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State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

July 7, 1989

Ms. Jody Belviso
American Electric Power Company
P. O. Box 700
Lancaster, Ohio 43130-0700

Dear Ms. Belviso:

Re: Conceptual Reclamation Plans, Willow Creek Site, ACT/007/002,
Carbon County, Utah

As we discussed in our phone conversation with you and Conrad Parrish on July 5, the Division had some comments and clarifications regarding your letter, received June 12, 1989, concerning reclamation planning for the Willow Creek Site.

Enclosed are review memos detailing the issues we discussed. These may provide some further clarification of our concerns.

Feel free to contact me if you have questions.

Sincerely,


Susan C. Linner
Reclamation Biologist/
Permit Supervisor

c1
cc: C. Parrish
D. Darby
BT45/263



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June 14, 1989

TO: Susan Linner, Permit Supervisor

FROM: Mike DeWeese, Reclamation Hydrologist *MD*

RE: On-site Meeting, Willow Creek Reclamation, American Electric Power, ACT/007/002, Carbon County, Utah

SUMMARY:

I have read AEP's letter regarding our field visit to the Willow Creek site. There are a couple of items which I think should be elaborated upon so that there are no misunderstandings.

In regards to item 3, Rick searched the archives and was not able to locate the Vaughn Hansen report containing the access road culvert. Therefore the operator will have to provide design calculations demonstrating that the existing structure is adequate.

Item 4 states that the operator intends to simply remove the lower embankment of Pond 017 and install a silt fence to provide sediment control. In my discussion with Conrad Parrish I stated that the remaining structure would have to be constructed properly according to standard sediment trap designs. I further explained that justification in terms of real data, not casual observations, would have to be provided to approve substitution of the pond with a sediment trap.

Item 5 discusses the proposed design of Pond 018. During our meeting I told the operator that I would have to check the Division's spillway policy to determine if the proposed design was approvable. Upon reviewing this policy it became clear that a single spillway consisting of a manual decant will not meet the regulatory requirements. Furthermore, UMC 817.49 prohibits leaving permanent impoundments after reclamation. Therefore both ponds will have to be removed as part of the reclamation process.

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American Electric Power
ACT/007/002

RECOMMENDATIONS:

I recommend that the operator be notified as soon as possible that the ponds must be removed to prevent unnecessary design work. I will be available to discuss possible design alternatives with the consulting engineer if they like.

BT98/42-43



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June 27, 1989

TO: Sue Linner, Permit Supervisor

FROM: Randy Harden^{SCL} Reclamation Engineer

RE: Willow Creek Reclamation Plan, Site Visit Response
Letter, American Electric Power, Willow Creek,
INA/007/002, Folder #2, Carbon County, Utah

SUMMARY:

This memo is in response to the commitments made by American Electric Power (AEP) regarding the reclamation work to be accomplished at Willow Creek. This letter was received by the Division on June 12, 1989.

The purpose of the site meeting and the follow-up letter by AEP was to help determine the preliminary requirements and the extent of the reclamation work to be accomplished at the Willow Creek site. It should be noted that AEP has yet to submit a proposed reclamation plan for the site and that comments made by both the Division and AEP may change subject finalization of the reclamation plan.

ANALYSIS:

The response by AEP indicated a resolution of issues regarding reclamation work for the site. The operator had requested that the Division verify the comments made in that letter.

The following issues were presented in that letter:

1. The permit boundary will remain as shown on the map included in the Blackhawk/UDOGM agreement for UDOGM use of the site in the AML Program, except that the bridge culvert at the entrance to the site will be included in the permit area.

As agreed in the meeting, these general boundaries are sufficient with the understanding that the operator will incorporate those adjacent disturbed areas to be affected by reclamation into the reclamation plan. The operator must sufficiently include in the plan, details of the reclamation work to be accomplished both within and adjacent to the boundaries delineated by the operator for the disturbed areas.

2. Jap Canyon does not flow through the small culvert under the site access road. Instead, the flow in this drainage is directed through an old man-enhanced channel away from the site. Blackhawk will perform peak flow calculations on this channel to ensure that it is adequate to continue to carry flows around the site.

No comment.

3. UDOGM will search their own files for a copy of the Vaughn Hansen report sizing the access road culvert on Willow Creek.

No comment.

4. Sediment Pond No. 017 will have the lower side berm removed during reclamation. In place of the berm a sediment fence will be constructed making this pond merely a sediment trap.

No comment.

5. Sizing calculations for Pond No. 018 will be reviewed as will the pond specifications. Blackhawk will provide for a manual decant for this pond as the physical size and location of this pond are not conducive to reasonable installation of an emergency spillway. If necessary, the pond will be designed to entirely handle the runoff from a 100-year, 24-hour event in order to qualify for the elimination of the emergency spillway.

No comment.

6. A general discussion of the slopes outside the permit area will be submitted. There are two areas mentioned by UDOGM as needing discussion. The first is the cut slope above the pad area adjacent to the transformer building. The second is the outslope area between Willow Creek and the crest of the pad.

Cut and fill slopes above and below the pad and road areas and included in the disturbed areas were discussed during the site visit. In addition to the comments made above, the Division also indicated that a discussion of these slopes would have to be made from a stability standpoint. This stability analysis was to include the general soil characteristics of the fill and natural materials of the embankments, general and critical cross sections

of those slopes, general criteria and assumptions for the stability of these slopes in consideration of their affect on reclamation and those facilities to remain as part of the post mining land use. In other words, these slopes must be proven stable to the extent that they satisfy the requirements for the post mining land use and the justification or determination for the condition of these slopes must be presented in the reclamation plan.

7. Blackhawk has agreed to provide supplemental and gratuitous interseeding of the outslope area above Willow Creek. Blackhawk has further agreed to provide supplemental and gratuitous interseeding of the relatively flat area to the northwest of Pond 018.

The location, extent and type of reclamation work to be accomplished within the permit area and the adjacent areas will primarily depend on the design for the reclamation. This should be made upon submittal of the reclamation plan by AEP.

8. The undisturbed area drainage through the pad that is on the AML side of the recently redrawn boundaries will be designed by Blackhawk. Design of this waterway will be adequate to carry the 100-year, 24-hour storm coming from the diversion ditch around Blackhawk's site.

No comment.

9. Blackhawk will import material to cover the coal area just to the southwest of Pond 018. It was generally felt by all involved in the field visit that although this area appears dark that the coal materials are not persistent to great depth in this area.

Importing of material to cover these areas is not recommended. Upon site investigation, it is apparent that sufficient suitable cover materials exist within the permit area so as not to require the import of material to the site. These borrow areas should be determined in the field and proposed in the reclamation plan. In the event that there is material imported from outside the permit area, the plan will have to be amended to incorporate those borrow areas into the permit area.

- A. It is Blackhawk's intention to reclaim the site to a postmining land use of industrial. The industrial postmining land use will be supported by a written lease of the area accompanied by an industrial plan for the area.

Determination of suitability of alternate postmining land use is subject to the provisions of UMC 715.13, 785.21 and 817.133. Basically, the determination as to the reasonable likelihood for achievement of the postmining land use must be made on a case-by-case basis. Final approval will be made upon approval of the facilities by the Division, and, after public notice to interested citizens and local, State and Federal agencies to review and comment on the proposed alternative postmining land use.

This public notice period could be made in conjunction with the public notice and approval of the reclamation plan. Currently, the Division sees no reason why the site could not be designated as industrial for post mining land use, but as stated during the site visit, the areas adjacent to the industrial area which are not to be included in the plan for industrial use will need to be incorporated into the reclamation plan in a manner which is suitable to the surrounding areas.

RECOMMENDATIONS:

Until such time as AEP submits their proposed reclamation plan, precise comments and requirements for the plan cannot be made. However, the general intent of the reclamation as proposed by AEP appears to be reasonable. In the event that an alternative postmining land use of industrial is utilized in the reclamation plan, it should be noted that some improvements to the site in accordance to that land use designation will have to be made. The building and the facilities will have to be improved to the extent as necessary to comply with local and state regulations for such facilities. Zoning, permits and approvals from the local planning agencies will be necessary for the land use to be approved by the Division.

The operator should be aware of the public notice requirements for land use and upon completion of the reclamation plan, a proposed copy of the public notice should be submitted to the Division for approval prior to publication.