

Rec'd 10/17/89
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Jeanie
Copies pls. to Baryant,
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and myself. Original
to Fliegel.
Thanks
Paul

October 13, 1989

Mark Matthews
Acting UMTRA Project Manager
5301 Central Avenue NE, Suite 1720
Albuquerque, New Mexico 87108

Re: Disposition of Uranium Tailings, Grand Junction,
Colorado; Request for a Supplemental EIS.

Dear Mr. Matthews:

I represent the Colorado West Mill Tailings Coalition, a group of citizens in the Grand Junction and Whitewater Colorado communities who are concerned about the transport and disposition of the uranium mill tailings in Grand Junction, Colorado. This request for a supplemental EIS is made on behalf of the Coalition and its members.

By way of further introduction, the Coalition is decidedly in favor of getting this issue resolved. While it steadfastly opposes the present all truck transport solution, the Coalition remains willing to be convinced that the Cheney Reservoir repository site may be engineered into an acceptable site within the meaning of the 1,000 year standard and other applicable regulations and standards. However, the Coalition views the presence of substantial amounts of water at Cheney Reservoir as a very serious situation. The Coalition believes that the worst possible resolution would be selection of a repository site which ultimately would not work, thus raising the specter of beginning the entire process anew and, even, relocation of tailings already placed at Cheney.

Consequently, upon learning of the water discoveries at Cheney, the Coalition commenced its own review of the site. This correspondence seeks to share with you our observations to date and to request preparation of a supplemental environmental impact statement pursuant to the National Environmental Policy Act. 42 U.S.C. 4331, 4332(2)(C), 40 CFR 1502.9(c). On September 27, 1989, the Coalition also sent a letter directing the attention of the Nuclear Regulatory Commission to this situation.

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A. Presence of water at the Cheney Reservoir Disposal Site.

DOE contractors have been trenching and drilling over a considerable part of the BLM Cheney site. Recent inspection of the site by the Coalition revealed that three large trenches to approximate depths of 20 - 30 feet have been dug in a north-south direction across the site. These trenches have been dug perpendicular to apparent sub-surface water flow direction (east to west), and no two trenches appear to be intercepting the same specific water flow, i.e., no trench is down-gradient from another. A rough estimate of the cumulative length of these trenches is approximately four hundred yards.

Recent visual inspection by members of the Coalition revealed active water seepage occurring with little interruption all along the east face of the trenches. Water flow could actually be observed in the trenches. In contrast, the west faces were generally dry and showed little or no seepage into the trenches. Water was standing in many places at the bottom of each trench, pumps or siphons were in place, and water was being collected and stored or pumped out on the surface downslope to the west.

I have enclosed photographs which help to depict the situation. The location of one of the trench excavations is shown in Figures 1 and 2, looking eastward toward Grand Mesa. Figures 3 and 4 show water which has collected at the bottom of one of the trenches. The other trenches show similar water presence.

In addition, there is a surface water source flowing generally from east to west across the southern portion of the repository site in a stream bed. This stream generally flows year-round, although during dry months portions of the stream bed surface may become dry while other portions remain wet. The photograph labeled Figure 5 shows this stream feature this past August. The Coalition notes that 1989 has been a relatively dry year.

At the request of the Coalition, the Clifton Water District removed samples from the surface stream and from one of the trenches and ran the tests shown on Table I. I am informed that the tests suggest (a) That the water present in each feature comes from different sources, in relationship to the immediate site vicinity (although they may well have a common source up gradient and well away from this site), and (b) That the trench water is quite clean.

Given this information and data, the Coalition is quite concerned about the viability of the Cheney Reservoir site.

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It is worried that there is a good chance that even the most sophisticated engineering for the repository itself, and for appropriate barriers necessary to keep the large volume of water present away from the uranium tailings, may not meet the 1,000 year assurance standard.

It has been suggested that a possible source of the ground water is an old irrigation ditch called "Whiting's Ditch," located approximately one mile northeast of the repository site. *infra.* The facts do not bear this out. This ditch is no longer used and has had no water in it for at least the last couple of years. Even when used in the past, the water rights were quite junior, and the ditch never ran more than two weeks in any given year.

B. Review of Water Problems in the EIS and DOE's Record of Decision.

The final EIS dated December 1986 does not disclose either the large ground water presence or the stream feature on the surface:

The Cheney site is located on a pediment surface that forms a divide between two small ephemeral washes, one approximately 800 feet north of the proposed site location and one approximately 1700 feet to the south. EIS p. 85.

The presence of surface water is not discussed beyond this reference. There is no mention of any surface water which would directly impact the disposal site, and there is no mention of plans and designs to assure that such surface water would be kept well away from the disposal cell. Referring again to Figure 5 (enclosed), the water course depicted is on the site, that is, on the reserved land, it is holding water in August of a dry year, and the alkali evidence on its banks suggests that considerably larger flows are present during better parts of the year and after storms. In short, it is a feature present on the actual site, which clearly has a very real potential for affecting the integrity of the disposal cell.

Eleven borings and data from five monitoring wells (EIS p. 87) from the Cheney site were apparently reviewed for the ground water discussion in the EIS. At p. 91, the EIS notes that "water is found in the lower few feet of the unconsolidated deposits but not in the upper Mancos shale," and that "(b)ecause of the low permeability and thinness of the saturated layer, a well completed in it would probably yield less than three gallons per day." The document goes on to identify the aforementioned Whiting Ditch as the "probable" recharge source.

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The Department of Energy's Record of Decision states:

Shallow, perched groundwater is present beneath the proposed disposal site. The depth to the perched water table is about 15 feet beneath the proposed base of the excavation. The shallow ground water saturates a zone of approximately ten feet of weathered Mancos Shale. The quantity of water that can be withdrawn from a well in this shallow aquifer is estimated to be well below the 150 gallons per day or greater required for an aquifer to be considered a groundwater resource (40 CFR Part 192.2 (g)), meaning the ground water is Class III and not suitable for domestic use.

In addition to being extremely slow moving and of poor quality, the shallow perched groundwater beneath the disposal site is spotty in occurrence, and a discreet surface discharge location for the water has not been located down gradient of the site. The small quantity of groundwater that is perched beneath the site probably discharges diffusely downgradient and into the underlying Mancos Shale. Draft ROD pp. 23-24.

It appears that these conclusions were drawn from the review set forth in Appendix F to the EIS, particularly pp. F-257-293. Clearly the EIS and Record of Decision are speaking from factual assumptions which contrast vividly with the actual on-site facts.

In view of the now known presence of substantial groundwater resources and a significant stream feature on the disposal site itself, the precise location of the disposal cell, the design of appropriate barriers, the practicality and cost of the final cell itself, and, ultimately, the long range integrity of any design selected in the presence of so much water, are all questions which must be thoroughly addressed and reviewed under appropriate NEPA procedures and processes. The alternatives, such as Two Road site, have to be reexamined in light of these startling developments at Cheney.¹⁾

1) The Two Road site particularly seems worthy of a second look. It has excellent existing rail access, and it appears considerably drier and better located in relationship to surrounding topography, including water sources from higher surrounding lands. In addition, the existing record reflects that Two Road was the original favorite of the Mesa County Planning Department and the U.S. Bureau of Land Management.

And, of course, of all the potential threats to a nuclear waste repository site, water, particularly ground water, is probably the most dangerous. It attacks and erodes the barriers placed to protect the wastes, and it forms a perfect conduit for distribution of the wastes released from a leak or rupture in the disposal cell into the surrounding environment. Unfortunately, such an event would in all likelihood not be known until the discovery of a release point well away from the repository site. Then, it will be too late to rehabilitate the site and its containment features.

As I remarked in my recent letter to the NRC, the Coalition remains willing to be convinced that disposal can appropriately and safely proceed at Cheney. However, the gravity of the water problems calls for the closest and most detailed review, and the Coalition believes that the supplemental EIS procedures as defined by the Council on Environmental Quality guidelines provide the most ideal way of accomplishing this result.

C. Request for a Supplemental EIS.

The guiding administrative interpretations of the National Environmental Policy Act, 42 U. S. C. 4331 et seq., are set forth by the Council on Environmental Quality at 40 CFR Part 1500.²⁾ Section 1502.9(c) specifically provides:

(C) Agencies

- (1) Shall prepare supplements to either draft or final environmental impact statements if:
 - (i) The agency makes substantial changes in the prepared action that are relevant to environmental concerns;
or
 - (ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.
- (2) May also prepare supplements when the agency determines that the purposes of the Act will be furthered by doing so.

2) DOE has elected to adopt the CEQ Guidelines *in toto* rather than promulgate its own. 10 CFR 1021.

- (3) Shall adopt procedures for introducing a supplement into its formal administrative record, if such a record exists.
- (4) Shall prepare, circulate, and file a supplement to a statement in the same fashion (exclusive of scoping) as a draft and final statement unless alternative procedures are approved by the Council.

The instant situation is a perfect example of "significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." There is now a significant body of case authority requiring the federal agency involved to prepare a supplemental EIS in circumstances such as exist at Cheney, and, pursuant to the guidelines and these cases, the Coalition requests that DOE begin a supplemental EIS process. See: *Louisiana Wildlife Federation v. York*, 761 F.2d 1044, 1049-53 (5th Cir. 1985); *Conservation Law Foundation v. Watt*, 560 F. Supp. 561, 570-573 (D. Mass. 1983), affirmed sub. nom., *Massachusetts v. Watt*, 716 P.2d 946, 948-951 (1st Cir. 1983); *Essex County Preservation Association v. Campbell*, 536 F.2d 956, 960-61 (1st Cir. 1986); *Nelson v. Butz*, 377 F. Supp. 819 (D. Minn. 1974).

The Coalition is sensitive to the desire of all concerned parties to get the project on track as soon as possible. While a supplemental EIS requires a process akin to an original EIS, the law provides that procedures and timetables can be reasonably adapted to the circumstances extant. The Coalition notes particularly that the present testing and review activities can easily be incorporated into a supplemental EIS proceeding. See, *State of Alaska v. Carter*, 462 F. Supp. 1155 (D. Alaska 1978), and 40 CFR 1502.9(c)(4).

D. Other considerations which argue in favor of a Supplemental EIS.

On June 8, 1989, the Board of Commissioners of Mesa County adopted amendments to its Conditional use Permit dated March 29, 1988. The amendments address allowed intervals between trucks hauling waste and curfew times. The result is to very significantly increase the total period of time addressed in the EIS over which tailings would be transported. This increases the costs of the all truck transportation mode markedly and reduces the cost advantages of truck only to a fraction of the difference assumed in the December, 1988, EIS.

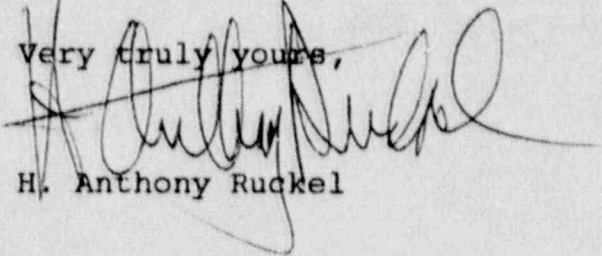
Since this cost differential was the principal reason set forth in the EIS for selecting the all truck alternative,

this recent action of the Mesa County Commissioners reinforces the Coalition's call for a supplemental EIS. See *Louisiana Wildlife Federation v. York, supra*.

This is especially important in the present instance, since, as the original EIS makes clear, the train-truck transportation mode causes less air pollution over the transportation route than the all truck mode., EIS p.71. The significance of this is magnified by the fact that Grand Junction is a non-attainment area in total suspended particulates (See e.g. EIS comment at p.71), and federal government policy does not favor federal projects which cause, or increase the severity of, violation of air pollution standards. See e.g., Executive Order No. 12088, 43 F.R. 47707 (Oct. 13, 1978), as amended by Executive Order NO. 12580, 52 F.R. 2923 (Jan. 23, 1987).³⁾

Finally, the Coalition submits that a supplemental EIS provides the DOE with a perfect opportunity to clear the air, assuage misgivings and distrust, reestablish DOE credibility in the community, and enjoy the hoped for result of the entire community behind an ultimately successful resolution of a very difficult matter.

Very truly yours,



H. Anthony Ruckel

HAR/mlo

cc: Don Leske, DOE Site Manager
James Watkins, Secretary, DOE
Paul Lohaus, NRC
John Singlaub, BLM
Chairman, CEQ

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- 3) The coalition also notes as a related matter the highly questionable selection of the exit point for trucks leaving the mill tailings site in Grand Junction just across from the only residential neighborhood adjacent to the tailings site. Air pollution and noise impact upon the residents is not mentioned at all in the EIS. This is particularly unfortunate, since there are many other potential exit points which would avoid an established neighborhood.