THE POWER TO MAKE IT HAPPEN℠

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VIA FEDERAL EXPRESS

March 26, 2009

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

Re: Arizona Public Service Company – Corporate Response: Request for Information Under 104(e) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9604(e) ("104(e) Request").

Dear Mr. Kinch:

On March 13, 2009, Arizona Public Service Company ("APS") received the above referenced 104(e) Request for each surface impoundment or similar diked or bermed management unit(s) or management units designated as landfills at additional APS facilities 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.

APS has no additional facilities with the types of units that that are covered by the 104(e) Request, other than the Cholla Generating Station and the Four Corners Generation Station – which each received separate information requests.

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: John R. Denman
Title: Sr. V.P., Fossil Generation

Attached is Arizona Public Service Company's one page corporate 104(e) response, as well as it's full responses for the Four Corners Generating Station and the Cholla Generating Station.

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Mr. Richard Kinch
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2733 S. Crystal Drive
Arlington, Virginia 22202-2733

Re: Arizona Public Service Company – Four Corners Generating Station: Request for Information Under 104(e) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9604(e) ("104(e) Request").

Dear Mr. Kinch:

On March 16, 2009, Arizona Public Service Company ("APS") received the above referenced 104(e) Request for each surface impoundment or similar diked or bermed management unit(s) or management units designated as landfills at the Four Corners Generating Station 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. APS's response for the Four Corners Generating Station is attached.

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: John R. Denman
Title: Sr. V.P., Fossil Generation

Arizona Public Service Company's 104(e) Response for the Four Corners Generating Station

Plant Description

The Four Corners Generating Station is a five unit, coal fired, 2060 megawatt steam electric power plant. All five generating units have operating particulate control devices and SO_2 scrubbers. As part of its operations, the plant generates residuals and by-products from the combustion of coal.

The plant's ash disposal area consists of an existing Dry Fly Ash Disposal Unit (which does not receive liquid-borne material), a Lined Ash Impoundment, a Lined Water Impoundment, and six old ash impoundments that are no longer in service. The old ash impoundments are dry and contain no free liquid. The old ash impoundments that the plant identifies as #3 and #6 are still inspected by the New Mexico Office of the State Engineer, Dam Safety Bureau, because APS has not yet submitted closure plans for those facilities.

Up to 20% of the fly ash generated at the plant is sold for beneficial reuse.

Bottom Ash Disposal

Wet bottom ash is removed from all five generating unit boilers and is slurried to collection bins for dewatering. The bottom ash is completely dewatered and then hauled by truck to the plant's ash disposal area.

All bottom ash is used by the plant in the construction of embankments for future Lined Ash Impoundment expansions. The embankments are constructed of a 15 foot layer of compacted clay material (water side portion of the embankment) and then ballasted with compacted bottom ash (on the dry side of the embankment).

Fly Ash and Flue Gas Desulphurization ("FGD") Disposal

The fly ash from generating units 1, 2, and 3 is collected by venturi scrubbers (a wet particulate/ SO_2 removal system), slurried to thickener equipment for fly ash and FGD material concentration (water reduction), and then pumped to the plant's Lined Ash Impoundment for dewatering. The decanted water flows by gravity through a filter built into the Lined Ash Impoundment, and then into the Lined Water Impoundment.

The fly ash from generating units 4 and 5 is collected by fabric filters (dry collection) and is disposed of dry at a lined, dry fly ash accumulation area (that that does not receive liquid-borne material).

The SO_2 from generating units 4 and 5 is removed from the flue gas by a wet spray tower scrubber system. The resulting FGD material is then pumped to thickener equipment, where it is concentrated before being pumped to the plant's Lined Ash Impoundment, where it is commingled with fly ash and FGD material from generating units 1, 2, and 3.

Low Volume Waste Water System

Water from the plant's low volume waste water system is pumped into a collection system sump from several sources within the plant. The water then flows out of the collection sump by gravity and flows through the Low Volume Waste Water Decant Cells before flowing into the plant's Low Volume Waste Water Pond.

Impoundment Descriptions

Lined Ash Impoundment

The Lined Ash Impoundment is constructed on top of the old ash impoundments identified by the plant as #3 and #4. The Lined Ash Impoundment's dikes are constructed of compacted clay material, in accordance with dam construction specifications approved by the New Mexico Office of the State Engineer, Dam Safety Bureau. The dikes are built on top of the clay dikes used for old ash impoundments #3 and #4. The Lined Ash Impoundment is constructed with a 60 Mil HDPE liner that lines the entire impoundment area, including the dikes.

Lined Water Impoundment

The Lined Water Impoundment is constructed on top of the old ash impoundment identified by the plant as #3. The Lined Water Impoundment's dikes are constructed of compacted clay material in accordance with dam construction specifications approved by the New Mexico Office of the State Engineer, Dam Safety Bureau. The dikes are built on top of the clay dikes used for old ash impoundment #3. The Lined Water Impoundment is constructed with two 60 Mil HDPE liner layers that lines the entire impoundment area, including the dikes. The second HDPE liner barrier also includes a leak detection system. The Lined Water Impoundment contains no solid ash material and is not an ash management unit. But due to the breadth of the impoundment definition and subsequent EPA guidance on chemicals of concern, APS is reporting on this unit.

Upper Retention Sump

The Upper Retention Sump is a below grade compacted soil cement basin that is part of the generating unit 4 and 5 SO_2 scrubber system. It is used for temporary surge capacity of coal combustion products and FGD materials from the normal waste disposal processes of the scrubbers. The material in the basin is returned to the generating unit 4 and 5 thickener equipment, and then sent to the Lined Ash Impoundment.

Low Volume Waste Water System Decant Cells

The Low Volume Waste Water System Decant Cells are below grade cells constructed with engineered fill (bottom ash placed on top of clay material). Each of the three cells contains floor drains (French type drains) to decant water from the solids contained in the plant's low volume waste water system. The decant cells help remove solids from the low volume waste water, prior to the water entering the Low Volume Waste Water Pond.

Low Volume Waste Water Pond

The Low Volume Waste Water Pond is a below grade water treatment pond. The pond allows solids in the water to settle, for later dredging (prior to the water flowing back into the plant's cooling lake).

104(e) Questions

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.

Lined Ash Impoundment

The rating, which is designated by the New Mexico Office of the State Engineer, Dam Safety Bureau, which regulates the unit, is "Significant Hazard Potential." The basis for the rating is set forth in the New Mexico Administrative Code ("N.M.A.C."), Title 19, Chapter 25, Part 12, Section 19.25.12.10 attached to this response as Exhibit A.

Lined Water Impoundment

The rating, which is designated by the New Mexico Office of the State Engineer, Dam Safety Bureau, which regulates the unit, is "Significant Hazard Potential." The basis for the rating is set forth in the N.M.A.C., Title 19, Chapter 25, Part 12, Section 19.25.12.10 attached to this response as Exhibit A.

Upper Retention Sump

Because the Upper Retention Sump does not meet the definition of a dam, as set forth in the N.M.A.C., Title 19, Chapter 25, Part 12, Section 19.25.7 H., the unit is not regulated as a dam.

Low Volume Waste Water System Decant Cells

Because none of the Low Volume Waste Water Decant Cells meet the definition of a dam, as set forth in the N.M.A.C., Title 19, Chapter 25, Part 12, Section 19.25.7 H., the units are not regulated as dams.

Low Volume Waste Water Pond

Because the Low Volume Waste Water Pond does not meet the definition of a dam, as set forth in the N.M.A.C., Title 19, Chapter 25, Part 12, Section 19.25.7 H., the unit is not regulated as a dam.

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

Lined Ash Impoundment

Commissioned (in-service) in 2003. Expanded in 2007.

Lined Water Impoundment

Commissioned (in-service) in 2003.

Upper Retention Sump

Commissioned (in-service) in 1984.

Low Volume Waste Water System Decant Cells

Commissioned (in-service) in 2004.

Low Volume Waste Water Pond

Commissioned (in-service) in 1979.

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).

Lined Ash Impoundment

(1) Fly ash; (2) bottom ash: (3) boiler slag; (4) flue gas emission control residuals; and (5) other. Other types include: boiler acid cleaning waste, treated sewage, chemical metal cleaning wastes, air preheater wash, co-disposal waste (permitted by 40 C.F.R. § 261.4(b)(4)), turbine foam cleaning waste, and stack flue gas residues.

Lined Water Impoundment

(4) Flue gas emission control residuals and (5) other. Other types include blow dust/dirt.

Upper Retention Sump

(4) Flue gas emission control residuals and (5) other. Other types include scrubber area wash down, dirt, and coal dust.

Low Volume Waste Water System Decant Cells

(1) Fly ash; (2) bottom ash: (4) flue gas emission control residuals; and (5) other. Other types include: boiler blow down, back pass boiler wash down, metal cleaning waste, coal dust, dirt, de minimus lubricants, demineralizer regeneration wastes, storm water, corrosion and flocculation chemicals, and potable water flushings.

Low Volume Waste Water Pond

(1) Fly ash; (2) bottom ash: (4) flue gas emission control residuals; and (5) other. Other types include: boiler blow down, back pass boiler wash down, metal cleaning waste, coal dust, dirt, de minimus lubricants, demineralizer regeneration wastes, storm water, corrosion and flocculation chemicals, and potable water flushings.

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?

Lined Ash Impoundment

The Lined Ash Impoundment was designed by a Professional Engineer. Its construction was under the supervision of a Professional Engineer. Inspection and monitoring of the safety of the Lined Ash Impoundment is under the supervision of a Professional Engineer.

Lined Water Impoundment

The Lined Water Impoundment was designed by a Professional Engineer. Its construction was under the supervision of a Professional Engineer. Inspection and monitoring of the safety of the Lined Water Impoundment is under the supervision of a Professional Engineer.

Upper Retention Sump

The Upper Retention Sump was not designed by a Professional Engineer. Its construction was not under the supervision of a Professional Engineer. Inspection and monitoring of the safety of the Upper Retention Sump is not under the supervision of a Professional Engineer.

Low Volume Waste Water System Decant Cells

The Low Volume Waste Water System Decant Cells were designed by a Professional Engineer. Their construction was under the supervision of a Professional Engineer. Inspection and monitoring of the safety of the Low Volume Waste Water System Decant Cells is under the supervision of a Professional Engineer.

Low Volume Waste Water Pond

The Low Volume Waste Water Pond was not designed by a Professional Engineer. Its construction was not under the supervision of a Professional Engineer. Inspection and monitoring of the safety of the Low Volume Waste Water Pond is under the supervision of a Professional 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?

APS Engineers who conducted the evaluations/assessments below are registered with the State of New Mexico as Professional Engineers, in accordance with the requirements of the New Mexico Board of Technical Registration. Also, in accordance with its dam safety regulations (N.M.A.C., Title 19, Chapter 25, Part 12, Section 19.25.12.13 A), the New Mexico Office of State Engineer, Dam Safety Bureau, has accepted each engineer as qualified for design, construction, maintenance, and operational oversight of the dam structures.

Lined Ash Impoundment

APS last assessed or evaluated the safety of the Lined Ash Impoundment in January 2009. The individual who conducted the assessment/evaluation was a Four Corners plant Professional Engineer. No safety deficiencies were identified. The next assessment/evaluation is scheduled for July 2009.

Lined Water Impoundment

APS last assessed or evaluated the safety of the Lined Water Impoundment in January 2009. The individual who conducted the assessment/evaluation was a Four Corners plant Professional Engineer. No safety deficiencies were identified. The next assessment/evaluation is scheduled for July 2009.

Upper Retention Sump

Because the Upper Retention Sump does not meet the definition of a dam, as set forth in the N.M.A.C., Title 19, Chapter 25, Part 12, Section 19.25.7 H., safety assessments/evaluations are not necessary for this sort of structure.

Low Volume Waste Water System Decant Cells

Because the Low Volume Waste Water System Decant Cells do not meet the definition of a dam, as set forth in the N.M.A.C., Title 19, Chapter 25, Part 12, Section 19.25.7 H., safety assessments/evaluations are not necessary for these sorts of structures.

Low Volume Waste Water Pond

Because the Low Volume Waste Water Pond does not meet the definition of a dam, as set forth in the N.M.A.C., Title 19, Chapter 25, Part 12, Section 19.25.7 H., safety assessments/evaluations are not necessary for this sort of structure.

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.

Lined Ash Impoundment

The New Mexico Office of State Engineer, Dam Safety Bureau, last inspected the Lined Ash Impoundment on October 4, 2007. Inspections by this agency are not planned and are unannounced. A copy of the most recent official inspection report is attached as Exhibit B. All recommended actions indicated on the report have been completed.

Lined Water Impoundment

The New Mexico Office of State Engineer, Dam Safety Bureau, last inspected the Lined Water Impoundment on October 4, 2007. Inspections by this agency are not planned and are unannounced. A copy of the most recent official inspection report is attached as Exhibit C. All recommended actions indicated on the report have been completed.

Upper Retention Sump

Because the Upper Retention Sump does not meet the definition of a dam, as set forth in the N.M.A.C., Title 19, Chapter 25, Part 12, Section 19.25.7 H., safety inspections are not conducted.

Low Volume Waste Water System Decant Cells

Because the Low Volume Waste Water System Decant Cells do not meet the definition of a dam, as set forth in the N.M.A.C., Title 19, Chapter 25, Part 12, Section 19.25.7 H., safety inspections are not conducted.

Low Volume Waste Water Pond

Because the Low Volume Waste Water Pond does not meet the definition of a dam, as set forth in the N.M.A.C., Title 19, Chapter 25, Part 12, Section 19.25.7 H., safety inspections are not conducted.

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.

Lined Ash Impoundment

No.

Lined Water Impoundment

No.

Upper Retention Sump

Not applicable. See response to Question #6.

Low Volume Waste Water System Decant Cells

Not applicable. See response to Question #6.

Low Volume Waste Water Pond

Not applicable. See response to Question #6.

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.

Lined Ash Impoundment

Surface area: 75 Acres.

Total storage capacity: 3,870,000 cubic yards.

Volume of materials currently stored: 3,406,600 cubic yards.

Date volume measurement was taken: December 31, 2008.

Maximum height: 83 feet (note, however, that the Lined Ash Impoundment is constructed on top of old ash impoundment #3, which comprises the first 43 feet of the dam height).

Lined Water Impoundment

Surface area: 45.1 Acres.

Total storage capacity: 435 acre-feet.

Volume of materials currently stored: 284 acre-feet.

Date volume measurement was taken: March 17, 2009.

Maximum height: 90 feet (note, however, that the Lined Water Impoundment is constructed on top of old ash impoundment #3, which comprises the first 80 feet of the dam height).

Upper Retention Sump

Surface area: 1.07 acres.

Total storage capacity: 17,265 cubic yards.

Volume of materials currently stored: 6,900 cubic yards.

Date volume measurement was taken: March 12, 2009.

Maximum height: Below grade, 0 feet.

Low Volume Waste Water System Decant Cells

Surface area: 0.63 acres.

Total storage capacity: 6,419 cubic yards.

Volume of materials currently stored: 1,100 cubic yards.

Date volume measurement was taken: March 12, 2009.

Maximum height: 6 feet.

Low Volume Waste Water Pond

Surface area: 13.7 acres.

Total storage capacity: 221,000 cubic yards.

Volume of materials currently stored: 88,400 cubic yards.

Date volume measurement was taken: March 17, 2009.

Maximum height: Below grade, 0 feet.

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).

Lined Ash Impoundment

There have been no known spills or unpermitted releases within the last ten years.

Lined Water Impoundment

There have been no known spills or unpermitted releases within the last ten years.

Upper Retention Sump

There have been no known spills or unpermitted releases within the last ten years.

Low Volume Waste Water System Decant Cells

There have been no known spills or unpermitted releases within the last ten years.

Low Volume Waste Water Pond

There have been no known spills or unpermitted releases within the last ten years.

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

Owner/Operator	Arizona Public Service Company.
Owner	Public Service Company of New Mexico
Owner	El Paso Electric
Owner	Tucson Electric Power
Owner	Salt River Project
Owner	Southern California Edison