

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

March 11, 2009

TO: Internal File

THRU: Jim Smith, Permit Supervisor *JS 04/22/09*

THRU: Dave Darby, Environmental Scientist III, Lead *[Signature]*

FROM: Joe Helfrich, Biologist *[Signature]*

RE: Mining activities during exclusionary periods, UtahAmerican Energy Inc., Lila Canyon Mine, C/007/0013, Task # 3223

SUMMARY:

On February 3, a field review by personnel from the Division observed the Lila Canyon Mine portals under construction. The Zero portal had been blasted to a depth of about 12 feet and the other two portals (One and Two) were being prepped for blasting. The time limit for surface blasting had expired after February 1, 2009, which put mining activities into the exclusionary period. The operator was informed that blasting of the other two portals could not continue unless it could be shown that there were no adverse impacts to nesting birds, and received U.S. Fish and Wildlife Service's and Utah Division of Wildlife Resource's consent.

This document includes a review of the information submitted by the UtahAmerican Energy on January 31, February 9, and March 5th 2009 to conduct blasting operations in the exclusionary period. The review also includes the U.S. Fish and Wildlife Service's (Service) stipulations prepared by Nathan Darnall to allow blasting of the portals.

The following deficiencies were noted in the review of this application:

DEFICIENCIES

R645-301-120, the information in the application needs to be formatted in accordance with the R645 rules and presented as commitments for insertion in the approved MRP. The plans must be included in Section 333.300 and Appendix 3-5 of the MRP-Part B.

R645-301-130, the data from the two surveys conducted to date does not include information about the status of the nests in the Golden Eagle territory that would be ground surveyed in lieu of the helicopter survey. The DWR had requested that the nests within the territory be monitored. The ground survey data needs to be submitted to the Division by the permittee or his designated agent and marked as confidential

R645-301-333, -301-342, -301-358 Page 20 paragraph 2 of the application needs to be revised. The first sentence needs to be deleted. The raptor ground surveys have been revised to include the status of Bighorn sheep observed during the survey. However they do not include the status of the nest or nests in that territory. UEI must obtain written approval from DWR, FWS and DOGM to discontinue monitoring after March 15, 2009. Also the permittee is required to monitor raven nests.

The Service, in consultation with UDWR, would be willing to allow limited surface blasting at the mine with the following stipulations, these stipulations need to also be correctly formatted and incorporated in the approved MRP.

- 1) That Utah American Energy or its employees mine follows its own recommendation for use of explosives for surface blasting. What constitutes surface blasting is not completely clear, but surface blasting is likely to involve more than one round of blasting to get underground. Unless UDOGM has a different definition of "underground" we will assume that surface blasting occurs until the portal is more than 25 feet underground, at which time larger charges could be used if needed. Surface blasting noise levels are not to exceed 75 decibells. Blasting records will include at a minimum the amount of charge, time of blast and distance to the face.
- 2) That portal canopies be used for surface blasts to contain rock and to focus noise away from the nests. Blast blankets are also required. There is no evidence that they were used.
- 3) That dosimeter readings have been collected during surface blasts (at a safe distance) to compare sub-surface and surface blasts. Data from one or more distances has been collected, such as 100 feet (to compare with the earlier blast measurement), 200 feet (to compare with earlier ambient measurement) and/or greater distances to determine attenuation. Photocopies of the blasting data at the two locations for each blast needs to be included along with corresponding data from the biologist present at the time of the blast.
- 4) That a biologist with education or experience in raptor behavior, identification and survey protocol as determined by Nathan Darnall, FWS, Jim Parrish, Leroy Mead, DWR, Joe Helfrich, DOGM and Derris Jones, EIS, will monitor the eagles and nests within ½ mile of the disturbed area boundary prior to and during any and all surface blasts less than 25 feet

from the face of the rock surface not including the canopy. The monitoring will follow the 2008 protocol and the current 2009 protocol as approved by DOGM in consultation with DWR and FWS. The biologist should monitor the noise level using a dosimeter from the observation point where the status of the nests can be observed during the blasts. The purpose of this monitoring is to also record the noise levels at that distance from the mining activities and determine if the eagles respond negatively to the blasts (e.g., flight response). If negative responses are observed, any and all surface blasting shall cease immediately, and the Service, UDWR and DOGM will be contacted for additional guidance. The information regarding the qualifications of the biologists was not submitted until after the blasts occurred. The information received from EIS is different than that received from UEI. That needs to be clarified.

5) That surface blasts, (any and all less than 25 feet from the face of the rock surface not including the canopy), only occur if eagles are not present at the nest or nests within ½ mile from the disturbed area boundary). If an eagle is incubating eggs and would respond negatively to the blast (e.g., quickly fly away) there is a chance that the eggs could be harmed. To avoid this possibility, any and all surface blasting can only occur when the birds are not at or perched near the nest. A biologist with education or experience in raptor behavior, identification and survey protocol as determined by Nathan Darnall, FWS, Jim Parrish, Leroy Mead, DWR, Joe Helfrich, DOGM and Derris Jones, EIS will monitor the eagles and nests within ½ mile of the disturbed area boundary prior to and during any and all surface blasts less than 25 feet from the face of the rock surface not including the canopy. The monitoring will follow the 2008 protocol and the current 2009 protocol as approved by DOGM in consultation with DWR and FWS. The biologist should monitor the noise level using a dosimeter from the observation point where the status of the nests can be observed.

January 31, 2009 Letter

On Page 1 item # 4, the application needs to include a protocol for and a commitment to monitor for Ferruginous hawks within ½ mile of the mining activities at present. The plan needs to be included in the proposed 2009 monitoring plan. If it is determined that Eagles are occupying nests within ½ mile of the mining activities the ferruginous hawk surveys may be discontinued. The ground surveys do not include ferruginous hawk data.

Page 2 item # 4 paragraph 2, delete the last sentence.

2009 Eagle Monitoring Plan

The plan needs to include a commitment to ground survey the nests identified (list the nests) in the aerial survey and the data from those nests.

Page 1, Solution

Delete (hen on eggs), as the nest could be occupied.

TECHNICAL ANALYSIS:

GENERAL CONTENTS

PERMIT APPLICATION FORMAT AND CONTENTS

Regulatory Reference: 30 CFR 777.11; R645-301-120.

Analysis:

The information in the application is in the form of correspondence. The information in the application needs to be formatted in accordance with the R645 rules and presented as commitments for insertion in the approved MRP. Prior to noting that the permittees MRP contained specific language pertaining to the location of plans the Division staff had suggested incorporating the plans into appendix 3 that does not exist. The review of the permittees MRP clearly describes where the plans are to be incorporated. Specifically the conditions of the MRP require the plans to be submitted for incorporation into appendix 3-5 of the MRP-Part B. The plans must be included in Section 358.100 (Chapter 3 MRP-Part B) as a compliment to the existing commitment on page 38(Chapter 3 MRP-Part B) as well as in section 333.300(Chapter 3 MRP-Part B) as a part of the existing "protection" list. (R645-301-322.100, -322.220)

Findings:

The information in the application is not adequate to meet the requirements of this section of the regulations;

R645-301-120, the information in the application needs to be formatted in accordance with the R645 rules and presented as commitments for insertion in the approved MRP. Specifically the conditions of the MRP require the plans to be submitted for incorporation into sections 333.300 and appendix 3-5 of the MRP-Part B. Appendix 3 does not exist, appropriate sections of the MRP need to be revised accordingly.

REPORTING OF TECHNICAL DATA

Regulatory Reference: 30 CFR 777.13; R645-301-130.

Analysis:

The data from the two surveys conducted to date does not include information about the status of the nests in the territory that would be ground surveyed in lieu of the helicopter survey. The DWR had requested that the nests within the territory be monitored.

Findings:

The information in the application is not adequate to meet the requirements of this section of the regulations;

R645-301-130, the data from the two surveys conducted to date does not include information about the status of the nests in the territory that would be ground surveyed in lieu of the helicopter survey. The DWR had requested that the nests within the territory be monitored.

PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES

Regulatory Reference: 30 CFR Sec. 817.97; R645-301-333, -301-342, -301-358.

Analysis:

Page 20 paragraph 2 of the application needs to be revised. The first sentence needs to be deleted. The raptor ground surveys have been revised to include the status of Bighorn sheep observed during the survey. However they do not include the status of the nest or nests in that territory. UEI must obtain written approval from DWR, FWS and DOGM to discontinue monitoring after March 15, 2009. Also the permittee is required to monitor raven nests.

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TECHNICAL MEMO

Blasting records will include at a minimum the amount of charge, time of blast and distance to the face.

- 2) That portal canopies be used for surface blasts to contain rock and to focus noise away from the nests. Blast blankets are also required.
- 3) That dosimeter readings have been collected during surface blasts (at a safe distance) to compare sub-surface and surface blasts. Data from one or more distances has been collected, such as 100 feet (to compare with the earlier blast measurement), 200 feet (to compare with earlier ambient measurement) and/or greater distances to determine attenuation. Photocopies of the blasting data at the two locations for each blast needs to be included along with corresponding data from the biologist present at the time of the blast.
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TECHNICAL MEMO

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RECOMMENDATIONS:

The application is not recommended for approval at this time.