



7/24/93

RESPONSE TO FREEDOM OF INFORMATION ACT ('FOIA) REQUEST

REQUESTER

Mr. John Darke

PART I. - AGENCY RECORDS RELEASED OR NOT LOCATED (See checked boxes)

No agency records subject to the request have been located.

No additional agency records subject to the request have been located.

Requested records are available through another public distribution program. See Comments section.

Agency records subject to the request that are identified in Appendix(es) A are already available for public inspection and copying at the NRC Public Document Room, 2120 L Street, N.W., Washington, DC.

Agency records subject to the request that are identified in Appendix(es) B are being made available for public inspection and copying at the NRC Public Document Room, 2120 L Street, N.W., Washington, DC, in a folder under this FOIA number.

The nonproprietary version of the proposal(s) that you agreed to accept in a telephone conversation with a member of my staff is now being made available for public inspection and copying at the NRC Public Document Room, 2120 L Street, N.W., Washington, DC, in a folder under this FOIA number.

Agency records subject to the request that are identified in Appendix(es) _____ may be inspected and copied at the NRC Local Public Document Room identified in the Comments section.

Enclosed is information on how you may obtain access to and the charges for copying records located at the NRC Public Document Room, 2120 L Street, N.W., Washington, DC.

Agency records subject to the request are enclosed. *

Records subject to the request have been referred to another Federal agency(ies) for review and direct response to you.

Fees (NONE)

You will be billed by the NRC for fees totaling \$ _____

You will receive a refund from the NRC in the amount of \$ _____

In view of NRC's response to this request, no further action is being taken on appeal letter dated _____, No. _____

PART II. A - INFORMATION WITHHELD FROM PUBLIC DISCLOSURE

Certain information in the requested records is being withheld from public disclosure pursuant to the exemptions described in and for the reasons stated in Part II, B, C, and D. Any released portions of the documents for which only part of the record is being withheld are being made available for public inspection and copying in the NRC Public Document Room, 2120 L Street, N.W., Washington, DC in a folder under this FOIA number.

COMMENTS

*The records identified on enclosed Appendices A and B are responsive to your request. Copies of these records are enclosed. The staff has informed me that they have been unable to locate a copy of the Technical Review that you requested. For your information, this record was a draft which was never finalized and has been destroyed.

You are not being assessed fees for the processing of your request since the minimal fee limit has not been exceeded. This completes NRC's action on your request.

SIGNATURE, DIRECTOR, DIVISION OF FREEDOM OF INFORMATION AND PUBLICATIONS SERVICES

Donnie A. Chinsky

9403300225 930621
PDR FOIA
DARKE93-226 PDR

APPENDIX A

DOCUMENTS MAINTAINED AT THE PDR

NUMBER	DATE	DESCRIPTION
1.	3/2/88	SECY-88-64, "Naturally Occurring and Accelerator-Produced Radioactive Materials," (81 pgs.), Acc. No. 8803240209.

APPENDIX B

RECORDS MAINTAINED IN THE PDR UNDER THE ABOVE REQUEST NUMBER

NUMBER	DATE	DESCRIPTION
1.	10/21/87	Letter to Dale Smith from Niles J. Andrus, re: amendment to SUA-667 License, (52 pgs.).
2.	1/21/88	Letter to Harry Pettengill from John S. Hamrick, re: re: Contact Person, (4 pgs.).

AMERICAN NUCLEAR CORPORATION

JOHN C. FERGUSON, PRESIDENT
TELEPHONE (307) 265-7912

October 21, 1987

314 WEST MIDWEST AVE
P.O. BOX 2713
CASPER, WYOMING 82602

R. Dale Smith
U.S. Nuclear Regulatory Commission
Region IV
Uranium Recovery Field Office
P.O. Box 25325
Denver, CO 80225



Dear Mr. Smith:

American Nuclear Corporation requests an amendment to SUA-667 to receive third party radium contaminated soils and debris from New Jersey and Denver, Colorado totaling approximately 100,000 cubic yards. The material is primarily tailings left from the processing of carnotite ores from the Colorado Plateau and the manufacture of radium dials. This material would be placed in Tailings Pond No. 1 over a period of approximately two (2) years, commencing in early 1988. The volume of material that will be placed in the Pond is not sufficient enough to require revisions of the approved 1984 Reclamation Plan.

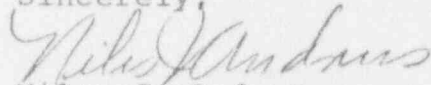
The New Jersey material (4,000 cubic yards), contained in boxes and drums, will be placed in the area of Tailings Pond No. 1 designated for contaminated materials, equipment and waste as shown on the Disposal Area Location map enclosed with ANC's Application for Amendment Decommissioning Plan, dated March 31, 1987. At the disposal site the containers will be opened and checked for voids. Any voids will be filled and the containers re-sealed prior to placing in trenches. The trenches will be backfilled in such a manner as to eliminate voids between containers. The Denver radium material (estimated to be from 65,000 to 130,000 cubic yards) will be transported in bulk to the disposal site and placed on Tailing Pond No. 1 and compacted. The New Jersey and Denver contaminated materials will be covered with a minimum of 6 feet of compacted soil and the Tailings Pond will be reclaimed to the countour and specifications contained in the 1984 Reclamation Plan.

~~8802180434 (6/85)~~

Attached are the radiological characteristics of the dry materials that will be placed in Tailings Pond No. 1 along with American's check in the amount of \$150.00 application fee..

As I discussed with Ed Hawkins, American needs, if at all possible, a response as to the feasibility of this requested amendment by November 1, 1987.

Sincerely,



Niles J. Andrus

Vice President-Operations

NJA/mk

Encl. 5 copies

Table 1
DENVER RADIUM SITE CONTAMINATION

Group	Volume (yd ³)	Area (ft ²)	Maximum Depth (in.)	Maximum Gamma (µR/hr)	Maximum Radium Concentration (pCi/g)	Radon Daughter Concentration (WL)	Maximum Alpha Contamination (cpm/100 cm ²)
I 12th & Quivas Area /	10,718 (soil)	63,996	90	510 (exterior)	1,920 (exterior)	0.18	ND
II 11th & Umstilla Area	14,317 (14,316 soil, <1 debris)	165,337	120	611 (exterior)	690 (exterior)	0.3039	ND
III 1000 W. Louisiana Area /	15,738 (15,599 soil, 139 debris)	204,115	96	2,189 (interior)	2,120 (interior)	0.173	263,000 (fixed)
IV, V 500 S. Santa Fe Area	7,204 (7,005 soil, 199 debris)	108,950	44	2,547 (interior)	5,093 (interior)	ND	632,000 (fixed)
VI Open Land Area /	1,040 (soil)	9,274	22	1,900 (exterior)	2,775 (exterior)	ND	ND
VII Streets /	30,800 (soil)	832,000	18	57 (exterior)	79 (exterior)	NA	NA
VIII 1800 S. Bannock Area	22,325 (soil)	310,699	112	1,451 (interior)	2,408 (interior)	0.223	526,000 (fixed)
IX 2000 E. Colfax Area	96 (soil)	1,245	50	62 (exterior)	425.4 (exterior)	ND	ND
X 1300 W. Evans Area	3,923 (soil)	67,026	108	95 (exterior)	960 (exterior)	ND	ND
XI 1200 S. Santa Fe Area	322 (soil)	6,383	36	83 (exterior)	690 (exterior)	NA	NA
TOTAL	106,483 (106,144 soil, 339 debris)	1,767,098	112	2,547 (interior)	5,093 (exterior)	0.3039	632,000 (fixed)

NOTES: ND = None detected or below standard.

NA = Not applicable.

Estimated areas/volumes above relevant and appropriate EPA standards or state guidelines.

Attachment

Radiological Characteristics of the Radium Contaminated
Soil from Montclair - Glen Ridge, NJ

Number of Containers and Quantities of Excavated Soil

During the 1985 construction season, excavations were conducted at three sites in Glen Ridge and Montclair. All of the material excavated was placed in sealed 55 gallon drums or 44 cubic foot steel boxes. This work is summarized as follows:

TABLE 1 - SUMMARY OF EXCAVATION QUANTITIES

<u>Site</u>	<u>Containers Drums</u>	<u>Filled Boxes</u>	<u>Total Volume in Containers</u>	<u>Total Weight of Container Contents</u>
Carteret Street	3,739	16	1,043.9 CY	1,151.5 T
Lorraine Street	4,383	35	1,250.2 CY	1,599.2 T
Virginia & Franklin	6,280	33	1,763.3 CY	2,499.2 T
TOTAL	14,402	84	4,057.4 CY	5,249.9 T

The values tabulated above include the 4,902 drums and 33 boxes in storage at the VF Site. Since these containers have not been processed or weighed through the transloader, only estimated net weights are available for these drums and boxes. The estimator were developed from sample drums and boxes which were weighted; the estimated net weight for each drum is 775 pounds and for each box is 4,000 pounds. These values are used in the above table and in all other calculations related to the contents of these drums and boxes.

Radiological Characteristics of Excavated Soil

During the excavation program, soil samples were collected for counting in the field laboratory. The samples were collected at random from the working faces of the excavation and placed in clean plastic bottles for transport to Eberline's field laboratory at the Oak Street Yard. In the laboratory each sample was counted in the shielded counting well using an integrating syntilometer for approximately ten (10) minutes per sample. The counting results were recorded in the laboratory along with the site of origin and control number for each sample.

A total of 476 bottle samples were collected and counted during the 1985 excavation program.

TABLE 2 - DISTRIBUTION OF BOTTLE SAMPLES BY SITE

<u>Site</u>	<u>Number of Samples from Each Site</u>	<u>Percent of Samples From Each Site</u>
Carteret	63	13.3%
Lorraine	271	56.9%
Virginia-Franklin	142	29.8%
TOTAL	476	100.0%

Before being used in further analyses, each reported value was doubled. This factor was applied to correct for the difference between the field measurement of activity per unit of wet soil weight and standard analytical methods based on activity per unit of dry soil weight. The correction factor is based on experience over many years of work at many sites and not strictly on the ratio of wet to dry weight of the soils at the Montclair and Glen Ridge Site. This correction factor has been empirically established as broadly applicable and there is no evidence indicating that this factor is not applicable to these sites.

The radiological content estimates resulting from the bottle samples are summarized in the following tables.

TABLE 3 - NUMBER OF SAMPLES IN EACH RANGE BY SITE

<u>Range of Activity</u>	<u>Carteret</u>	<u>Lorraine</u>	<u>Virginia-Franklin</u>	<u>Totals</u>
all samples	63	271	142	476
all samples < 2000 pCi/g	62	258	141	461
all samples < 750 pCi/g	59	246	141	446
all samples < 200 pCi/g	57	221	132	410

TABLE 4 - AVERAGE ACTIVITY OF SAMPLES IN EACH RANGE BY SITE
FOR ALL SITES WEIGHTED BY NUMBER OF SAMPLES

<u>Range of Activity</u>	<u>Carteret</u> (pCi/g)	<u>Lorraine</u> (pCi/g)	<u>Virginia-Franklin</u> (pCi/g)	<u>Averages*</u> (pCi/g)
all samples	430.80	466.10	128.77	360.79
all samples except highest	110.79	279.08	64.54	190.07**
all samples < 2000 pCi/g	110.79	123.37	64.54	103.69
all samples < 750 pCi/g	58.35	68.24	64.54	65.76
all samples < 200	51.50	26.85	43.71	35.71

*Averages weighted according to numbers of samples in each range from each site, not according to weights of material excavated from each site.

**Excludes highest sample from each site.

TABLE 5 - PERCENT OF BOTTLE SAMPLES IN EACH RANGE
BY SITE BASED ON NUMBER OF SAMPLES

<u>Range of Activity</u>	<u>Carteret</u>	<u>Lorraine</u>	<u>Virginia-Franklin</u>	<u>Averages*</u>
all samples	100 %	100 %	100 %	100 %
all samples < 2000 pCi/g	98.4%	95.2%	99.3%	96.8%
all samples < 750 pCi/g	93.7%	90.8%	99.3%	93.7%
all samples < 200	90.5%	81.5%	93.0%	86.1%

*Averages weighted according to numbers of samples in each range from each site, not according to weights of material excavated from each site.

TABLE 6 - DISTRIBUTION OF BOTTLE SAMPLES AND SOIL
EXCAVATED BETWEEN SITES

<u>Site</u>	<u>Percent of Bottle Samples (by Number)</u>	<u>Percent of Material Excavated (by Weight)</u>
Carteret	13.3%	21.9%
Lorraine	56.9%	30.5%
Virginia/Franklin	29.8%	47.6%
TOTALS	100.0%	100.0%

TABLE 7 - AVERAGE ACTIVITY IN EACH RANGE FROM BOTTLE SAMPLE RESULTS
WEIGHTED ACCORDING TO PORTION OF SOIL EXCAVATED FROM EACH SITE

<u>Range</u>	<u>Averages*</u>
all material	297.80 pCi/g
all material except highest	140.10 pCi/g
all material < 2000 pCi/g	92.61 pCi/g
all material < 750 pCi/g	64.31 pCi/g
all material < 200 pCi/g	40.27 pCi/g

*Averages are weighted according to weights of material excavated from each site, not according to numbers of bottle samples.

Umetco Minerals Corporation

860 E



WHITE MESA MILL • P.O. BOX 669 • BLANDING, UTAH 84511
☎ (801) 678-2221

January 20, 1987

Mr. Randall Brisch, Project Manager
Uranium Recovery Field Office
U. S. Nuclear Regulatory Commission
P. O. Box 25325
Denver, CO 80225

Re: Umetco Minerals Corp./
White Mesa Mill SUA-1358
Docket No. 40-8681

Dear Mr. Brisch:

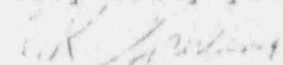
Umetco Minerals requests a license amendment to SUA-1358 to permit the receipt and subsequent disposal of containers of contaminated waste from the Energy Fuels, Inc., Bingham Canyon, Utah, ion exchange (IX) facility formerly operated by Westinghouse Electric whose wastes were disposed at the Rio Algom Corporation facility under Source Material License No. SUA-1119.

Energy Fuels, Inc. indicates that there is not a backlog of material onsite awaiting disposal and that long term activities would potentially generate a maximum of 100 barrels annually. The wastes associated with this project are similar in nature to the wastes as described in the Rio Algom submittal. Solid wastes consisting of contaminated piping materials and concrete scrap wastes would be included as part of the disposal materials. The backup discussion of the Bingham Canyon wastes are described in the May, 1984 memorandum regarding Amendment 20 to Source Material License SUA-1119 and is only referenced herein in support of the amendment request.

Umetco Minerals Corporation proposes to dispose of this material in the contaminated equipment disposal site within the White Mesa tailing Cell #2 following the current waste disposal procedures as authorized per LC 42 of SUA-1358. Drummed material will be inspected prior to burial to determine presence of void spaces. Drums containing void spaces will be filled with tailing wastes and resealed prior to disposal within this site. Disposal practices will follow those currently presented in the Contaminated Solid Waste Disposal written and approved procedures.

A check for the amount of \$150 is enclosed for the amendment request fee. If there are any questions concerning this request, please contact me or the mill personnel involved.

Very truly yours,


D. K. Sparling

~~87-0218-149~~ IP
DKS/dj
Encl.