

D40Wm048110E

State of CO

# STATE OF COLORADO

RETURN ORIGINAL TO PDR, HQ

## COLORADO DEPARTMENT OF HEALTH

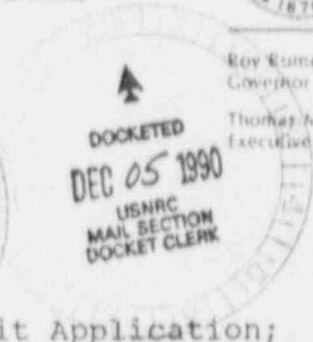
4210 East 11th Avenue  
Denver, Colorado 80220-3716  
Phone (303) 320-8333

Telefax:  
(303) 322-9076 (Main Building/Denver)  
(303) 320-1529 (Platting Place/Denver)  
(303) 246-7190 (Grand Junction Regional Office)



November 30, 1990

Mr. Max Stodolski  
U.S. Bureau of Reclamation  
Durango Projects Office  
P.O. Box 640  
Durango, Colorado 81302-0640



Ray Komer  
Governor  
Thomas M. Vernon, M.D.  
Executive Director

Subject: Comments on BOR Restricted Use Permit Application;  
File DUR XIII-U

Dear Mr. Stodolski:

The Colorado Department of Health (CDH), the Colorado Attorney General's Office (AGO) and the U.S. Nuclear Regulatory Commission (NRC) have reviewed the draft Restricted Use Permit Application (RUP). We have combined the CDH, AGO and NRC comments in Attachment A. For your information and files, the NRC's comments are also included in their original form in Attachment B. Unfortunately, we have not received comments from the U.S. Department of Energy (DOE). We have decided to proceed with the Application without DOE's comments.

The majority of the attached comments concern the specific wording of the permit application. However, the Colorado AGO raised concerns about the legality of the permit, and suggested that CDH and BOR enter into a temporary Access Agreement, until such time that the site is certified by NRC and a permanent easement is arranged. Thus, we will need to discuss with you the details of the Access Agreement. We will use the RUP application and the Site Characterization study as attachments to the Access Agreement. We do not foresee that this change will cause any unnecessary delays in granting access to the property.

An additional provision of the Access Agreement will be that the BOR will be responsible for sealing all BOR monitor wells and test holes in accordance with Colorado regulations. Also, the office compound and any other ground disturbance will need to be restored to its original grade, with stabilized vegetation or to a condition consistent with some other beneficial use of the property, at the end of construction, or in the event that construction does not occur. In addition, the BOR shall comply with all local land use regulations that apply to the site.

9101030299 901130  
PDR STPRG ~~ESG~~ PDR

DESIGNATED ORIGINAL

Certified By Mary C. Hood

Add Info  
91-0126

DF02  
1/1

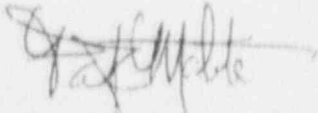
020015

M. Stodolski  
November 30, 1990  
Page 2

We have received the Site Characterization documents and while we do not plan a formal review of the documents, we will relay to you any comments raised by the DOE or the NRC concerning site characterization activities.

Please contact Wendy Naugle of my staff at 331-4842 at your earliest convenience to discuss the details of the Access Agreement and any questions that you may have concerning the attached comments.

Sincerely,



Patricia C. Martinek  
Acting UMTRA Technical Manager

HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION

Attachments

cc w/attachment:     Steve Hamp, DOE  
                         Will Maez, DOE  
                         Ramon Hall, NRC ✓  
                         Russel Edge, TAC  
                         Wendy Naugle, CDH  
                         Jerry Goad, AGO

## ATTACHMENT A

### STATE AND NRC COMMENTS ON BOR RESTRICTED USE PERMIT

#### General Comments

Please change title of document to: "Attachment to Access Agreement- Details of Agreement".

Replace "Restricted Use Permit" with "Access Agreement".

Replace "Application" with "Agreement".

Replace "contaminated materials" with "residual radioactive materials" to be consistent with UMTRCA definitions.

#### Specific Comments

Page 1, Purpose of Application - Please change final sentence to read "Under such an Access Agreement, CDH, as land owner, would grant Reclamation access to the property until such time that a permanent easement is granted, to construct, operate, and maintain the Durango Pumping Plant on this site. CDH will seek concurrence from the DOE and the NRC on this agreement."

Page 1, Background, Paragraph 2 - Please add that the role of CDH under UMTRCA is to acquire processing sites for the DOE and to cost share in the remedial actions.

Page 1, Background, Paragraph 2 - The final sentence states that "A report will be filed by DOE to CDH and NRC stating that the area has been cleaned up and is suitable for surface use." This statement should be clarified. Suggested rewording: "DOE and CDH will submit a Completion Report and Final Remedial Action plan to the NRC for certification that the area meets the EPA standards and is suitable for surface use."

Page 1 Background, Paragraph 3 - Please add a final sentence which reads: "Reclamation has performed sufficient site characterization (see attached "Hydrogeochemical Site Characterization") such that Reclamation, DOE and CDH need not wait for a similar DOE study."

Page 2, Schedule, Paragraph 2 - Please delete the final sentence and amend second to final sentence to read: "It is anticipated that CDH will approve the Access Agreement by January, 1991 with concurrence by DOE and NRC."

Page 4, Land Status, Paragraph 1 - Please change to read: "Present Use - The proposed Durango Pumping Plant site is in an area where solid residual radioactive materials have been removed by DOE and CDH under the UMTRA project as described in the Introduction."

Page 4, Land Status, Paragraph 2 - Information on land ownership needs to be corrected. Please reword as follows: "The State of Colorado obtained fee title to this property on August 30, 1990 and is now the owner."

Page 5, Ownership, Paragraph 4 - please include a map that shows the pumping plant location and layout.

Page 5, Design Considerations, 2 - please amend first sentence to read: "A major design requirement established by representatives of CDH and DOE is the prevention of significant quantities of contaminated groundwater from entering the pumping plant and impacting water quality in the Ridges Basin Reservoir. However, recent site investigations indicate that the groundwater beneath and upgradient of the pumping plant is not contaminated. Groundwater modeling studies indicate that the pumping plant will not significantly alter the groundwater flow regime. (See attached site characterization study)."

Page 5, Design Considerations, 2.a - Due to the fact that BOR has moved the intake structure to a location upgradient from the predominant contamination, lining of the intake structure is unnecessary.

Page 6, Construction Water Treatment, Paragraph 1 - reword final sentence as follows: "Before this water can be released into the Animas River, treatment will be necessary to meet the water quality discharge requirements imposed by a CDPS or NPDES permit." Note that the NRC is currently reviewing its policy concerning discharge of recovered groundwater. The current NRC policy is that recovered groundwater from NRC licensed mill sites is byproduct material and therefore cannot be discharged to the environment. A policy determination should be forthcoming and may impact the BOR's plans to discharge recovered groundwater.

Page 7, 1. - Please describe site security in more detail. Site security should be maintained in a manner that prevents uncontrolled site access and the potential for undetected contamination of intruders.

Page 7, 2. - Design/capacity of holding pond is not specified. The holding pond should be designed to contain, at a minimum, a 10-yr 24-hr storm and the water from the excavation to avoid an inadvertent discharges of untreated water during large storm events. Please include a statement that indicates that the design capacity of the holding pond will satisfy this criterion.

Page 7, 7. - Please add that "BOR will consult with CDH in determining the final disposal of holding pond materials." Note that NRC currently regards sludge containing residual radioactive materials resulting from treatment of recovered groundwater a byproduct material. On this basis, it would require disposal in either an existing mill tailings facility or in an approved disposal site authorized to accept byproduct material.

Page 7, Handling of Groundwater - This section indicates that most of the water in the excavation will result from intruding river water. While this is true, it should also be noted that some water associated with raffinate disposal will also be encountered.

Page 8, Handling Excavated Material, Paragraph 1 - This paragraph states that "The level of contaminant contained within the disposal mounds will be maintained at levels below limits specified by CDH." Please clarify that the mounds will be maintained at levels below the EPA standards for radium in soils. Should excavation result in recovery of contaminated soils above normal acceptance limits, dilution by blending with outside sources can not be allowed. The material shall only be mixed with other material from the same excavation and the resulting level must be below the EPA standards. Concentration of contaminated materials in one central location shall be avoided. Please revise the text to include these provisions.

Page 9, Monitoring Plans, Paragraph 1, final sentence - This sentence states that "Reclamation will formally advise CDH and DOE prior to terminating monitoring activities." Please clarify by stating, instead, that "Reclamation may terminate monitoring activities pending approval by CDH." In addition, the monitoring program including monitoring locations, parameters and frequency shall be approved by CDH.

Page 10, Environmental, Health and Safety, Paragraph 1 - The Health and Safety Plan must be approved by CDH. A Health Physicist, trained and experienced in radiological protection, should be available to monitor excavated materials and to perform personnel surveys of potentially exposed site workers as necessary. To assure that there is not undetected contamination of site workers, routine exit surveys may be necessary should excavation result in exposure of contaminated soils. The frequencies for radiation protection and health and safety training should be defined. The scope of personnel to be so trained should also be stated. Training shall include methods of identifying contaminated materials. All work must be conducted in compliance with Colorado Rules and Regulations Pertaining to Radiation Control, Part 4, Standards for Protection Against Radiation.

Please add to the application a paragraph concerning the site restoration, including restoration of the office compound, and any other ground disturbance. Also, please state how BOR will use the compound. The site shall be restored to its original grade, with stabilized vegetation or to a condition consistent with some other beneficial use of the property, at the end of construction, or in the event that construction does not take place.

Please add to the application a paragraph that states that the BOR will be responsible for sealing all BOR monitor wells and test holes in accordance with Colorado regulations, at the end of construction, or in the event that construction does not occur.



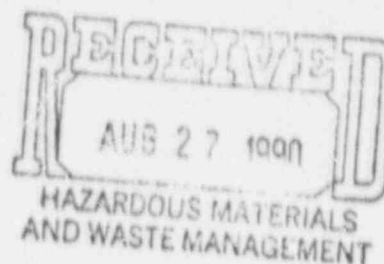
APPENDIX B

UNITED STATES

NUCLEAR REGULATORY COMMISSION

REGION IV

URANIUM RECOVERY FIELD OFFICE  
BOX 25325  
DENVER, COLORADO 80225



23 1990

URFO:DLJ  
Docket No. WM-006  
40WM0006020E

State of Colorado  
Colorado Department of Health  
ATTN: Patricia C. Martinek  
Acting UMTRA Technical Manager  
Hazardous Materials and Waste  
Management Division  
4210 East 11th Avenue  
Denver, Colorado 80220-3716

Dear Ms. Martinek:

Attached are our comments and suggestions on the draft Restricted Use Permit application prepared by the Bureau of Reclamation for the Durango UMTRA processing site. Two topics identified in our comments are currently under policy review by the Commission. These are recovered ground-water discharge and sludge disposal. As policy is established in these areas, it will be forwarded to you.

Also, our review of the existing ground-water data indicates that there is little or no concern associated with the ground water at the proposed site of the Bureau of Reclamation project. The construction and dewatering activities will most likely result in a cleanup of the area with the hazardous constituents being concentrated in the treatment sludges.

~~9809047059~~ 4PP

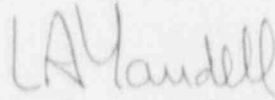
AUG 23 1990

State of Colorado

2

If our office can be of any further assistance or if you have any questions, please contact D. L. Jacoby of my staff on (303) 236-2805.

Sincerely,

A handwritten signature in cursive script that reads "L. A. Yandell".

L. A. Yandell  
Acting Director

Attachment:  
As stated



COMMENTS ON THE DRAFT APPLICATION FOR  
RESTRICTED USE OF THE DURANGO PROCESSING SITE

1. There are two topics considered in the proposed application which are currently under policy review by the NRC.
  - a. Recovered Ground-Water Discharge: Current NRC policy is that recovered ground water from NRC licensed mill sites is byproduct material and therefore cannot be discharged to the environment. This interpretation is currently being discussed with NRC headquarters, and a policy determination should be forthcoming shortly.
  - b. Sludge Disposal: Sludge resulting from treatment of recovered ground water is also considered byproduct material. On this basis, it would require disposal in either an existing mill tailings facility or in an approved disposal site authorized to accept byproduct material.
2. Should excavation result in recovery of contaminated earth above normal acceptance limits, dilution by blending with outside sources should not be considered permissible. If a localized deposit of contaminated material is mixed with other material from the same excavation and the resulting contamination level is below acceptable limits, it would be consistent with normal site cleanup criteria. Concentration of contaminated material in one central location should be avoided.
3. Under the heading "Environmental, Health, and Safety Considerations": Provisions are included for monitoring for the possible spread of contamination during site construction. It states that an Industrial Hygienist would be onsite. It is suggested that this section should be strengthened to require that a Health Physicist, trained and experienced in radiological protection, be available to monitor excavated materials and to perform personnel surveys of potentially contaminated site workers as necessary.

Even though not explicitly stated in this section, it is assumed that normal construction site security will be in place. This should be sufficient for prevention of uncontrolled site access and the potential for undetected contamination of intruders. To assure that there is no undetected contamination of site workers, routine exit surveys may be necessary should excavation result in exposure of contaminated soils. This kind of data may prove useful if there are any future questions related to the potential for contamination of site workers.

Frequencies for radiation protection and health and safety training should be defined. The scope of personnel to be so trained should also be

stated. Training may include identification of possibly contaminated material. The applicability of the State of Colorado's equivalent of 10 CFR 19 and 10 CFR 20 regulations applicable to this site may bear emphasis.

4. Under the heading "Handling Ground Water," the application should indicate that some water associated with raffinate disposal will be encountered.
5. To be consistent with UMTRCA, 1978, the phrase "contaminated materials" should be changed to "residual radioactive materials."