

US EPA ARCHIVE DOCUMENT

**BASIN ELECTRIC  
POWER COOPERATIVE**

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March 25, 2009

**OVERNIGHT MAIL**

Mr. Richard Kinch  
US Environmental Protection Agency  
Two Potomac Yard  
2733 S. Crystal Dr.  
5<sup>th</sup> Floor; N-5783  
Arlington, VA 22202 2733

Re: Request for Information Under Section 104(e) of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9604(e)

Dear Mr. Kinch:

This letter is in response to the letter dated March 9, 2009, from Barry N. Breen, Acting Assistant Administrator of the U.S. Environmental Protection Agency (EPA) to the Plant Manager of the Leland Olds Station (LOS), Stanton, North Dakota. The March 9, 2009 EPA letter was received by LOS on March 13, 2009.

The Leland Olds Station (LOS) is owned and operated by Basin Electric Power Cooperative (Basin Electric) and consists of two coal-based electrical generation units. Unit 1 became operational in January 1966; Unit 2 became operational in December 1975.

LOS uses primarily lignite coal with some sub-bituminous coal to fuel its two units. Two kinds of ash are produced. The fly ash that is produced is collected from the flue gas in the electrostatic precipitators. The bottom ash that is created settles to the bottom of the boiler.

The bottom ash disposal facility is permitted under permit SP-038 which is issued by the North Dakota Health Department, Waste Management Division. A separate discharge permit has been issued to the Leland Olds Station by the North Dakota Health Department, Water Quality Division under permit number NDPDES ND-0025232.

LOS uses three management units to settle out and recover bottom ash. The management units are not lined with engineered clay or synthetic materials. Other than natural precipitation, inflows to the ponds are controlled by pumps operated by plant employees. Bottom ash from both generating units is sluiced in water and transported via pipe from the plant to Pond #1 and #2. Pond #1 is near capacity and the majority of the area will be reclaimed. An area on the west side of Pond #1 will remain active and be used for storage of bottom ash sold for beneficial use. Bottom ash sluiced to Pond #2 settles out and water flows into Pond #3. Water is piped back to the plant where it is mixed with cooling water and returned to the Missouri River. The #2 settling pond was cleaned and re-graded for use in 1995.

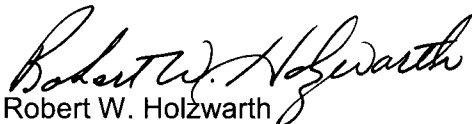


March 25, 2009

Page 2

The Plant Manager of the LOS is Mr. Mark Thompson who reports to me as the Vice President of Operations for Basin Electric. Enclosed are the specific responses to the Enclosure of the March 9, 2009 EPA letter to the LOS Plant Manager. If you have any further questions, please advise.

Sincerely,



Robert W. Holzwarth  
V.P. Plant Operations

/gmj

Enclosures

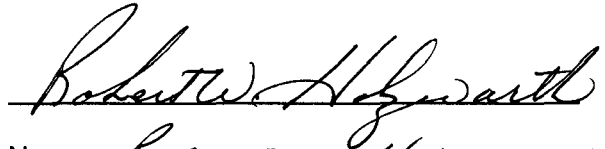
cc: Ron Harper (w/enc.)  
Dave Glatt (w/enc.)

## CERTIFICATION

By

### Authorized Representative

I certify that the information contained in this response to EPA's request for information and the accompanying documents is true, accurate and complete. As to the identified portions of this response for which I cannot personally verify their accuracy, I certify under penalty of law that this response and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.



Name: ROBERT W. HOLZWARTH  
Title: V.P. PLANT OPERATIONS

Leland Olds Station (LOS) responses to the Enclosure of the March 9, 2009 EPA letter.

**Question 1** 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 does not have a rating, please note that fact.

**Response 1** The Leland Olds Station management units do not have an official rating that has been assigned by a state or federal regulatory agency. The LOS management units are regulated under North Dakota Department of Health Waste Management Permit SP-038. The North Dakota Department of Health, Waste Management Division inspects the management units annually. The North Dakota Department of Health, Water Quality Division also inspects the ponds that are discharge points under the approved discharge permit.

**Question 2** What year was each management unit commissioned and expanded?

**Response 2** Exact commissioning dates are unknown. Settling pond #1 was commissioned in the late 1960s. Settling pond #2 was commissioned in the mid 1970s. Settling pond #3 was commissioned between 1974 and 1976. In 1995, settling pond #2 was cleaned and re-graded for use again.

**Question 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).

**Response 3** The LOS management units are permitted to accept bottom ash, Unit 2 economizer ash, Unit 2 air heater ash and Unit 1 inside hopper ash. The bottom ash fraction amounts to 90% of the waste stream going out to the disposal area.

**Question 4** Was the management unit(s) designed by a Professional Engineer? Is or was the construction of the waste management unit(s) under the supervision of a Professional Engineer? Is inspection and monitoring of the safety of the waste management unit(s) under the supervision of a Professional Engineer?

**Response 4** Due to the age of LOS, documentation regarding the design and construction of the waste management units are unavailable. The inspection and monitoring of the safety of the waste management units are not under the supervision of a Professional Engineer.

**Question 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?**

Response 5 The management units at LOS have not been assessed or evaluated for safety (i.e., structural integrity) by Basin Electric. In approximately 1977, level indicators were installed in settling pond #3 to maintain a more constant level within the pond. Basin Electric plans to complete a structural integrity assessment of these management units by a Professional Engineer in 2009 and every five (5) years thereafter.

**Question 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 official inspection report or evaluation.**

Response 6 The management units at LOS have not been assessed or evaluated for safety (i.e., structural integrity) by a State or Federal regulatory official. In approximately 1977, level indicators were installed in settling pond #3 to maintain a more constant level within the pond.

**Question 7 Have assessments or evaluations, or inspections conducted by State or Federal regulatory officials conducted within the past year uncovered a safety issues(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.**

Response 7 No safety issues have been identified with any of the management units at LOS. Please see "Response 7 Attachment 1".

**Question 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.**

Response 8 The surface area of settling pond #1 is 27.1 acres. The surface area of settling pond #2 is 38.2 acres. The surface area of settling pond #3 is 3.1 acres. The management units have never been surveyed. Therefore, the current volume of materials cannot be measured. However, the maximum volume that settling pond #1 can hold is believed to be 1,200,000 cubic yards; the maximum volume that settling pond #2 can hold is believed to be 1,490,000 cubic yards; and the maximum volume that settling pond #3 can contain is believed to be 20,000 cubic yards. The maximum height of settling pond #1 is 35 feet. The maximum height of settling pond #2 is 19 feet. The maximum height of settling pond #3 is 18 feet.

**Question 9** Please provide a brief history of known spills or unpermitted releases from the unit within the last 10 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).

**Response 9** There have been no known spills or unpermitted releases from ponds #1 or #2 of the management units within the last 10 years. Pond #3 had an oil and grease exceedance in May, 2000. That exceedance was due to servicing of a pump and not related to the waste management role of the facility.

**Question 10** Please identify all current legal owner(s) and operator(s) of the facility.

**Response 10** The facility is owned and operated by Basin Electric Power Cooperative.