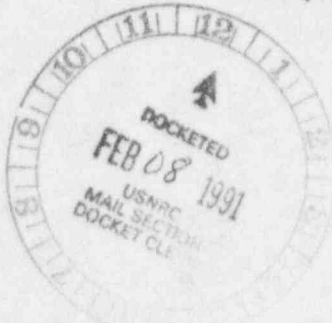


040WMO39560E

Wm-39



Department of Energy
 Albuquerque Operations Office
 P.O. Box 5400
 Albuquerque, New Mexico 87115
 JAN 31 1991



Vicinity Property No. DU-616S
 Address: U.S. Highway 160
 at Roosa Road
 Durango, Colorado



Mr. Ramon Hall
 U.S. Nuclear Regulatory Commission
 Uranium Recovery Field Office
 P.O. Box 25325
 Denver, Colorado 80225

Dear Mr. Hall:

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 U.S. Department of Energy (DOE) and the U.S. Nuclear Regulatory Commission (NRC) (GMO04-85AL26037), two copies of the Vicinity Property Completion Report for the above property are submitted for NRC certification concurrence. Please note the NRC has previously concurred in the application of supplemental standards as presented within the Radiological Engineering Assessment. 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, contact Gaeton Falance of my staff at (505) 845-5636 or FTS 845-5636.

Sincerely,

Mark L. Matthews
 Project Manager
 Uranium Mill Tailings Remedial
 Action Project Office

Enclosures

cc:
 G. A. "Bud" Franz, III, CDH, CO

9102130066 9106708 OFFICIAL DOCKET COPY

91-0245

NRC Review Form
for Supplemental Standards 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 Falance

01-25-91

Gaeton Falance, DOE Certification Officer Date

=====

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.: DV-6165

The data presented in the certification folder indicate:

	TAC Evaluation			DOE 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 <input type="checkbox"/> lab <input checked="" type="checkbox"/> .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 <input type="checkbox"/> lab <input checked="" type="checkbox"/> .	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. The indoor gamma readings are <20 uR/h above background in every habitable room.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. The radon daughter concentration in any habitable room is <0.02 working levels, or at most 0.03 WL. <input type="checkbox"/> RDC levels exceed 0.03 WL due to non-tailings material.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Supplemental standards were applied in accordance with EPA standards 192.21.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TAC Recommendation: ☐ Certification, ☒ Certification pending NRC Concurrence, ☐ Hold pending long-term RDC results (detectors previously installed), ☐ Request additional measurements per the RAC/TAC consensus form, ☐ Close-Out.

Comments: Supplemental standards applied to these grids.

Mark Miller 12/4/90
Radiological Services Manager / Date

Robert J. Rose 12/11/90
Vicinity Property Manager / Date

DOE Decision: ☐ Certification, ☒ Certification pending NRC Concurrence, ☐ Hold pending long-term RDC results, ☐ Request additional measurements as noted below, ☐ Close-Out.

Comments:

REA Concurrence
CDH 7/26/89
NRC 4/10/90

91-0245
Gaston Talance 12/13/90
DOE Certification Evaluator / Date

CERTIFICATION REVIEW SUMMARY

Property No.: DV-6165 Reviewed by: R. Conaway Date: 11/30/90
Address: US Hwy 160 at Roswell Approved by: Mark Miller Date: 12/4/90
Durham, CO
Property Category: Commercial

Mark Miller
Manager, Radiological Services
Jacobs-Weston Team

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 & 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.

3.0 CONDITIONS

- ☐ Annual average RDC results are required.
- ☐ The following additional measurements are required:

- ☐ The following additional actions must be completed:

**VICINITY PROPERTY CERTIFICATION REVIEW
FOR COMPLIANCE WITH RADIOLOGICAL STANDARDS**

Property No. DV-6165

Qty. of soil removed: 256 (yd³)

RA Contractor MK-F

Address: U.S. Hwy 160 + Roosa Rd.
Durango, CO

Reviewer: R. Conway

Subcontractors Chem-Dyne Inc.

Date: 11/30/90

Burke Const.

CERTIFICATION REQUIREMENT

COMPLIANCE
Yes No N/A

COMMENTS (Reference page in completion report)

I. SOIL EXCAVATION

1. Were soil samples collected/analyzed?
(List quantity of surface and sub-
surface samples.)

✓		
---	--	--

49 subsurface soil samples.

2. Did grid intervals equal 10 ^{meters} ~~feet~~ or
less? (List grid size and quantity
sampled.)

✓		
---	--	--

49 Grids

3. Were adequate spatial averaging
techniques clearly demonstrated?

✓		
---	--	--

4. Was an outdoor gamma survey conducted
(List results.)

		X
--	--	---

not for verification

5. Were alternate measurements per-
formed? (List types of measure-
ments, range, and average of
results.)

		✓
--	--	---

6. Were all contaminated areas sampled
after excavation?

✓		
---	--	--

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

CERTIFICATION REQUIREMENT	COMPLIANCE Yes No N/A			COMMENTS (Reference page in completion report)
I. SOIL EXCAVATION (Continued)				
7. Were soil concentrations of Ra-226, averaged over 100m ² , less than:				Soil Sample Range 1.09 to 35.9 pCi/g
o 5 pCi/g plus background (surface)? (List range of results).	✓			
o 15 pCi/g plus background (subsurface)?	✓			
8. If excavation was done around structures or utility conduits to structures, was contamination removed to background levels?			✓	supplemental standards were applied to three grids.
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 sq.ft.) gridded at intervals of 10 ft. or smaller?			✓	no structures
3. Were verification measurements taken at locations of prior maximum readings?			✓	

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

CERTIFICATION REQUIREMENT	COMPLIANCE Yes No N/A			COMMENTS (Reference page in completion report)
II. INDOOR GAMMA SURVEY (Continued)				
4. Were instrument readings converted to indicate microR/hr? (List range and average of readings.)			✓	
5. After remedial action, was the average value for each room or 2000 sq.ft.-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?			✓	
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 completed?			✓	no structures
2. If no RDC measurements were performed before remedial action, were they taken in every habitable structure after remedial action?			✓	

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 near 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.)			✓	
6. If annual average measurements were used for verification, were acceptable procedures followed?			✓	
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?			✓	

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 is not presented, were additional measurements taken?			✓	
2. Were acceptable procedures used?			✓	
3. Were indoor Rn-222 results less than 2.0 pCi/l?			✓	
4. 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?			✓	
5. Was Ra-226 the only radionuclide of concern at this property? If not, explain.			✓	
6. Were additional measurements performed? (Type, results.)			✓	

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

CERTIFICATION REQUIREMENT	COMPLIANCE Yes No N/A			COMMENTS (Reference page in completion report)
V. SUPPLEMENTAL STANDARDS				
1. If numerical standards were not met, is this due to presence of natural radioactivity? (What data shows this.)		✓		Three grid areas as discussed in the REA.
2. If all residual radioactive material at the property was not cleaned up, were supplemental standards (40 CFR 192 Subpart C) applied?	✓			
3. Was the application of supplemental standards in accordance with the Plan for Implementing EPA Standards?	✓			
4. Did appropriate state and Federal agencies concur in this application of supplemental standards?	✓			
VI. SITE AUDIT RESULTS				
1. If a site audit was performed at this property, were the results satisfactory?			✓	
2. If the contractor's effort's were evaluated at other properties, were the results satisfactory?	✓			

**VICINITY PROPERTY CERTIFICATION REVIEW
FOR COMPLIANCE WITH RADIOLOGICAL STANDARDS**
(Continued)

CERTIFICATION REQUIREMENT	COMPLIANCE Yes No N/A			COMMENTS (Reference page in completion report)
VII. ADDITIONAL CONSIDERATIONS				
1. Are there any additional comments or considerations?			✓	
VIII. CERTIFICATION				
1. Is this property recommended for certification as meeting the EPA standards for residual radioactive material? If not, why?	✓			Note: Supplemental Standalone