

US EPA ARCHIVE DOCUMENT



September 29, 2010

Mr. Craig Dufficy  
US Environmental Protection Agency  
Two Potomac Yard  
2733 S. Crystal Dr., 5th Floor; N-5831  
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) – Reid Gardner Generating Station**

Dear Mr. Dufficy,

Enclosed with this letter are the NV Energy ("NVE") responses to the United States Environmental Protection Agency's ("EPA") Request to Provide Information Pursuant to the authority granted to it under Section 104 (e) of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. 9604(e) with regard to the Reid Gardner Generating Station.

Also enclosed is the requested certification signed by an authorized representative of the Reid Gardner Generating Station.

The specific request was for information regarding 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 byproducts from the combustion of coal, including, but not limited to, fly ash, bottom ash, boiler slag, or flue gas emission control residuals.

NVE's Reid Gardner Generating Station has eight "units" relevant to this inquiry. Accordingly, responses to each of the individual questions with respect to each "unit" have been provided.

NVE reserves the right to amend or supplement these responses if warranted by any subsequently discovered information or changed circumstances. NVE objects to the scope and breadth of the Information Request, and has limited its efforts to identify and produce responsive, non-privileged information to a good faith, duly diligent search for the information requested.

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If you have any questions regarding this submission, please contact Mr. Tony Garcia,  
NVE Environmental Manager, at (702) 402-5767.

Sincerely,



Kevin Geraghty  
Vice President, Power Generation  
NV Energy

Enclosure

Cc: D. Sharp  
T. Garcia  
M. Rojo  
T. Woodworth

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**CERTIFICATION STATEMENT  
NV ENERGY  
REID GARDNER GENERATING STATION**

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.

Signature: 

Name: Kevin Geraghty

Title: Vice President, Power Generation

## Enclosure A

***Please provide the information requested below for each surface impoundment or similar diked or bermed management unit(s) or management units designated as landfills which receive liquid borne material 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. This includes units that no longer receive coal combustion residues or by-products, but still contain free liquids.***

- 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(s) does not have a rating, please note that fact.***

### **NV Energy Response:**

<b>Management Unit</b>	<b>National Inventory of Dam Number</b>	<b>Nevada State Identification Number</b>	<b>Hazard Rating</b>
B1	NV10732	J-613	Significant
B2	NV10733	J-614	Significant
B3	NV10734	J-615	Significant
C1	NV10735	J-616	Significant
C2	NV10736	J-617	Significant
E1	NV10737	J-618	Significant
E2	NV10738	J-619	Significant
F	NV10739	J-620	Significant

The State of Nevada, Department of Conservation and Natural Resources, Division of Water Resources regulates the Dam Safety program. The basis of the hazard ratings was determined in accordance with the State of Nevada NAC 535.140 (Hazard Classification).

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

**NV Energy Response:**

<b>Management Unit</b>	<b>Year Unit Commissioned</b>	<b>Year Unit Expanded</b>
4B1	1992	N/A
4B2	1992	2008*
4B3	1992	N/A
4C1	1992	N/A
4C2	2001	2002**
E1	2003	N/A
E2	2003	N/A
F	1986	N/A

*\*In 2008, the dry pond solids were removed and a new HDPE liner system was installed in Ponds B1 and B2. Pond B2 was expanded while Pond B1 was reduced. Overall the combined surface area and volumes of the two ponds did not change significantly.*

*\*\*In 2002, former ponds 4C2 and 4C3 were closed. After the dry FGD solids were removed, a new pond (named 4C2) was constructed in the same area of the former 4C2 and 4C3 ponds. The 4C2 pond has the same approximate dimensions that the previous 4C2 and 4C3 ponds had together.*

**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).**

**NV Energy Response:**

Flue gas emission control residuals and small amounts of fly ash "carry-over" are temporarily contained in the management units. Accumulated dry residuals are removed and disposed in a permitted onsite solid waste landfill. NV Energy completed installation of bag houses on generating units 1, 2 and 3 in 2008 and 2009 to capture fly ash prior to entering the wastewater stream, reducing the potential for fly ash to accumulate in the wastewater and in the management units. No flue gas emission control residuals solids or fly ash are permanently stored in the management units.

- 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?**

**NV Energy Response:**

<b>Management Unit</b>	<b>PE Designed</b>	<b>PE Supervision During Construction</b>	<b>Inspection/ monitoring under PE Supervision*</b>
4B1	Yes	Yes	No
4B2	Yes	Yes	No
4B3	Yes	Yes	No
4C1	Yes	**	No
4C2	Yes	**	No
E1	Yes	**	No
E2	Yes	**	No
F	Yes	Yes	No

\*No formal inspection program under PE supervision is in place for these management units. Informal inspections under a PE (Civil) are discussed in the answer to question 5 below.

\*\*The management units were designed by a PE; however, historical documentation does not confirm whether or not a PE supervised construction. NVE can confirm the construction was completed under the supervision of a NVE project engineer.

- 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?**

**NV Energy Response:**

No formal structural integrity testing has been completed on the management units since their construction. Plant personnel tour the ponds routinely under the supervision of a PE (Civil) and would be able to identify any obvious structural deficiencies; additionally, pond levels are recorded to ensure freeboard is maintained.

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.***

**NV Energy Response:**

On April 22, 2008, Staff from the State of Nevada, Division of Water Resources inspected the above mentioned ponds at the Reid Gardner Station. The final report documents that the overall inspection condition of the management units was good. NVE has complied with and/or will comply with the corrective actions specified in the report by the required deadlines. NV Energy is not aware of any future state or federal inspections that are planned at this time. A copy of the final inspection report is enclosed as Attachment "A".

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.***

**NV Energy Response:**

There have been no inspections conducted by the state or federal regulatory officials in the last year.

8. ***What is the surface area (acres) and total storage capacity of each of the management units? What is the volume of material 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.***

**NV Energy Response:**

The surface areas, total storage capacities, volume of material currently stored and maximum heights were determined per the figure provided in Enclosure A of the information request.



Management Unit	Surface Area (Acres)	Total Storage Capacity (CY)	Volume of Material Currently Stored (CY)	Date Volume Measured (CY)	Maximum Height (ft)
4B1	14.1	311,200	181,800	9/29/2010	16
4B2	13.2	239,200	102,844	9/29/2010	13
4B3	8.5	145,200	44,000	9/29/2010	12
4C1	16.9	185,200	104,700	1/2/2009	15
4C2	17.3	279,400	141,700	6/3/2010	13
E1	8.5	185,200	144,200	9/29/2010	17
E2	17	265,600	205,700	9/29/2010	12
F	4.1	59,400	35,000	9/30/2010	12

**9. 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).**

**NV Energy Response:**

There have been no known spills or unpermitted releases to surface water or to the land within the last ten years from the management units identified above in Questions #4 and #8.

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

**NV Energy Response:**

Reid Gardner Units #1, #2 and #3 are Owned and Operated by NV Energy

Reid Garner Unit #4 is co-owned by NV Energy and the California Department of Water Resources. NV Energy is the Operator of Unit #4.

**ATTACHMENT "A"**

**(Copy of April 22, 2008 Dam Safety Inspection Report)**

JIM GIBBONS  
Governor

STATE OF NEVADA



ALLEN BIAGGI  
Director

TRACY TAYLOR, P.E.  
State Engineer

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES  
DIVISION OF WATER RESOURCES

901 S. Stewart Street, Suite 2002  
Carson City, Nevada 89701  
(775) 684-2800 • Fax (775) 684-2811  
[water.nv.gov](http://water.nv.gov)  
September 10, 2008

Forrest Hawman  
Nevada Power  
P.O. Box 279  
501 Wally Kay Way  
Moapa, NV 89025

**Re: Reid Gardner Power Plant Inspection**

**Low Hazard**

Pond 4A: Not in Service – no permit  
Pond D: Not in Service – no permit  
Cooling Tower Blow Down Pond – In Service – no permit

**Significant Hazard**

Pond 4B-1: J-613  
Pond 4B-2: J-614  
Pond 4B-3: J-615  
Pond 4C-1: J-616  
Pond 4C-2: J-617  
Pond E-1: J-618  
Pond E-2: J-619  
Pond F: J-620  
Pond G: J-621

**High Hazard**

Three (3) Raw Water Ponds – In Service – no permit

Dear Mr. Hawman:

On April 22, 2008, Robert K. Martinez and Hamilton Reed inspected the above-described impoundment. The purpose of the inspection was to determine the condition of the structure with respect to dam safety. Reid Gardner Ring Dikes are classified as shown above.

The overall inspection condition was good. Based on the above inspection and related information, the following corrective actions should be taken.

IMMEDIATE

No conditions were observed that required immediate attention at this time.

SHORT TERM (1 YEAR)

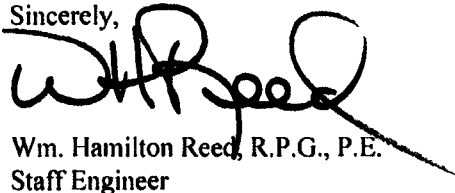
1. Pond's 4B&C: Repair precipitation erosion runnels on exterior embankments.
2. Pond's 4B&C: Raise elevation and grade ring dike roads so precipitation does not puddle and degrade road bed or create erosion runnels on exterior embankments.
3. Raw Water Ponds: Submit Dam Safety Application.
4. Raw Water Ponds: Remove vegetation and repair erosions runnels on exterior embankments.

LONG TERM (3 YEARS)

1. Raw Water Ponds: maintain minimum 2 feet of freeboard.

If you have any questions, please call Robert K. Martinez, P.E. or myself at 775-684-2800.

Sincerely,



Wm. Hamilton Reed, R.P.G., P.E.  
Staff Engineer

WHR/sg

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