



Department of Energy
Albuquerque Operations Office
P. O. Box 5400
Albuquerque, New Mexico 87185-5400

DEC 14 1994

Mr. Joseph J. Holonich, Chief
High-Level Waste and Uranium Recovery
Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards
Mail Stop 5E-4 OWFN
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Vicinity Property No. LO-021S
South Fork Lodge River Front
Home Sites Lot 5
Lowman, Idaho 83663

Dear Mr. Holonich:

In accordance with the Uranium Mill Tailings Radiation Control Act of 1978 (Public Law 95-604), the Environmental Protection Agency (EPA) Standards (40 CFR part 192), and the Memorandum of Understanding between the U.S. Department of Energy (DOE) and the NRC (GM004-85AL26037), two copies of the Vicinity Property Completion Report for the above property are submitted for NRC certification concurrence. Please note that the application of supplemental standards does not appear in the REA. Supplemental standards were applied in the field. Also enclosed to aid in the review are the NRC Review form and a copy of the Vicinity Property Certification Summary and Decision.

Should you have any questions, please contact Gaeton Falance of my staff at 505-845- 5636.

Sincerely,

Charles A. Cormier
Acting Project Manager
Uranium Mill Tailings Remedial Action
Project Office

cc:
R. Donovan, IDHW, ID

9412290225 941214
PDR WASTE
WM-43 PDR

WM-43
N604
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VP No.: LO-021S
NRC Review Form
for Supplemental Certification
of Vicinity Properties

The Department of Energy (DOE) has determined that the remedial action at the following vicinity property (VP) has been completed and thereby complies with supplemental standards invoked by DOE under 40 CFR, Subpart C, specifically Subsections 192.21 and 192.22.

NRC concurrence for the Radiological Engineering Assessment (REA) given on: _____

Supplemental standards were not in the REA, special circumstances required that supplemental standards be involved during remedial action.

Gaeton Falanca
Gaeton Falanca, DOE Certification Officer

12/02/94
Date

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Based on the information and certification provided by the DOE, the NRC:

concurs that the remedial action at the subject VP has been completed under its authority provided by the Uranium Mill Tailings Radiation Control Act (UMTRCA), Section 104(f)(1) and as described in the Memorandum of Understanding (MOU), Appendix A, Section 3.4.

concurs, as above, except for the following conditions:

- 1.
- 2.
- 3.

See attached sheets for any additional provisions.

needs additional information to make a concurrence decision. This information consists of:

See attached sheets for any additional informational needs.

NRC Concurring Official and Title

Date

VICINITY PROPERTY CERTIFICATION SUMMARY AND DECISION - VP NO. 20-021

The data presented in the certification folder indicate:	TAC			DOE		
	Evaluation			Evaluation		
	Yes	No	N/A	Yes	No	N/A
1. The Ra-226 concentration in the top 15 cm of soil averages ≤ 5 pCi/g above background over 100 sq m, in-situ () lab <input checked="" type="checkbox"/> .	<input checked="" type="checkbox"/>	()	()	()	()	()
2. The Ra-226 concentration in any 15 cm of soil below the top 15 cm surface layer averages ≤ 15 pCi/g above background over 100 sq m, in-situ () lab <input checked="" type="checkbox"/> .	<input checked="" type="checkbox"/>	()	()	()	()	()
3. The indoor gamma readings are ≤ 20 uR/h above background in every habitable room	<input checked="" type="checkbox"/>	()	()	()	()	()
4. The radon daughter concentration (RDC) in any habitable room is < 0.02 working levels, or at most 0.03 WL. () RDC levels exceed 0.03 WL due to non-tailings material.	<input checked="" type="checkbox"/>	()	()	()	()	()
5. Supplemental standards were applied in accordance with EPA standards 40 CFR Part 192.21.	<input checked="" type="checkbox"/>	()	()	()	()	()

TAC Recommendation: () Certification, Certification pending NRC concurrence, () Hold pending long term RDCs (detectors previously installed), () Request additional measurements per the RAC/TAC consensus form, () Close-out.

Comments:

Mark Miller 10/6/94
Radiological Services Manager/Date

Walt Meyer 10 OCT 94
Vicinity Property Manager/Date

DOE Decision: () Certification, Certification pending NRC concurrence, () Hold pending long term RDCs (detectors previously installed), () Request additional measurements per the RAC/TAC consensus form, () Close-out.

Comments:

Gaston B. Tolance 12/02/94
DOE Certification Evaluator/Date

CERTIFICATION REVIEW SUMMARY

Property No.: LD - 021

Reviewed by: James M. [Signature] Date: 10/5/94

Address: SOUTH FORK LODGE
RIVER FRONT HOMES SITES LOT 5
LOWMAN, IDAHO 83637

Approved by: Mark Miller Date: 10/6/94

Mark Miller
Manager, Radiological Services
Jacobs-Weston Team

Property Category: SINGLE RESIDENTIAL

Quantity of soil removed: 584 (yd³) 512 CY-IN RA Contractor: MIKI
72 CY-OUT

The recommendation for certification is based on a review of the Completion Report and other available data describing remedial actions and resulting radiological conditions at this property. Measurement methods and data are compared to the requirements provided in the Vicinity Properties Management and Implementation Manual, and in 40 CFR 192. The following recommendations are made according to the intent of those requirements:

1.0 CERTIFICATION

- This property complies with the EPA standards and is recommended for Certification.
- This property is recommended for Certification only after the conditions listed in 3.0, below, are met.
- Remedial actions were refused by the property owner, and the property cannot be Certified.

2.0 SUPPLEMENTAL STANDARDS

- Supplemental Standards were not applied at this property.
- Supplemental Standards were applied as described in the Completion Report.
- The following agencies concurred in the application of Supplemental Standards at this property.
STATE - IMPLIED CONCURRENCE - REFER TO V.4

3.0 CONDITIONS

- Annual average RDC results are required.
- The following additional measurements are required: N/A

- The following additional actions must be completed: N/A

VICINITY PROPERTY CERTIFICATION REVIEW FOR COMPLIANCE WITH RADIOLOGICAL STANDARDS

CERTIFICATION REQUIREMENT	COMPLIANCE*			COMMENTS (Reference Page in Completion Report)
	Yes	No	N/A	
I. SOIL EXCAVATION	✓			42 SAMPLES ANALYZED FOR Ra-226 IN SOIL. CONCENTRATIONS RANGED FROM 1.5 TO 7.8 pCi/g. ALL WERE WITHIN THE 5/15 LIMITS. SUPP. STDS RESULTS ALSO INCLUDED. FINAL VERIFICATION DETERMINED BY OCS ANALYSIS
1. Were soil samples collected/analyzed? (List quantity of surface and subsurface samples.)				
2. Did grid intervals equal 10 meters or less? (List grid size and quantity sampled.)	✓			
3. Were adequate spatial averaging techniques clearly demonstrated?	✓			
4. Was an outdoor gamma survey conducted? (List results.)			✓	
5. Were alternate measurements performed? (List types of measurements, range, and average of results.)			✓	
6. Were all contaminated areas sampled after excavation?	✓			

* If no or N/A, then an explanation is required.

VICINITY PROPERTY CERTIFICATION REVIEW FOR COMPLIANCE WITH RADIOLOGICAL STANDARDS (continued)

CERTIFICATION REQUIREMENT	COMPLIANCE*			COMMENTS (Reference Page in Completion Report)
	Yes	No	N/A	
I. SOIL EXCAVATION (continued)	✓			EXCLUDING SUPP-STDS LOCATIONS
7. Were soil concentrations of Ra-226, averaged over 100 square meters, less than or equal to:	✓			
o 5 pCi/g plus background (surface)? o 15 pCi/g plus background (subsurface)?				
8. If excavation was done around structures or utility conduits to structures, was contamination removed to meet EPA Standards?	✓			EXCLUDING TREES - COVERED IN SUPP-STDS.
II. INDOOR GAMMA SURVEY				
1. Were assessment measurements taken in the lowest habitable level of every habitable building?	✓			
2. Were small rooms scanned and large rooms (2000 ft ²) gridded at intervals of 10 feet or smaller?	✓			
3. Were verification measurements taken at locations of prior maximum readings?	✓			

* If no or N/A, then an explanation is required.

VICINITY PROPERTY CERTIFICATION REVIEW FOR COMPLIANCE WITH RADIOLOGICAL STANDARDS (continued)

CERTIFICATION REQUIREMENT	COMPLIANCE*			COMMENTS (Reference Page in Completion Report)
	Yes	No	N/A	
II. INDOOR GAMMA SURVEY (continued) 4. Were instrument readings converted to indicate microR/hr? (List range of readings.) 5. After remedial action, was the average value for each room or 2000 ft ² area less than 20 microR/hr above background? 6. If any reading exceeded 20 microR/hr above background, was it satisfactorily investigated to ensure no tailings involvement?	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	4-11 uR/hr
III. INDOOR RDC MEASUREMENTS 1. If RDC measurements were performed before remedial action, and results were above standards, were they repeated after remedial action was complete? 2. If RDC measurements were not performed before remedial action, were they taken in every habitable structure after remedial action?	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	RDC MEASUREMENTS NOT TAKEN AS A RESULT OF HIGH INTERIOR γ READINGS PRIOR TO REMEDIAL ACTION. MEASUREMENTS TAKEN IN THE LIVING ROOM & SHED (GRAB SAMPLES)

* If no or N/A, then an explanation is required.

VICINITY PROPERTY CERTIFICATION REVIEW FOR COMPLIANCE WITH RADIOLOGICAL STANDARDS (continued)

CERTIFICATION REQUIREMENT	COMPLIANCE*			COMMENTS (Reference Page in Completion Report)
	Yes	No	N/A	
III. INDOOR RDC MEASUREMENTS (continued)				
3. If tailings were excavated within 10 ft of the structure or around utility conduits into the structure, were RDC measurements performed after remedial action?	✓			
4. If grab samples were used for verification, were acceptable procedures used?	✓			
5. Were grab sample results less than 0.01 WL? (List range and average of results.)	✓			LIVING ROOM 0.0070 WL 0.0065 WL SHED 0.0066 0.0044
6. If annual average measurements were used for verification, were acceptable procedures followed?			✓	GRAB SAMPLING PERFORMED
7. Were annual average RDC results less than EPA WL standards? (List range and average of results.)			✓	
8. If annual average RDC results were between 0.02 WL and 0.03 WL, was appropriate justification given?			✓	

* If no or N/A, then an explanation is required.

VICINITY PROPERTY CERTIFICATION REVIEW FOR COMPLIANCE WITH RADIOLOGICAL STANDARDS (continued)

CERTIFICATION REQUIREMENT	COMPLIANCE*			COMMENTS (Reference Page in Completion Report)
	Yes	No	N/A	
IV. OTHER VERIFICATION MEASUREMENTS				
1. If adequate verification data are not presented, were additional measurements taken?			✓	
2. Were acceptable procedures used?			✓	
3. Were surface alpha contamination levels less than:			✓	
o 20 dpm/100 sq cm for removable alpha activity?				
o 100 dpm/100 sq cm for total alpha activity?				
4. Was Ra-226 the only radionuclide of concern at this property?	✓			
5. Were additional measurements performed? (List type and results.)			✓	

* If no or N/A, then an explanation is required.

VICINITY PROPERTY CERTIFICATION REVIEW FOR COMPLIANCE WITH RADIOLOGICAL STANDARDS (continued)

CERTIFICATION REQUIREMENT	COMPLIANCE*			COMMENTS (Reference Page in Completion Report)
	Yes	No	N/A	
V. SUPPLEMENTAL STANDARDS				
1. If numerical standards were not met, is this due to the presence of natural radioactivity? What data show this?			✓	
2. If all residual radioactive material at the property was not cleaned up, were supplemental standards (40 CFR 192 Subpart C) applied?	✓			CALCULATED DOSE OF 88 mrem/YR IS ALSO BELOW THE 100 mrem/YR LIMIT ALSO USED IN DOSE ESTIMATIONS.
3. Was the application of supplemental standards in accordance with the Plan for Implementing EPA Standards?	✓			<input type="checkbox"/> a. Risk injury to workers/public <input checked="" type="checkbox"/> b. Environmental harm <input checked="" type="checkbox"/> c. High cost relative to long-term benefits <input type="checkbox"/> d. High cost of cleaning up building relative to benefits <input type="checkbox"/> e. No known remedial action <input type="checkbox"/> f. Radionuclides other than Ra-226 exist
4. Did appropriate state and Federal agencies concur in this application of Supplemental Standards? (Note: final NRC concurrence of the Completion Report is obtained following the DOE certification decision.)	STATE IMPLIED			<input checked="" type="checkbox"/> The application of Supplemental Standards appears in the REA. <input checked="" type="checkbox"/> The application of Supplemental Standards does not appear in the REA. Supplemental Standards were applied in the field. State concurrence dated <u>9/24/94</u> - IMPLIED VIA LETTER FROM MKF NRC concurrence dated _____

* If no or N/A, then an explanation is required.

D. CHARLTON - NO REPLY TO LETTER 1/25/94 TO MR. C. CODY - IDAHO REP FOR UMTRA. LACK OF STATE'S RESPONSE IMPLIES CONCURRENCE OF USING SUPPLEMENTAL STDS.

VICINITY PROPERTY CERTIFICATION REVIEW FOR COMPLIANCE WITH RADIOLOGICAL STANDARDS (continued)

CERTIFICATION REQUIREMENT	COMPLIANCE*			COMMENTS (Reference Page in Completion Report)
	Yes	No	N/A	
VI. SITE AUDIT REPORTS 1. If a site audit was performed at this property, were the results satisfactory? 2. If the contractor's efforts were evaluated at other properties, were the results satisfactory?			✓ ✓	
VII. ADDITIONAL CONSIDERATIONS 1. Are there any additional comments or considerations?	✓			OBTAIN NRC CONCURRENCE IF NECESSARY.
VIII. CERTIFICATION 1. Is this property recommended for certification as meeting the EPA standards for residual radioactive material?	✓			TAC AGREES WITH APPLICATION OF SUPPLEMENTAL STDS.

* If no or N/A, then an explanation is required.

NOTE:
SUPPLEMENTAL
STANDARDS

DEPARTMENT OF ENERGY
ALBUQUERQUE OPERATIONS OFFICE
CONTRACT NO. DE-AC04-83AL18796

Vicinity Property Completion Report

Remedial Actions
Contractor
for the
Uranium Mill Tailings
Remedial Actions
Project



MK-FERGUSON COMPANY
A MORRISON KNUDSEN COMPANY

Vicinity Property No. L0 0215