

## MEMORADUM FOR FUSRAP ADMINISTRATIVE RECORD

SUBJECT: NRC Implementation of UMTRCA at Uranium Recovery Facilities

1. Telephonic discussion between Ms. Elaine Brummett, NRC, and Messrs. Dennis Chambers and Ron Frerker, USACE, on 25 April 2000 provided information on NRC policies and positions with respect to implementation of UMTRCA criteria in 10 CFR 40. A subsequent telephone conference call between representatives of the U.S. Nuclear Regulatory Commission (NRC) and MVS took place on 26 April 2000. This call was to obtain clarification and guidance with respect to the manner in which NRC rules and regulations are to be implemented to assure MVS consistency particularly with regard to implementation of UMTRCA criteria and related benchmark dose approaches contained in 10 CFR 40.

2. Participants in the 26 Apr 00 call included the following:

NRC Division of Waste Management, Uranium Recovery Branch: Ms Elaine Brummett, Messrs Tom Essex and James Kennedy.

MVS: Ms. Sharon Cotner; Messrs Lou Dellorco, William Levins, Walter Ohar, Dennis Chambers, Jim Moos, Ron Frerker and John Waddell.

3. The following information was provided by the NRC:

a. The application of UMTRCA criteria is considered by NRC to be appropriate only when integrated with all other considerations to include climate; population density; potential pathways (including ground water); and particularly, institutional controls/transfer of the site to the government for permanent management of the cell and areas not meeting the unrestricted release standard.

b. NRC applies the 5 pCi/g surface criteria site-wide at all depths except as an exception to policy. As a matter of practice, mills and impacted vicinity properties are routinely remediated by removal of the top foot of surface soil. This approach is used relatively independent of contamination concentrations in surface soils as it assures proper site drainage without regard to backfill and is a protective and cost effective approach. Use of the UMTRCA 15 pCi/g subsurface soil criteria is approved only as an exception to policy and is limited to small areas (e.g., a few hundred square feet). Use of the 15 pCi/g subsurface standard is not considered by NRC to meet the intent of ALARA at uranium mill sites or to be protective with respect to radon. The use of the subsurface criteria is accompanied by the imposition of institutional controls to include limits on future construction so as to assure protectiveness particularly of radon concentrations. (Enclosure 1 provides an example of institutional controls imposed on property remediated to 15 pCi/g. Ownership of this property was transferred to the state of Colorado with restrictions that clearly denote that institutional controls are appropriate when concentrations exceed the 5 pCi/g UMTRCA surface soil criteria).

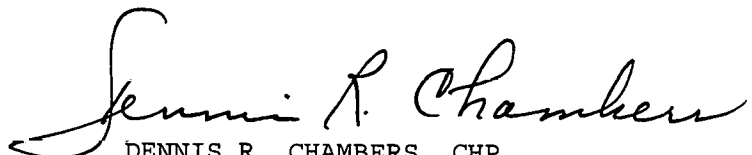
SUBJECT: NRC Implementation of UMTRCA

c. The use of the 10 CFR 40, Appendix A, Criterion 6(6) is appropriate only if "all potential pathways and all plausible future land uses are included". Although NRC developed the benchmark approach, the manner in which USACE is applying the benchmark at the Colonie site is "not consistent with NRC practices". USACE is too restrictive with respect to plausible future land uses and excludes reasonable pathways. As such, the NRC staff will recommend that the Commissioners non-concur with the manner in which USACE implements the benchmark dose. Additionally, the implementation of ALARA provisions of ARARs is significantly different within USACE than its intended application at uranium recovery facilities. Additional NRC guidance on implementation of benchmark doses will be contained in the revised "Site Review Plan" (SRP) expected within the next few weeks.

d. Restricted release provisions in 10 CFR 20, Subpart E, were specifically excluded from 10 CFR 40. All properties except the mill disposal cell (and potentially some other limited mill areas) are generally remediated to the 5 pCi/g unrestricted release criteria. Ownership of properties exceeding unrestricted release criteria is transferred to the government for management in perpetuity. As such, provisions for restricted release are neither necessary nor appropriate for UMTRCA sites.

e. NRC experience suggests that failure to apply remediation criteria that are both protective and consistent with other federal and state agencies can be expected to result in litigation.

4. Conclusions: NRC application of UMTRCA criteria is consistent with that of the EPA except with respect to constraining the benchmark dose to 15 mrem/y and separately addressing ground water. There is no significant disagreement between NRC and EPA with respect to the manner in which subsurface radium criteria is implemented. The current USACE application of ARARs for uranium recovery facilities/mill tailings is not consistent with the intent of NRC or EPA in promulgation of 10 CFR 40 or 40 CFR 192, respectively. The criteria detailed by USACE in the St Louis North County Site Feasibility Study and Proposed Plan is sufficiently consistent with the implementation of UMTRCA intended by both NRC and EPA.

  
DENNIS R. CHAMBERS, CHP  
Health Physicist

QUIT CLAIM DEED

The Colorado Department of Public Health and the Environment ("Grantor"), whose address is 4300 Cherry Creek Drive South, Denver, Colorado, 80222-1530, City and County of Denver, State of Colorado, pursuant to 42 U.S.C. § 7914 (e) (1) (B) and C.R.S. § 25-11-303, hereby donates and quit claims to the County of Gunnison ("Grantee"), whose address is 200 E. Virginia, Gunnison, Colorado, 81230, City and County of Gunnison, State of Colorado, the following real property in the County of Gunnison, State of Colorado, to wit: A parcel of land in Gunnison County, State of Colorado, containing Sixty and ninety two hundredths (60.92) acres, more or less, described as follows:

Township 49 North, Range 1 West, N.M.P.M.

A tract of land situated in the S $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 2 and the NE $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 11 more particularly described as follows:

Commencing at the North quarter corner of said Section 11; thence South 89°34'00" West along the North line of said Section 11, a distance of 30.91 feet to the Westerly right-of-way line of the existing county road; thence North 00°07'00" West along said right-of-way line 742.17 feet; thence North 53°22'00" West, 231.90 feet, to the POINT OF BEGINNING; thence Southeasterly along said right-of-way along a curve to the right, having a radius of 144.71 feet, 268.98 feet, chord bearing South 53°22'00" East, 231.90 feet; thence South 00°07'00" East along said right-of-way line, 742.17 feet, to the North line of said Section 11; thence South 00°08'00" East along said right-of-way line, to the South line of said NE $\frac{1}{4}$ NW $\frac{1}{4}$ ; thence South 89°41'00" West along said South line, 1,271.72 feet; thence North 01°06'00" West, 1320.03 feet to said North line of Section 11; thence North 89°34'00" East along said North line, 112.00 feet; thence North 00°31'00" East, 219.42 feet; thence North 89°09'00" West, 166.32 feet; thence North 13°56'00" West 99.16 feet; thence North 06°14'00" West, 211.88 feet to the Southerly right-of-way line of said existing county road; thence Northeasterly along said right-of-way line, to the POINT OF BEGINNING

Subject to: (i) any coal, oil, gas, or other mineral rights in any person; (ii) existing rights-of-way for roads, railroads, telephone lines, transmissinn lines, utilities, ditches, conduits, or pipelines on, over, or across said lands; (iii) court liens, judgments, or financial encumbrances such as deeds of trust for which a formal consent or order has been obtained from a court for the lien holder; (iv) other rights, interests, reservation nr exceptions of record; and the following terms, conditions, rights, reservations and covenanis:

Grantor reserves to: (i) itself, the U. S. Department of Energy, their employees, agents and contractors the right of access to the property as may be necessary to complete activities under the Uranium Mill Tailings Radiation Control Act of 1978, 42 U.S.C. § 7901 et seq. ("UMTRCA") and for other lawful purposes, until such time as Grantor and the U.S. Department of Energy determine that all remedial activities are complete; and (ii) to itself any non-tributary groundwater underlying this parcel, the right to develop tributary groundwater, and the right to surface access for groundwater development.

Grantee covenants to hold harmless the Grantor and the Department of Energy for any liability associated with disruption of any public purpose ventures on the property conveyed by this deed, the disruption of any improvement on said property made by the Grantee, its successors and assigns, and any temporary or permanent limitations to the use of the property, should the Grantor and the Department of Energy be required to perform additional surface remedial activities on the property conveyed by this deed.

Grantee covenants (i) to comply with the applicable provisions of UMTRCA, 42 U.S.C. #7901 et. seq., as amended; (ii) not to use ground water from the site for any purpose, and not to construct wells or any means of exposing ground water to the surface unless prior written approval for such use is given by the Grantor and the U.S. Department of Energy; (iii) not to sell or transfer the land to anyone other than a governmental entity within the state; (iv) that any sale or transfer of the property described in this deed shall have prior written approval from the Grantor and the U.S. Department of Energy; and that any deed or other document created for such sale or transfer and any subsequent sale nr transfer will include information stating that the property was once used as a uranium milling site and all other information regarding the extent of residual radioactive materials removed from the property as required by Section 104(d) of the Uranium Mill Tailings, 42 U.S.C. sec. 7014(d), and as set forth in the Annotation attached hereto; (v) not to perform construction and/or excavation or soil removal of any kind on the property without permission from the Grantor and the U.S. Department of Energy unless prior written approval of construction plans (e.g., facilities type and location), is given by the Grantor and the U.S. Department of Energy; (vi) that any habitable structures constructed on the property shall employ a radon ventilation system or other radon mitigation measures; and (vii) that its use of the property shall not adversely impact groundwater quality, nor interfere in any way, with groundwater remediation under UMTRCA activities; and (viii) to use the

property and any profits or benefits derived therefrom only for public purposes as required by UMTRCA sec. 104(e)(1)(C), 42 U.S.C. 7914(e)(1)(C).

These covenants are made in favor and to the benefit of Grantor, shall run with the land and be binding upon Grantee and its successors and assigns, and shall be enforceable by Grantor, and its successors and assigns;

Grantee acknowledges that the property was once used as a uranium milling site, and that the Grantor makes no representations or warranties that the property is suitable for Grantee's purposes;

IN WITNESS WHEREOF:

GRANTOR:

APPROVED AS TO FORM:

David Kreutzer - Assistant Attorney General

STATE OF COLORADO  
Bill Owens, Governor  
Acting by and through  
The Department of Public Health and Environment

By: \_\_\_\_\_  
Executive Director

By: \_\_\_\_\_  
Program Approval

ACCEPTANCE OF DEED  
AND COVENANTS

GRANTEE:

\_\_\_\_\_  
(Full Legal Name or Agency)

By: \_\_\_\_\_  
(Name)

Title: \_\_\_\_\_

(Affix Seal)

ATTESTATION:

\_\_\_\_\_  
City/County Clerk

Signed this       day of       , 19      

STATE OF COLORADO,  
County of

} SS.

The foregoing instrument was acknowledged before me this  
day of       , 19       , by

My commission expires

Witness my hand and official seal

\_\_\_\_\_  
Notary Public.

## Data Entry Form

{Technical Managers fill in C through G. Document Managers fill in the rest}

A. Document ID Number: Will be assigned by database 00-203 B. Further Information Required?: ☐

C. Primary Category: (Choose One):

~~IISACE~~ ☒  
St. Louis Sites ☒  
Downtown ☐  
North County ☐  
Madison Site ☐  
Inaccessible Areas ☐  
PRP ☐  
Oversight Committee ☐

D. Site (Optional):

SLDS VP ☐  
Mallinckrodt ☐  
SLAPS ☐  
SLAPS VP ☐  
CWC ☐  
HISS ☐  
Madison ☐

E. Area (Optional): \_\_\_\_\_

F. Primary Document Type (Choose One):

Site Management Records ☒  
Removal Response ☐  
Remedial Investigation ☐  
Feasibility Study ☐  
Record of Decision ☐  
Program Management ☐

Remedial Design ☐  
Remedial Action ☐  
Public Affairs/Community Relations ☐  
Congressional Relations ☐  
Freedom of Information Act Requests ☐  
Real Estate ☐

G. Secondary Document Type (see back of form): Reference Document

H. Bechtel Number: —

I. SAIC Number: —

J. MARKS Number(Choose One): FN: 1110-1-8100e ☐ FN: 1110-1-8100f ☐ FN: 1110-1-8100g ☐

K. Subject: TRC Implementation of UMTCA

L. Title: \_\_\_\_\_

M. Author: Dennis Chambers

N. Author's Company: ED-P

O. Recipient: Title

P. Recipient's Company: FUSRAP

Q. Version (Choose One): Draft ☐

Final ☒

R. Date: 7 May 00

S. Include in the ARF? ☒

T. Include in the AR? ☒

U. Filed as Confidential/Privileged? ☐

V. To Be Microfilmed? ☐

W. Document Format (Choose one):

Paper ☒  
Electronic ☐

Photographic ☐  
Audio-visual ☐

Cartographic/Oversize ☐  
Microform ☐

X. Physical Location (Choose One):

Central Files ☐  
Records Holding Area ☐

Microfilm Vendor ☐  
Department of Energy ☐

In ARF ☐  
In AR ☐

Y. Filed in AR Volume Number:

Z. Associated with Document(s):

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# Administrative Record for the Formerly Utilized Sites Remedial Action Program (FUSRAP) North St. Louis County Sites

St. Louis County, Missouri

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**US Army Corps  
of Engineers**  
St. Louis District®

Volume 1.6 *a*  
Site Management –  
Reference Documents

SLAP\_000684