



Bruce Mansfield Plant P.O. Box 128 Shippingport, PA 15077-0128

March 26, 2009

724-643-5000

Mr. Richard Kinch US Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, DC 20460

> RE: Request for Information Under Section 104 (e) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 USC 9604(e)

Dear Ms. Jackson, Mr. Breen and Mr. Kinch:

As director of the Bruce Mansfield Power Station in Shippingport, Pennsylvania, I am pleased to be of assistance in completing your CERCLA Section 104(e) information request.

From the language of your letter, it is clear that you are concerned about coal combustion byproduct disposal units which have potential to cause damage to homes, property or the environment similar to the example cited in your letter of March 9, 2009. We have one large disposal facility called the Little Blue Run Dam which receives our coal ash and scrubber sludge for disposal.

We also have three small lined ponds on our power plant property which have the potential to infrequently receive small amounts of plant wastes which may include coal combustion byproducts.

While we believe responding to your information request for Little Blue Run Dam meets the intent of your request, your request is sufficiently broad that we have included an additional response category for our three small lined ponds where coal combustion byproducts may be managed in small quantities on a temporary basis until their ultimate disposal elsewhere.

Should you or your staffs have any questions please contact:

Mr. Richard G. Mende Director, Bruce Mansfield Power Station Shippingport, PA 15077 (724) 643-2310 or

Mr. Michael L. Horvath Manager, Environmental Projects Akron, OH 44308 (330) 384-5964

We will be happy to assist you.

Sincerely, Julian & Mande

Mr. Richard G. Mende Director, Bruce Mansfield Plant

skc

Enclosures CERTIFIED MAIL RECEIPT #: 7005 1160 0002 0449 7691 RETURN RECEIPT REQUESTED

Primary Response for:

Little Blue Run Dam and Reservoir

The answers below are for the Bruce Mansfield Power Station and its Little Blue Run dam and reservoir. The Little Blue Run dam is a 400 ft. tall engineered earth, rock and clay core dam built into the mountainsides and designed to create a nearly 1000 acre reservoir for the final disposal of a mixture of fly ash, bottom ash, boiler slag, flue gas emission control residuals, coal pile runoff, and boiler cleaning materials solely from the Bruce Mansfield Power Station.

 Relative to the National Inventory of Dams criteria for High, Significant, Low or Less-than-Low, please provide the potential hazard rating for each management unit and indicate who established the rating, what the basis of the rating is, and what federal or state agency regulates the unit(s). If the unit(s) does not have a rating, please note that fact.

This disposal facility is listed as High on the National Inventory of Dams. A small saddle dam which is also a part of this management unit is under consideration by PaDEP as a C-2, High Hazard Dam. This rating is established as per <u>25PaCode105.91</u> Classification of <u>Dams and Reservoirs</u>. This management unit is regulated by the Pennsylvania Department of Environmental Protection (PaDEP).

- 2. What year was each management unit commissioned and expanded? The Little Blue Run Dam and Reservoir is a single management unit which began operation in 1975. The facility was modified under a permit change in 1996 to install geotubes in the "finger" areas of the management unit to begin dry processing. Also, additional permit modifications and upgrading of the engineered dam spillway were completed in 2006 which allow for conversion of portions of the management unit to dry disposal.
- 3. What materials are temporarily or permanently contained in the unit? Use the following categories to respond to this question: (1) fly ash; (2) bottom ash; (3) boiler slag; (4) flue gas emission control residuals; (5) other. If the management unit contains more than one type of material, please identify all that apply. Also, if you identify "other," please specify the other types of materials that are temporarily or permanently contained in the unit(s). *The management unit is designed for the final disposal of a mixture of fly ash, bottom ash, boiler slag, flue gas emission control residuals, coal pile runoff, and boiler cleaning materials solely from the Bruce Mansfield Power Station.*
- 4. Was the management unit(s) designed by a Professional Engineer? Is or was the construction of the waste management unit(s) under the super-

vision of a Professional Engineer? Is inspection and monitoring of the safety of the waste management unit(s) under the supervision of a Professional Engineer?

This management unit was designed by the professional engineering firms of Gibbs & Hill and G.A.I. Consultants. The management unit was constructed by Dravo Engineering. G.A.I. Consultants also conducts inspection & monitoring of the safety of this management unit.

5. When did the company last assess or evaluate the safety (i.e., structural integrity) of the management unit(s)? Briefly describe the credentials of those conducting the structural integrity assessments/evaluations. Identify actions taken or planned by facility personnel as a result of these assessments or evaluations. If corrective actions were taken, briefly describe the credentials of those performing the corrective actions, whether they were company employees or contractors. If the company plans an assessment or evaluation in the future, when is it expected to occur?

G.A.I. Consultants inspected this management unit on October 13, 2008. No corrective actions were required. As noted earlier, G.A.I. Consultants, Inc. is a 650-person engineering and environmental consulting firm with over 50 years of experience. G.A.I. Consultants conducts semi-annual inspections of this management unit and issues a report after each visit. Reports are reviewed by personnel at the power station including a plant professional engineer.

6. When did a State or a Federal regulatory official last inspect or evaluate the safety (structural integrity) of the management unit(s)? If you are aware of a planned state or federal inspection or evaluation in the future, when is it expected to occur? Please identify the Federal or State regulatory agency or department which conducted or is planning the inspection or evaluation. Please provide a copy of the most recent inspection report or evaluation.

Inspectors from the Southwest Regional Office of PaDEP inspected the Little Blue Run dam and reservoir on January 21, 2009. Attached is their correspondence and recommendations of March 10, 2009.

7. Have assessments or evaluations, or inspections conducted by State or Federal regulatory officials conducted within the past year uncovered a safety issue(s) with the management unit(s), and, if so, describe the actions that have been or are being taken to deal with the issue or issues. Please provide any documentation that you have for these actions.

In the attached March 10, 2009 correspondence, PaDEP has made some recommendations for our consideration. We will discuss their recommendations and comments with our engineering consultants in the near future and, based upon their recommendations and expertise, we will respond to the PaDEP. 8. What is the surface area (acres) and total storage capacity of each of the management units? What is the volume of materials currently stored in each of the management unit(s)? Please provide the date that the volume measurement(s) was taken. Please provide the maximum height of the management unit(s). The basis for determining maximum height is explained later in this Enclosure.

The surface area of the Little Blue Run reservoir is 967 acres. The reservoir is calculated to have a total storage capacity of 84,300 acre feet of material. Presently, it is estimated that over its 34 years of operation approximately 62,600 acre feet of material have been safely disposed. The base of the dam lies at elevation 700 ft. above mean sea level. The crest of the dam lies at elevation 1100 ft. above mean sea level. Thus the maximum height, as per the Enclosure to your letter, is 400 feet. It is important to note that the designed normal pool elevation of 1088 feet is the basis for our calculations of storage capacity. This allows 12 feet of freeboard to the crest of the dam.

 Please provide a brief history of known spills or unpermitted releases from the unit within the last ten years, whether or not these were reported to State or federal regulatory agencies. For purposes of this question, please include only releases to surface water or to the land (do not include releases to groundwater).

There are several seeps in the Little Blue Run dam and in the surrounding hillsides. These seeps are well known to PaDEP. Several of the seeps are permitted as NPDES outfalls, and FirstEnergy conducts a semi-annual seep survey and reports the results to PaDEP. The seeps are also assessed and monitored by our consultants. In addition, the seeps and their management is the subject of a Consent Order and Agreement between FirstEnergy and PaDEP.

10. Please identify all current legal owner(s) and operator(s) at the facility. *FirstEnergy Generation Corp.*