UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105-3901

Received DOE
Grand Jct. Proj. Office

DEC 05 1991

December 2, 1991

MEMORANDUM

SUBJECT: Final Report by Cerrillos Land Company, Clean-up Action on Section 19, T13N, R10W of McKinley County.

FROM: Robert Bornstein RB
Federal On-Scene-Coordinator

TO: Bill Nelson, ATSDR (for distribution among ATSDR)
Ray Churan, DOI (for distribution among DOI agencies)
Stan Edison, Navajo Superfund (for distribution)
Linda Wandres, ORC
Bob Ivey, DOE

Enclosed is a copy of the post-removal report by Cerrillos Land Company. The report was submitted to EPA pursuant to EPA Order 91-16. If you need a copy of the post removal contour map please request a copy from Mr. Paul Eby of Cerrillos Land Company at 505-880-5300. Their post removal survey indicates that the site's gamma radiation levels have been significantly reduced to below 71 uR/hr (50 uR/hr divided by their instrument conversion factor of .7). Overall, within the reclamated areas, the section is reading approximately 28 uR/hr.

If you have any questions regarding this report, please contact me at 415-744-2298.

Printed on Recycled Paper

Cerrillos Land Company

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Albuquerque, New Mexico 87110
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Albuquerque, New Mexico 87125
505/880-5300 Fax# 505/880-5435

POST RESPONSE REPORT

EPA ORDER 91-16

Receipt of Order

On August 5, 1991, Cerrillos Land Company received EPA Order 91-16. This order designated Cerrillos as a potentially responsible party for elevated gamma radiation from uranium sub-ore grade mine waste and large shallow open pits located in the NW 1/4, Section 19, Township 13N, Range 10W of McKinley County, New Mexico, where Cerrillos retains ownership of the mineral rights. The basis of this order was for Cerrillos to reduce the potentially hazardous gamma emissions from the site to a level acceptable to all agencies concerned (165 uR/hr above background or to a total of 180 uR/hr) in order to remediate potential health risk to families living nearby.

Acceptance of Order

As provided for in the order, Cerrillos Land Company requested a conference with EPA representatives in order to determine the exact nature of the order, for legal clarification and for guidelines on how to proceed. This accomplished, Cerrillos accepted the order on August 28, 1991, and proceeded with compliance.

Submittal of Site Work Plan - Health and Safety Plan

On August 28, 1991, a final Site Work Plan and Site Health and Safety Plan, detailing actions necessary to comply with the order, were submitted for approval. Included with the Work Plan was the pre-response gamma survey map, statement of qualifications for the contractor selected and statement of

Contractor Personnel and Equipment

Taylor Services of Grants, New Mexico, was the contractor selected by Cerrillos for site stabilization work. They have provided excellent, responsive and cost effective work on a very complex project. Key personnel are listed below:

Larry Taylor - Owner - Superintendent
Tony Canaba - Foreman - Operator
Dale Rowe - Operator
Paul Rowe - Operator
Mike McGinn - Operator
Rudy Purilla - Operator
Richard Grey - Operator
Raul Zapata - Driver
Multiple - Laborers

The primary equipment provided by Taylor Services for this project was either new or substantially equivalent to new. All equipment listed below was not run continuously, but on an as-needed basis.

3 - D-8 size Bulldozers
1 - D-6 size Bulldozer
1 - Front-End Loader (6 yd.)
1 - Road Grader
1 - End-Dump Truck
3 - Belly-Dump Trucks (Sub-contract)
1 - Office Trailer - Lunchroom

Contractor compliance with the Health and Safety Plan was excellent. Primary equipment had pressurized cabs and all equipment had back-up horns. Personnel wore hard hats, safety shoes or boots, safety glasses, radiation badges, and

During the second and third weeks of September, several more pieces of machinery were added and the project schedule accelerated to the maximum manageable level. Work proceeded, as planned, with only minor deviations. Some material had to be moved or covered two or more times to achieve acceptable readings. Mass effect in a larger area such as this proved difficult. Also, every effort was made to save as many Juniper and Piñon trees as possible. By mid-November, all areas were covered, contoured and made ready for the post-response survey and subsequent seeding.

Post Response Survey

The post-response radiometric survey over the property was performed by first laying out a 250′ x 250′ control grid over the area of disturbance. This was done with the use of a Brunton compass, tripod and a 300′ tape. At that point, each 250′ grid was internally divided into a 50′ grid, again utilizing the 300′ tape and setting pin flags at all points. Four Ludlum model 19 instruments, each calibrated against its own check source, were then used for the survey. This was performed using a measuring line and four men, each with an instrument held at a height of one meter above the ground and walking on 12 1/2′ centers on east-west lines to cover the entire property. At 50′ intervals, the highest reading from each instrument for that line was recorded on a chart. This then provided five line readings for 50′ grid, the highest of which was then recorded on the grid map provided as the final post-response survey.

The 500′ x 500′ grid sections on this map are numbered to correspond with the pre-response survey map submitted previously. Copies of each are submitted with this report. For your further edification, we are submitting the 500′ x 500′ grid charts showing line readings for each of the 50′ x 50′ grids.

Project Cost

Approximate expenditures on the project for all direct charged costs are as follows:

Title Work	$ 5,188
Ground Survey	7,142
Aerial Survey & Mapping	3,690
Instruments	5,515
On-Site Coordinator & Technician	17,670
Dirt Contractor	175,305
Seed	5,822
Miscellaneous	2,383
DIRECT PROJECT COST	$222,715

Conclusion of Report

Affidavit attached.

HAYSTACK MOUNTAIN PROJECT

Grid No. 1 **Date** _____

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HAYSTACK MOUNTAIN PROJECT

Grid No. 3 Date

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HAYSTACK MOUNTAIN PROJECT

Grid No. 5

Date

HAYSTACK MOUNTAIN PROJECT

Grid No. 7 Date

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HAYSTACK MOUNTAIN PROJECT

Grid No. 9 Date

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		28	32	38	28	36	14	16	20
		42	32	38	26	34	16	20	24
		30	48	30	28	36	14	18	22
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HAYSTACK MOUNTAIN PROJECT

Grid No. 11 Date

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14 10 10 11	12 10 11 10	14 11 11 9	14 12 14 14	14 12 14 12	18 18 16 14	18 16 14 16	18 18 20 16	15 16 16 14	18 14 14 16
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18 14 10 10	16 12 12 12	18 12 12 10	16 18 14 16	18 20 18 14	20 20 18 16	20 18 14 14	20 20 18 16	24 26 40 20	22 20 22 22

HAYSTACK MOUNTAIN PROJECT

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26 22 30 24	32 30 38 24	30 26 20 22	24 20 24 26	28 24 26 24	28 26 30 28	34 30 30 32	38 28 32 32	32 26 30 34	38 [illegible] [illegible] 24
28 30 34 34	22 26 28 30	28 24 30 30	24 24 24 24	28 24 26 36	30 26 26 28	30 34 44 32	30 28 34 32	32 30 32 32	36 35 36 34
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HAYSTACK MOUNTAIN PROJECT

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HAYSTACK MOUNTAIN PROJECT

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HAYSTACK MOUNTAIN PROJECT

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HAYSTACK MOUNTAIN PROJECT

Grid No. 21

Date

HAYSTACK MOUNTAIN PROJECT

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32 20 28 24	30 18 22 22	26 40 36 32	32 30 34 28	26 20 28 24	18 16 18 18	18 18 20 20	22 24 18 24	22 26	24 24
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