

US EPA ARCHIVE DOCUMENT



TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.

HEADQUARTERS: P.O. BOX 33695 DENVER, COLORADO 80233-0695 303-452-6111

March 25, 2009

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

Submitted also via Federal Express

RE: Response to EPA's Requests for Information Under Section 104 (e) of the
Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C.
9604(e) for the Escalante Power Station

Dear Mr. Kinch:

Tri-State Generation and Transmission Association, Inc. (Tri-State) received two separate Request for Information (RFI) letters from the EPA for the Escalante Power Station. The RFI addressed to the Tri-State CEO was received on March 13, 2009. The RFI addressed to the Plant Manager for the Escalante Power Station was received on March 19, 2009. This cover letter and the corresponding attachments meet the requirements of both RFIs.

The RFI addressed to the CEO requests that we identify and furnish a list of any additional facilities in our corporation to whom EPA has not sent an information request. These additional facilities are those that have "surface impoundments or similar diked or bermed management unit(s) or management units designated as landfills which receive liquid-borne material from a surface impoundment used for the storage or disposal of residuals or by-products from the combustion of coal, including, but not limited to, fly ash, bottom ash, boiler slag, or flue gas emission control residuals." In addition to the Escalante Power Station, Tri-State owns (partially or as a whole) and operates the following facilities that include limited management units as defined above for low-volume wastes:

Craig Generating Station, located in Craig, Colorado
Nucla Generating Station, located in Nucla, Colorado

The ash at all of these facilities is managed in a manner that is commonly referred to as a dry ash handling system. The materials are used for either mine reclamation, beneficial reuse (e.g., material substitution for construction activities) or placed in a regulated landfill.

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CRAIG STATION
P.O. BOX 1307
CRAIG, CO 81626-1307
970-824-4411

ESCALANTE STATION
P.O. BOX 577
PREWITT, NM 87045
505-876-2271

NUCLA STATION
P.O. BOX 698
NUCLA, CO 81424-0698
970-864-7316



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Tri-State also owns (partially or as a whole) but does not operate the following facilities that manage coal combustion products in a manner that is commonly referred to as dry ash handling:

Laramie River Station, located in Wheatland, Wyoming
Springerville Generating Station Unit 3, located in Springerville, Arizona
San Juan Generating Station Unit 3, located in Waterflow, New Mexico

The RFIs require that this response includes the following certification signed and dated by an authorized representative of Tri-State.

I certify that the information contained in this response to EPA's request for information and the attached 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.

If you have any questions about the information provided, please contact Chris Gilbreath or me at (303) 452-6111.

Sincerely,

Barbara A. Walz
Vice President
Environmental

BAW:CSG:pvt

Attachment

cc: Ken Anderson
Mac McLennan
Micheal McInnes
Ken Reif

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

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

**Tri-State Generation and Transmission Association, Inc.
Escalante Generating Station
("Escalante Power Station" as described in RFI)**

The Escalante Power Station is comprised of what is commonly referred to as a dry ash handling system. Materials generated at the facility, include: fly ash, bottom ash, flue gas emission control residuals (i.e., scrubber sludge/flue gas desulfurization (FGD) solids) and wastewater solids. Limited quantities of scrubber sludge and bottom ash fines are temporarily stored within four on-site surface impoundments (identified below) that are used for dewatering and drying the materials. Annually, over 35% of the ash generated at the facility is sold for beneficial reuse (e.g., fly ash is used for concrete, while bottom ash is used for cement). The remaining ash and FGD solids are disposed of at the on-site landfill regulated by the New Mexico Environment Department. There are no free liquids disposed of at the landfill. Before being sent to the landfill, dewatered FGD solids are comingled with fly ash using a pugmill process. Bottom ash is also dewatered of all free liquids prior to disposal. Bottom ash and the fly ash/FGD solids are placed in prescribed layers at the landfill to ensure stability and maximize compaction.

Management Unit 1 – Evaporation Pond 1

1. In accordance with the National Inventory of Dams, the New Mexico Office of the State Engineer (OSE), Dam Safety Bureau, has assigned a "significant" hazard potential to this management unit/surface impoundment (unit), based on environmental damage only.
2. The unit was commissioned in 1984 and has not been expanded.
3. This unit temporarily stores the following materials for purposes of dewatering and drying: FGD solids and wastewater. This unit does not permanently store or dispose of residuals or by-products from the combustion of coal. Solid residuals are removed annually, at a minimum, and disposed of at the on-site landfill.
4. The unit was designed and constructed under a professional engineer (P.E.) certification in accordance with the facility's OSE permit #3937. The unit is inspected and maintained in accordance with the P.E. Certified, "Operations and Maintenance Manual for Evaporation Ponds 1-4 OSE File No. D-644 and Evaporation Pond 5 OSE File No. D-645," dated June 2008. The O&M Manual was approved by the New Mexico OSE, Dam Safety Bureau, in 2008. The O&M Manual is reviewed at least every ten years.
5. In accordance with the June 2008 O&M Manual, quarterly inspections of the unit are conducted by on-site facility personnel. The most recent quarterly inspection was conducted on January 8, 2009. In accordance with the New Mexico Groundwater Discharge Permit reissued on September 2, 2008, monthly inspections of the unit are also conducted by on-site facility personnel. The most recent monthly inspection was completed on February

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personnel. The most recent monthly inspection was completed on February 24, 2009. The facility personnel assigned to these inspections have Bachelor's degree(s) in science or engineering and at least 10 years of operational experience at the facility inspecting chemical systems and other environmental systems. Following implementation of the O&M Manual, no safety (e.g., structural integrity) issues have been observed. The next quarterly inspection is planned for April of 2009. The next monthly inspection is planned for March of 2009.

6. Mr. Sushil Chaudhary, D.Eng., P.E., of the New Mexico OSE, Dam Safety Bureau, last inspected the unit on July 30, 2007, as part of the Evaporation Pond 4 construction inspection. Attachment A includes a copy of the 2007 inspection report. The recommended actions were addressed. The inspection report states that Evaporation Ponds 1-3 are in satisfactory condition. Tri-State has not been notified of any planned state or federal regulatory inspection or evaluation in the future.
7. No state or federal regulatory inspections of the unit have occurred within the past year.
8. The physical dimensions of the unit are as follows:
 - a. Total surface area = 2.3 acres (high water level).
 - b. Storage capacity = 14.3 acre-feet (high water level).
 - c. Volume of FGD solids currently stored in the unit = 1.43 acre-ft or 466,000 gallons (approximately 10% of the storage capacity of the unit). The volume was measured on March 12, 2009.
 - d. Maximum dam height of the unit is seven (7) feet.
9. No known spills or unpermitted releases from the unit within the last ten years.
10. Tri-State is the legal owner and operator of the Escalante Station and Evaporation Pond 1.

Management Unit 2 - Emergency Scrubber Pond

1. In accordance with the National Inventory of Dams, the New Mexico Office of the State Engineer (OSE), Dam Safety Bureau, has not assigned a hazard potential to this management unit/surface impoundment (unit).
2. The unit was commissioned in 1984 and has not been expanded.

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or dispose of residuals or by-products from the combustion of coal. Solid residuals are removed annually, at a minimum, and disposed of at the on-site landfill

4. The unit was designed and constructed under a professional engineer (P.E.) in accordance with the facility's OSE permit #3937. The unit is inspected and maintained in accordance with the general monitoring requirements under the OSE permit and pond/lagoon inspections requirements under the NM Ground Water Quality Bureau Groundwater Discharge Permit.
5. In accordance with the New Mexico Groundwater Discharge Permit reissued on September 2, 2008, monthly inspections of the unit are conducted by on-site facility personnel. The most recent monthly inspection was completed on February 24, 2009. The facility personnel assigned to these inspections have Bachelor's degree(s) in science or engineering and at least 10 years of operational experience at the facility, inspecting chemical systems and other environmental systems. Following implementation of the New Mexico Groundwater Discharge Permit, no safety (e.g., structural integrity) issues have been observed. The next monthly inspection is planned for March of 2009.
6. Given the Emergency Scrubber Pond does not have an assigned hazard potential, the unit's safety (structural integrity) has not been inspected or evaluated by a State or Federal regulatory official within the last ten years. Tri-State has not been notified of any planned state or federal regulatory inspection or evaluation in the future.
7. No state or federal regulatory inspections of the unit have occurred within the past year.
8. The physical dimensions of the unit are as follows:
 - a) Total surface area = 0.8 acres (high water level).
 - b) Storage capacity = 3.1 acre-feet (high water level).
 - c) Volume of FGD solids currently stored in the unit = 1.6 acre-ft or 521,000 gallons (approximately 50% of storage capacity). The volume was measured on March 12, 2009.
 - d) Maximum dam height of the unit is two and one-half (2.5) feet.
9. No known spills or unpermitted releases from the unit within the last ten years.

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Escalante Generating Station
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10. Tri-State is the legal owner and operator of Escalante Station and the Emergency Scrubber Pond.

Management Units 3&4 – Bottom Ash (Fines only) Ponds (2)

1. In accordance with the National Inventory of Dams, the State of New Mexico Office of the State Engineer has assigned a "low" hazard potential to these management units/surface impoundments (units).
2. The units (north and south cells) were commissioned in 1984 and have not been expanded.
3. The units temporarily store the following materials for purposes of dewatering and drying: bottom ash fines and wastewater. These units do not permanently store or dispose of residuals or by-products from the combustion of coal. Solid residuals are removed annually, at a minimum, and disposed of at the on-site landfill.
4. The units were designed and constructed under a professional engineer (P.E.) certification in accordance with the facility's OSE permit #3937. The units are inspected and maintained in accordance with the general monitoring requirements under the OSE permit and pond/lagoon inspections requirements under the NM Ground Water Quality Bureau Groundwater Discharge Permit.
5. In accordance with the NM Groundwater Discharge Permit reissued on September 2, 2008, monthly inspections of the units are conducted by on-site facility personnel. The most recent monthly inspection was completed on February 24, 2009. The facility personnel assigned to these inspections have Bachelor's degree(s) in science or engineering and at least 10 years of operational experience at the facility, inspecting chemical systems and other environmental systems. Following implementation of the New Mexico Groundwater Discharge Permit, no safety (e.g., structural integrity) issues have been observed. The next monthly inspection is planned for March 2009.
6. Mr. Jay Groseclose, P.E., of the New Mexico OSE, Dam Safety Bureau, last inspected the units as part of a facility-wide inspection on July 8, 2003. The inspection report states that the dam (serving the north and south cells separated by an interior dike) is in satisfactory condition. Tri-State has not been notified of any planned state or federal regulatory inspection or evaluation in the future. Attachment B includes a copy of the 2003 inspection report.

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7. No state or federal regulatory inspections of these units have occurred within the past year.
8. The physical dimensions of the combined units are as follows:
 - a. Total surface area = 13.0 acres (high water level).
 - b. Storage capacity = 95.9 acre-feet (high water level).
 - c. Volume of bottom ash particles/fines currently stored in the units = 9.59 acre-ft or 3,125,000 gallons (approximately 10% of storage capacity). The volume was measured on March 12, 2009.
 - d. Maximum dam height of the unit is 12.5 feet.
9. No known spills or unpermitted releases from the units within the last ten years.
10. Tri-State is the legal owner and operator of Escalante Station and the Bottom Ash (Fines only) Ponds.