screens placed in these types of settings normally utilize a grout basket placed at a level above the well screen.

Comment No. 11.

General Comment: Who/how will the department determine what a “Background” standard is for any downgradient wells installed to meet these new regulations in areas where coal ash has already been placed? Furthermore, special conditions should be written in permits to acknowledge that wells were installed after ash placement started.