40-8912

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New Mexico Ecological Services Field Office
2105 Osuna NE
Albuquerque, New Mexico 87113
Phone: (505) 346-2525 Fax: (505) 346-2542

August 13, 1998

Cons. #2-22-98-I-382

Mr. Joseph Holonich
Uranium Recovery Branch
Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Mr. Holonich:

This responds to your July 10, 1998, letter requesting review of your proposed project's effects upon species federally listed or proposed to be listed as endangered or threatened. The proposed project is the reclamation of three abandoned uranium mines in New Mexico owned by the Estate of Michael P. Grace. We have enclosed a list of endangered, threatened, and candidate species, and species of concern that may be found in the county or counties where the proposed project is located. As you know, under the Endangered Species Act (Act), it is the responsibility of the Federal action agency or its designated representative to determine whether the proposed action "may affect" any listed or proposed species.

Candidates are those species for which the U.S. Fish and Wildlife Service (Service) has sufficient information on their biological status and threats to propose them as endangered or threatened, but for which issuance of a proposed rule is precluded by work on higher priority species. Species of concern include those for which further biological research and field study are needed to resolve their conservation status. Candidate species and species of concern have no legal protection under the Act and are included in this document for planning purposes only. However, the Service is concerned and would appreciate receiving any status information that is available or gathered on these species.

While the Service believes the proposed reclamation tasks will go a long way towards improving the ecosystem health in and around these disturbed areas, we are concerned that the $300,000 financial limitation on cleanup may not sufficiently address all contaminant and wildlife concerns. For instance, no sources have been identified for securing additional monies for unexpected and/or additional cleanup requirements or disposal of other, non-radioactive hazardous wastes. Revegetation of the reclaimed areas is not planned for, even though this is an important component of proper mine land reclamation. Also, statements in the work-plan such as "Due to the lack of information regarding the former activities that were conducted at the Grace #3 site, soils for

1/1

NL05

backfill and grading will come from surrounding areas to assure that no large borrow for soil occurs near the disturbed area." imply that there may be contaminants not discovered during initial screening of the "disturbed" area, that could pose a hazard to local surface and ground water supplies and wildlife. Every effort should be made to identify any and all contaminated areas within and near to the mine sites. Removal of borrow material from outside the currently "disturbed" area would increase the overall adverse impact to vegetation and wildlife habitat. Therefore, borrow material should be taken from within the disturbed area. If additional contamination is identified at this time, then that contamination must be dealt with appropriately.

Furthermore, the modified operating license issued to Mr. Grace on December 15, 1993 from the NRC (Section III, page 3, top paragraph) discusses other potential contaminant threats not directly addressed in the proposed site reclamation work plan:

> "Two of the three licensed sites appear to have been abandoned. Wells were observed that had been left uncapped; unknown substances were found in deteriorating barrels; potentially dangerous trash, such as batteries, were littering the ground; ponds that had once held contaminated solutions were still capable of retaining fluids. The apparent abandonment of these sites demonstrates insufficient regard for public health and safety. The status of the third site is unknown, but it is assumed that it is also similarly abandoned."

While the work-plan discusses burial of trash that meets radiation criteria, it does not detail disposal options for other contaminants, such as "unknown substances in deteriorating barrels." These substances must be identified to determine proper disposal procedures in accordance with the New Mexico Solid Waste, and New Mexico Radioactive and Hazardous Waste regulations. Other potentially hazardous non-radiological contaminants associated with uranium mining include sulfuric acid, arsenic, copper, lead, molybdenum, selenium, and vanadium (Meneely et al. 1979).

Removal of tailings, backfilling areas with clean soil, and contouring the area to match local topography will adequately restore the physical aspects of the site. However, no mention is made regarding restoration of vegetative characteristics. Without planting of some native vegetation, such as grasses, these areas will be prone to erosion and will have little, if any value for wildlife. Erosional materials could also be transported into nearby intermittent streams, arroyos, playas, or stock ponds to the detriment of aquatic organisms, wildlife, and stock. The Service recommends that an appropriate revegetation plan be developed, such as discussed in Kelley (1979), "Vegetational Stabilization of Uranium Spoil Areas, Grants, New Mexico" (attached), and information provided by local Natural Resource Conservation Service offices. Vegetation should also be replaced in areas disturbed by construction equipment and surfaces scraped for use as borrow material.

The work-plan also discusses plugging some wells, and capping of others. Without a more detailed presentation of groundwater quality and water rights certification, the

Service recommends that *all* wells be plugged and buried. This will limit the possibility that residual contaminants could leach into groundwater and be discharged in nearby springs and consumed by wildlife, or into private drinking water supply wells. Even though the "Environmental Report, License SUA-1480" (page 1) states that *"To the extent that reclamation funds remain available,* wells will be plugged at the sites." (emphasis added), the NRC should consider that all wells will be plugged, even if monies from the Estate are insufficient.

During removal activities, playas, wetlands, riparian vegetation, and sensitive habitats on or near the site should be protected. Dust created by truck traffic should be suppressed. If adverse impacts cannot be avoided, we would appreciate discussing your project in more detail.

Radiological contaminants should be cleaned up s specified in the work-plan, any additional contamination identified during reclamation should be removed, and reclaimed areas should be reasonably re-vegetated. The NRC should not terminate license SUA-1480 until these sites no longer pose a threat to public health, and resident or migratory wildlife.

In summary, given the financial constraints of this action, the Service agrees with the cleanup priorities outlined in the work-plan, with the following additional considerations to sufficiently protect wildlife:

1) Remove tailings in identified areas as proposed.
2) Plug *all* wells, unless additional data is provided regarding current and predicted future groundwater quality, and appropriately documented water rights certification, indicating that these wells may be capped for future use for livestock watering.
3) On-site disposal (burial) of mine-related debris. Contact the New Mexico Environment Department, Hazardous and Radioactive Materials Bureau, for disposal options for items suspected of non-radiological contamination (e.g., barrels with "unknown substances").
4) Re-vegetate backfilled tailings removal sites and any other areas disturbed during the removal action.

We suggest you also contact the New Mexico Department of Game and Fish and the New Mexico Energy, Minerals, and Natural Resources Department, Forestry and Resources Conse· ·ation Division for information concerning fish, wildlife, and plants of State concern.

Mr. Joseph Holonich

If we can be of further assistance, please contact Russ MacRae at (505) 346-2525, ext. 124.

Sincerely,

Jennifer Fowler-Propst
Field Supervisor

Enclosure

cc: (wo/enc)
Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico
Director, New Mexico Energy, Minerals, and Natural Resources Department, Forestry and Resources Conservation Division, Santa Fe, New Mexico

References

Meneely, S.C., S.L. Duzan, and S.D. Schemnitz. 1979. Impacts of uranium mining and milling upon the fish and wildlife resources of the New Mexico Sanu Juan Basin. U.S. Fish and Wildlife Service, Biological Services Program, FWS/OBS-80/56, 172 pp.

Kelley, N.E. 1979. Vegetational stabilization of uranium spoil areas, Grants, New Mexico. M.S. Thesis, University of New Mexico, Albuquerque, N.M. Los Alamos National Laboratory, N.M., LA-7624-T, 97 pp.

ENDANGERED, THREATENED, AND CANDIDATE SPECIES AND SPECIES OF CONCERN

August 13, 1998

Bernalillo County

Arizona black-tailed prairie dog, Cynomys ludovicianus arizonensis, SC
Big free-tailed bat, Nyctinomops macrotis (=Tadarida m., T. molossa), SC
Black-footed ferret, Mustela nigripes, E
Fringed myotis, Myotis thysanodes, SC
Long-legged myotis, Myotis volans, SC
New Mexican meadow jumping mouse, Zapus hudsonius luteus, SC
Occult little brown bat, Myotis lucifugus occultus, SC
Pale Townsend's (=western) big-eared bat, Plecotus townsendii pallescens, SC
Pecos River muskrat, Ondatra zibethicus ripensis, SC
Small-footed myotis, Myotis ciliolabrum, SC
Spotted bat, Euderma maculatum, SC
Yuma myotis, Myotis yumanensis, SC
American peregrine falcon, Falco peregrinus anatum, E
Arctic peregrine falcon, Falco peregrinus tundrius, E (S/A)
Baird's sparrow, Ammodramus bairdii, SC
Bald eagle, Haliaeetus leucocephalus, T
Black tern, Chlidonias niger, SC
Ferruginous hawk, Buteo regalis, SC
Loggerhead shrike, Lanius ludovicianus, SC
Mexican spotted owl, Strix occidentalis lucida, T
Mountain plover, Charadrius montanus, C
Northern goshawk, Accipiter gentilis, SC
Southwestern willow flycatcher, Empidonax traillii extimus, E
Western burrowing owl, Athene cunicularia hypugea, SC
White-faced ibis, Plegadis chihi, SC
Whooping crane, Grus americana, XN
Flathead chub, Platygobio (=Hybopsis) gracilis, SC
Rio Grande silvery minnow, Hybognathus amarus, E w/PCH
Texas horned lizard, Phrynosoma cornutum, SC
Millipede, Toltecus chihuanus, SC

McKinley County

Black-footed ferret, Mustela nigripes, E
Fringed myotis, Myotis thysanodes, SC
Long-eared myotis, Myotis evotis, SC
Long-legged myotis, Myotis volans, SC
Occult little brown bat, Myotis lucifugus occultus, SC
Small-footed myotis, Myotis ciliolabrum, SC
Spotted bat, Euderma maculatum, SC

American peregrine falcon, Falco peregrinus anatum, E
Arctic peregrine falcon, Falco peregrinus tundrius, E (S/A)
Bald eagle, Haliaeetus leucocephalus, T
Black tern, Chlidonias niger, SC
Ferruginous hawk, Buteo regalis, SC
Loggerhead shrike, Lanius ludovicianus, SC
Mexican spotted owl, Strix occidentalis lucida, T
Northern goshawk, Accipiter gentilis, SC
Southwestern willow flycatcher, Empidonax traillii extimus, E
Western burrowing owl, Athene cunicularia hypugea, SC
White-faced ibis, Plegadis chihi, SC
Zuni bluehead sucker, Catostomus discobolus yarrowi, SC
Acoma fleabane, Erigeron acomanus, SC
Goodding's onion, Allium gooddingii, C
Parish's alkali grass, Puccinellia parishii, PE
Sivinski's fleabane, Erigeron sivinskii, SC
Zuni (=rhizome) fleabane, Erigeron rhizomatus, T

Socorro County

Allen's (Mexican) big-eared bat, Idionycteris (=Plecotus) phyllotis, SC
Arizona black-tailed prairie dog, Cynomys ludovicianus arizonensis, SC
Black-footed ferret, Mustela nigripes, E
Desert pocket gopher, Geomys bursarius arenarius, SC
Fringed myotis, Myotis thysanodes, SC
Long-eared myotis, Myotis evotis, SC
Long-legged myotis, Myotis volans, SC
New Mexican meadow jumping mouse, Zapus hudsonius luteus, SC
Occult little brown bat, Myotis lucifugus occultus, SC
Organ Mountains Colorado chipmunk, Eutamias quadrivittatus australis, SC
Pale Townsend's (=western) big-eared bat, Plecotus townsendii pallescens, SC
Pecos River muskrat, Ondatra zibethicus ripensis, SC
Small-footed myotis, Myotis ciliolabrum, SC
Spotted bat, Euderma maculatum, SC
Yuma myotis, Myotis yumanensis, SC
American peregrine falcon, Falco peregrinus anatum, E
Arctic peregrine falcon, Falco peregrinus tundrius, E (S/A)
Baird's sparrow, Ammodramus bairdii, SC
Bald eagle, Haliaeetus leucocephalus, T
Black tern, Chlidonias niger, SC
Ferruginous hawk, Buteo regalis, SC
Interior least tern, Sterna antillarum, E
Loggerhead shrike, Lanius ludovicianus, SC
Mexican spotted owl, Strix occidentalis lucida, T
Mountain plover, Charadrius montanus, C

Northern aplomado falcon, Falco femoralis septentrionalis, E
Northern goshawk, Accipiter gentilis, SC
Piping plover, Charadrius melodus, T
Southwestern willow flycatcher, Empidonax traillii extimus, E
White-faced ibis, Plegadis chihi, SC
Whooping crane, Grus americana, XN
Flathead chub, Platygobio (=Hybopsis) gracilis, SC
Longfin dace, Agosia chrysogaster*, SC
Rio Grande silvery minnow, Hybognathus amarus, E w/PCH
Arizona southwestern toad, Bufo microscaphus microscaphus, SC
Texas horned lizard, Phrynosoma cornutum, SC
Chiricahua leopard frog, Rana chiricahuensis, SC
Socorro isopod, Exosphaeroma thermophilus, E
Alamosa springsnail, Tryonia alamosae, E
Chupadera springsnail, "Fontelicella" chupaderae, C
Socorro springsnail "Fontelicella" neomexicana, E
Fugate's blue-star, Amsonia fugatei, SC
Sandhill goosefoot, Chenopodium cycloides, SC

Index

E	=	Endangered
PE	=	Proposed Endangered
PE w/CH	=	Proposed Endangered with critical habitat
T	=	Threatened
PT	=	Proposed Threatened
PT w/CH	=	Proposed Threatened with critical habitat
PCH	=	Proposed critical habitat
C	=	Candidate Species
SC	=	Species of Concern
S/A	=	Similarity of Appearance
*	=	Introduced population
XN	=	Nonessential experimental

MESSAGE CONFIRMATION

DATE:08/13/98 TIME:11:57

ID:NEW MEXICO ECO.

DATE	TIME	TX-TIME	DISTANT STATION ID	MODE	PAGES	RESULT
08/13	11:54	03'27"	913014155397	G3-S	008	OK