

DEC 09 1993

License Nos. 29-00047-02
29-00047-06
SUB-348

Docket Nos. 030-05215
030-05216
040-06377

Control Nos. 112495
112497
112499

Department of the Army
Commander
U.S. Army Materiel Command
ATTN: AMCSF-P
5001 Eisenhower Avenue
Alexandria, Virginia 22333-0001

Gentlemen:

Subject: Financial Assurance for Decommissioning

This refers to your various submittals regarding financial assurance for decommissioning dated April 30, 1990, April 11, 1991, and May 13, 1992. We have reviewed your cost estimates and Statement of Intent and have no further questions at this time. Based on the information provided in these documents, you are presently in compliance with the financial assurance requirements in the decommissioning rule outlined in 10 CFR 30.35

Please note that you must adjust your decommissioning funding plan for each license and submit the modified cost estimate along with each application for license renewal.

If you have any questions, please contact Anthony Dimitriadis, of my staff, at (215) 337-6953.

OFFICIAL RECORD COPY - S:\PENDING\DEPTARM.FA - December 9, 1993

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PDR ADDCK 03005215
C PDR

MA 10

Department of the Army

2

Your cooperation with us is appreciated.

Sincerely,

**Original Signed By:
Mohamed M. Shanbaky**

Mohamed M. Shanbaky, Chief
Research and Development Section
Division of Radiation Safety
and Safeguards

cc:

Department of the Army
U.S. Army Armament Research
Development and Engineering Center
ATTN: Michael F. Clune, Acting Chief
Safety, Surety & Environmental Office
Picatinny Arsenal, New Jersey 07806-5000

bcc:

M. Shanbaky, RI
A. Dimitriadis, RI

DRSS:RI
Dimitriadis

12/18/93

DRSS:RI
Shanbaky

12/18/93

MS-16
L-3



DEPARTMENT OF THE ARMY
U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER
PICATINNY ARSENAL, NEW JERSEY 07806-5000

May 13, 1992

REPLY TO
ATTENTION OF

Installation Safety Division
Health Physics Branch

U.S. Nuclear Regulatory Commission-Region I
Attention: Mr. Eric H. Reber
475 Allendale Road
King of Prussia, Pennsylvania 19406-1415

Dear Mr. Reber,

This is in response to your enclosed letter to this Center, dated February 10, 1992. Refer to Mail Control Numbers 112499, 112496, and 112498. In your letter, you made four requests/recommendations. These are addressed below individually.

a. In response to paragraph 1, this Center has re-written the Statement of Intent, enclosed, to include a specific dollar amount. It lists the figure of \$475,000 to cover the decommissioning costs for NRC licenses 29-00047-02 (\$55,000), 29-00047-08 (\$75,000), and SUB-348 (\$345,000).

b. In response to paragraph 2, this Center has removed references to, and costs associated with licenses 29-00047-06 and 29-00047-09 from the Statement of Intent. This Center also removed references to, and costs associated with license SNM-561, since it only authorizes possession of sealed material in quantities less than those listed in the sealed source column of Regulatory Guide 3.66, appendix G.

c. In response to paragraph 3, this Center has elected to provide a Decommissioning Funding Plan, also enclosed, for license 29-00047-02.

d. In response to paragraph 4, this Center discussed this issue with Mr. Reber during telephone conversations on May 4 and 5, 1992, and mutually agreed that it would not be necessary to enclose a copy of the Decommissioning Funding Plan for license SUB-348, since it was already submitted to NRC-Region I in a letter dated March 22, 1991.

If you have any further questions, you may contact Mr. Richard Fliszar, ARDEC Radiation Protection Officer (RPO), or Mr. Richard Moss, Alternate RPO, at (201)724-3126/3742.

Sincerely,

Michael F. Clune
Acting Chief, Safety, Surety,
& Environmental Office

Enclosures

Copies Furnished:
AMCSF-P (Mr. John Manfre)
AMSMC-SFS (Ms. Kathy LaFrenz)

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112495
MAY 20 1992

RECEIVED
HFC 273



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

FEB 10 1992

License Nos. 29-00047-02, 08
SUB-348

Docket Nos. 030-05215, 030-12535
040-06377

Control Nos. 112495, 112497
112499

Department of the Army
Commander
U.S. Material Command
ATTN: AMSCF-P
5001 Eisenhower Avenue
Alexandria, Virginia 22333-0001

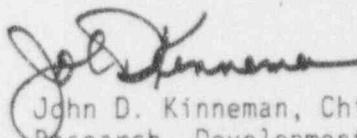
Gentlemen:

This is in reference to your financial assurance submittal dated April 11, 1991 for Picatinny Arsenal, New Jersey. In order to continue our review, we need the following additional information:

1. Please amend your Statement of Intent to reference a specific dollar amount.
2. When you amend your Statement of Intent, it would be less confusing if you did not reference License Nos. 29-00047-06 and 29-00047-09. 10 CFR 30.35 does not require you to provide financial assurance for these licenses.
3. If you would like to provide only \$75,000 in financial assurance for License No. 29-00047-02, you will need to amend that license so that it only authorizes the possession and use of sealed sources.
4. Please provide the details of the decommissioning cost estimate that you made for License No. SUB-348. Your decommissioning cost estimate should contain a level of detail similar to that contained in Regulatory Guide 3.66, Appendix F (enclosed).

We will continue our review upon receipt of this information. Please reply in duplicate to my attention at the Region I office and refer to Mail Control Nos. 112499, 112496, and 112498. The reviewer for this licensing action is Eric H. Reber. If you have questions regarding this action please call the reviewer at (215) 337-5276.

Sincerely,



John D. Kinneman, Chief
Research, Development &
Decommissioning Section B
Division of Radiation Safety
and Safeguards

Enclosure: Regulatory Guide 3.66

bcc:
Reber, E., RI
Kinneman, J., RI



DEPARTMENT OF THE ARMY
U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER
PICATINNY ARSENAL, NEW JERSEY 07806-5000



REPLY TO
ATTENTION OF

15 MAY 1992

STATEMENT OF INTENT


The U.S. Army Armament Research, Development and Engineering Center (ARDEC) located at Picatinny Arsenal, New Jersey is licensee under NRC license numbers 29-00047-02, 29-00047-08 and SUB-348.

ARDEC, as licensee under the foregoing NRC licenses, is responsible for providing financial assurance on decommissioning costs which would be required if ARDEC were to discontinue any or all operations involving these NRC licensed activities.

The Commanding Officer of ARDEC, signatory on the foregoing NRC licenses, will assure that whatever funds required will be programmed through budgetary procedures in the amounts prescribed in 10 CFR parts 30, 40, and 70, or in appropriate funding plans, for such decommissioning. The Commander is responsible under Army Regulation 210.10 for all activities assigned to or under the jurisdiction of the installation and for ensuring that requisitions and estimates for allotment of funds are properly prepared and submitted.

The funds needed for decommissioning, currently estimated to be \$475,000, will be requested sufficiently in advance of decommissioning activities in order to prevent delay of those activities.

This is an originally signed duplicate.


WILLIAM R. HOLMES
Brigadier General, USA
Commanding



DEPARTMENT OF THE ARMY
U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER
PICATINNY ARSENAL, NEW JERSEY 07806-5000



REPLY TO
ATTENTION OF

15 MAY 1992

STATEMENT OF INTENT


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This is an originally signed duplicate.


WILLIAM R. HOLMES
Brigadier General, USA
Commanding

Decommissioning Funding Plan for License 29-00047-02 (March 9, 1992)

1. The basis for this Decommissioning Funding Plan is the cost associated with disposal of the current inventory, and the costs required to clean up current contamination of ARDEC resulting from activities under license 29-00047-02. All statements made in this Decommissioning Funding Plan apply only to this license, and only for conditions and operations as they presently exist. Since this is a research and development facility, circumstances could change with time.

2. The current estimated cost of decommissioning for license 29-00047-02 is \$55,000. This is a conservative plan based on a worst-case analysis of the current contamination status. Much less effort will probably be necessary since the levels of contamination of the facilities listed below are below the release limits listed in Regulatory Guide 1.86. A general description of the plan is described in the paragraphs which follow. The detailed costs are itemized in the cost estimating tables, attached.

3. The inventory consists of less than two thousand curies of tritium in sealed light sources, along with a much smaller quantity of other isotopes mostly in sealed source form. ARDEC currently has very little unsealed material on hand, all of which is actually enclosed in sealed containers such as glass vials, lecture bottles, or tightly closed containers. This Decommissioning Funding Plan assumes that the inventory will be transferred to an approved low level radioactive material disposal site.

4. The limited contamination consists entirely of tritium which has leaked from activities involving tritium light source research over the years. The following buildings have some level of tritium contamination, which, as can be seen below, is minor in nature.

a. Building 3018: This is an old earth-covered explosives storage magazine which was used to store radioactive materials in the past. At one time, a leaking tritium vial was stored there awaiting disposal. Some of the tritium was absorbed into the floor resulting in removable contamination levels of about 200 dpm/100 cm². Even though these levels are relatively low, this Decommissioning Funding Plan assumes that to decommission the facility, it will be necessary to sandblast the entire interior wall and ceiling surface, and cut up and remove the concrete floor for disposal in an approved radioactive waste disposal site. The disposal site is assumed to be the Envirocare Facility in Utah, which is the most reasonable location to dispose of contaminated building material.

b. Building 3021: This facility contains a laboratory fume hood which has been used for temporary storage of several leaking tritium light sources. The interior has locations with removable contamination of approximately several thousand dpm/100cm². This hood is scheduled to be disposed of in the next few months, and funding has already been set aside for this effort. However, this Decommissioning Funding Plan still includes the costs associated with disposal of the hood and its associated ductwork. Building 3021 also contains a vault which has been used as a radioactive material storage area. The vault previously contained a neutron generator which at one time leaked a small quantity of tritiated water on the floor. Since initial cleanup, there is still removable tritium contamination levels of several hundred dpm/100cm² in several locations on the floor. This Decommissioning Funding Plan assumes that the storage area floor tile would be removed and transported to Envirocare for disposal.

5. The following cost estimates are submitted in accordance with Regulatory Guide 3.66. This Center had generally followed the format found in appendix F except that:

a. More worker categories were included to cover contractor consultants, since it is likely that they will do a significant amount of the work. Some categories were changed (i.e., Supervisor to RPO), and the laborers category was eliminated since there is no plan to use them.

b. For convenience and clarity, a new column, "Worker Cost Per Day", was added to Table 2.

c. Work days and costs were summed at the bottom of Tables 1, 3, and 9, instead of on the right side.

6. This Decommissioning Funding Plan will be incorporated into the license upon the next license renewal, and will be reviewed and modified each time the license is submitted for renewal.

COST ESTIMATING TABLES

1. PLANNING AND ORGANIZATION

TABLE 1

TASK	(WORK DAYS)								
	RPO	SEN H.P.	H.P.TECH	CLERICAL	FOREMAN	CRAFTSMEN	CONT PROJ MGR	SEN TECH	
1. PREPARATION OF DOCUMENTATION FOR REGULATORY AGENCIES	1	5	-	-	-	-	-	-	-
2. SUBMITTAL OF DECOMMISSIONING PLAN TO NRC	1	5	-	1	-	-	-	-	-
3. DEVELOPMENT OF WORK PLANS	-	-	-	-	1	-	2	-	-
4. PROCURING OF SPECIAL EQUIPMENT	-	-	-	-	1	-	-	1	-
5. STAFF TRAINING	2	1	1	1	1	1	2	1	1
6. CHARACTERIZATION OF RADIOLOGICAL CONDITION OF FACILITY	.5	4	-	-	-	-	1	-	-
SUBTOTALS	4.5	15	1	2	3	1	5	2	1
TOTAL COST	\$1332	\$1230	\$227	\$206	\$661	\$192	\$2000	\$672	\$280

TABLE 2

UNIT COST FOR WORKERS

POSITION	BASIC SALARIES (\$/YEAR)	OVERHEAD RATE (%)	WORKER COST PER YEAR	WORKER COST/DAY
RPO	55,000	40%	77,000	296
SENIOR HP	46,000	40%	64,000	246
HP TECH	42,000	40%	59,000	227
FOREMAN	42,000	40%	59,000	227
CRAFTSMAN	36,000	40%	50,000	192
CLERICAL	19,000	40%	27,000	103
CONTRACTOR PROJ MGR	NA	NA	NA	400
CONTRACTOR SENIOR TECH	NA	NA	NA	336
CONTRACTOR TECH	NA	NA	NA	280

2. DECONTAMINATION AND/OR DISMANTLING OF RADIOACTIVE FACILITY COMPONENTS

	NUMBER	DIMENSIONS	RELEASE/DISPOSAL		NUMBER	DIMENSIONS	REL/DISP
GLOVE BOXES	-	-	-	FLOOR SPACE (3018)	1	14 M ²	DISP
FUME HOODS	1	3 m ³	DISP	FLOOR SPACE (3021)	1	28 M ²	DISP
HOT CELLS	-	-	-	VENTILATION DUCT (3021)	1	10 M	-
LAB BENCHES	-	-	-	WALL SPACE	-	-	-
SINK AND DRAIN	-	-	-				

COST ESTIMATING TABLES (CONTINUED)

TABLE 3

TASK	(WORKDAYS)								
	RPO	SEN H.P.	H.P.TECH	CLERICAL	FOREMAN	CRAFTSMEN	CONT PROJ MGR	SEN TECH	
1. DECON/DIS-MANTLE MAJOR COMPONENTS AND/OR PROCESSING AND STORAGE TANKS	-	-	-	-	-	-	-	-	-
2. DECON/DIS-MANTLE LABORATORIES FUME HOODS	1	1	-	-	-	-	1	-	-
3. DECON/DIS-MANTLE WASTE AREAS	-	-	-	-	-	-	-	-	-
4. DECON/DIS-MANTLE SERVICE FACILITIES	1	2	-	-	1	2	3	3	3
5. DECON/DIS-MANTLE WASTE TREATMENT FACILITIES ON THE SITE	-	-	-	-	-	-	-	-	-
6. MONITOR FOR COMPLIANCE RECLEAN AND REMONITOR IF NECESSARY	.5	2	-	-	-	-	-	-	-
TOTALS	2.5	9	-	-	1	2	4	3	3
TOTAL COSTS	\$740	\$2214	-	-	\$227	\$384	\$1600	\$1008	\$840

TABLE 4

EQUIPMENT/SUPPLY	QUANTITY	COST
CRANE (TO LOAD B25 CONTAINERS ON TRUCK)	1 DAY	\$ 0.00 (COVERED BY OVERHEAD)
FRONT END LOADER (TO REMOVE CONCRETE FROM 3018)	1 DAY	\$ 0.00 (COVERED BY OVERHEAD)
INDUSTRIAL SANDEBLASTER, COMPRESSOR AND SAND	1 DAY	\$ 400.00
CONCRETE CUTTER AND BLADE RENTAL PURCHASE	2 DAYS	\$ 400.00
FEE FOR CONTRACTOR OWNED EQUIPMENT (SAMPLER ETC)	8 DAYS	\$ 2000.00
FEE TO CONTRACTOR PROVIDED PPE	8 DAYS	\$ 2000.00

COST ESTIMATING TABLES (CONTINUED)

3. PACKAGING, SHIPPING, AND DISPOSAL OF RADIOACTIVE WASTES/INVENTORY

TABLE 5

WASTE TYPE	VOLUME (M ³)	NO OF CONT	TYPE OF CONT	UNIT COST OF CONT	TOTAL COST OF CONT
CONCRETE	6.0	2	B25 BOX	\$ 400.00	\$ 800.00
TRITIUM (<2000 Ci)	.3	10	DOT 17C CANS	\$ 20.00	\$ 200.00
OTHER INVENTORY	.5	5	DOT 17H DRUMS	\$ 30.00	\$ 300.00
TRITIUM	.3	1	HI INTEG CONT	\$ 400.00	\$ 400.00
DUCT	1.0	1	STC	\$ 200.00	\$ 200.00
TILE	.1	1	DOT 17H DRUM	\$ 30.00	\$ 30.00
ABRASIVE SAND	.1	1	DOT 17H DRUM	\$ 30.00	\$ 30.00
TOTAL	-	-	-	-	\$ 1960.00

TABLE 6

DISTANCE SHIPPED	750.00 MILES TO BARNWELL SC	2000 MILES TO ENVIROCARE (UTAH)
COST PER MILE	\$ 2.50	
ADDITIONAL CHARGES	\$ 0.00	

WASTE TYPE	NO. OF SHIPMENTS	UNIT COST FOR SHIP	DISTANCE	SURCHARGE	TRANS COST
CONTAMINATED CONCRETE AND TILE	1	\$ 0.00	2000 MI	0.00	\$ 5000
EXCESS INVENT, SAND, LL WASTE, ETC	1	\$ 0.00	750 MI	0.00	\$ 1875

TABLE 7

	BARNWELL SC	ENVIROCARE (UTAH)
BURIAL CHARGES	\$1236.00 PER CUBIC METER	\$883.00 PER CUBIC METER
SURCHARGES		
NONCOMPLIANCE STATE	\$ 5648.00 PER CUBIC METER	NA
CURIE SURCHARGE	\$ 10000.00 TOTAL FOR INVENTORY	NA

WASTE TYPE	BURIAL VOLUME	UNIT COST OF BURIAL	SURCHARGE	BURIAL COST
CONCRETE	6 CUBIC METERS	\$ 883/CUBIC METER	-	\$ 5298
TILE	.1 CUBIC METER	\$ 883/CUBIC METER	-	\$ 88
CRUSHED DUCT	.3 CUBIC METER	\$ 1236/CUBIC METER	\$ 5648/CUBIC METER	\$ 2065
EXCESS INVENTORY	1.1 CUBIC METERS	\$ 1236/CUBIC METER	\$ 5648/CUBIC METER	\$ 7572
SAND	.1 CUBIC METER	\$ 1236/CUBIC METER	\$ 5648/CUBIC METER	\$ 688

4. RESTORATION OF CONTAMINATED AREAS OF FACILITY GROUND

TABLE 8

TASK	SUPERVISOR	FOREMAN	H.P.	CLERICAL	CONTRACTOR	TOTAL	TOTAL COST
BACKFILL AND RESTORE SITE	-	-	-	-	-	-	-

COST ESTIMATING TABLES (CONTINUED)

5. FINAL RADIATION SURVEY

TABLE 9

TASK	RPO	SENIOR H.P.	H.P.	CLERICAL	FOREMAN	CONTRACTOR	PROJ MGR	SENIOR TECH	TECH
SURVEY SOIL UNDER BLDG 3018 FLOOR	1	2	-	-	-	-	-	-	-
SURVEY SUBFLOOR IN BLDG 3021	.5	.5	-	-	-	-	-	-	-
SURVEY WALLS IN BLDGS 3021 AND 3018	.5	1	-	-	-	-	-	-	-
TOTAL	2.0	3.5	-	-	-	-	-	-	-
TOTAL COST	\$ 592	\$ 861	-	-	-	-	-	-	-

6. SITE STABILIZATION, LONG TERM SURVEILLANCE (NOT APPLICABLE)

112495

5/4/92

TELEPHONE OR VERBAL CONVERSATION RECORD

A.M.
 P.M.

INCOMING CALL

OUTGOING CALL

VISIT

PERSON CALLING

OFFICE/ADDRESS

PHONE NUMBER | EXTENSION

Eric H. Reber

Region I

(215) 337-5276

PERSON CALLED

OFFICE/ADDRESS

PHONE NUMBER | EXTENSION

Richard Hisszar

(201) 724-3126

CONVERSATION

SUBJECT

License Nos 29-00047-02, 08 SUB-348

SUMMARY

5/4 - ~~they~~ sent cost estimate on March 2, '91 for
SUB-348 as part of renewal - get
it to look at

He will be sending a response in
a week or so for -02 & -08
licenses

5/5 - Dick Moss - should have it ⁱⁿ by the end of the
week (their response)

REFERRED TO:

ACTION REQUESTED

ACTION TAKEN

ADVISE ME OF
ACTION TAKEN.

INITIALS

DATE

INITIALS

DATE

FEB 10 1992

License Nos. 29-00047-02, 08
SUB-348

Docket Nos. 030-05215, 030-12535
040-06377

Control Nos. 112495, 112497
112499

Department of the Army
Commander
U.S. Material Command
ATTN: AMSCF-P
5001 Eisenhower Avenue
Alexandra, Virginia 22333-0001

Gentlemen:

This is in reference to your financial assurance submittal dated April 11, 1991 for Picatinny Arsenal, New Jersey. In order to continue our review, we need the following additional information:

1. Please amend your Statement of Intent to reference a specific dollar amount.
2. When you amend your Statement of Intent, it would be less confusing if you did not reference License Nos. 29-00047-06 and 29-00047-09. 10 CFR 30.35 does not require you to provide financial assurance for these licenses.
3. If you would like to provide only \$75,000 in financial assurance for License No. 29-00047-02, you will need to amend that license so that it only authorizes the possession and use of sealed sources.
4. Please provide the details of the decommissioning cost estimate that you made for License No. SUB-348. Your decommissioning cost estimate should contain a level of detail similar to that contained in Regulatory Guide 3.66, Appendix F (enclosed).

We will continue our review upon receipt of this information. Please reply in duplicate to my attention at the Region I office and refer to Mail Control Nos. 112499, 112496, and 112498. The reviewer for this licensing action is Eric H. Reber. If you have questions regarding this action please call the reviewer at (215) 337-5276.

Sincerely,

Original Signed By:
John D. Kinneman

John D. Kinneman, Chief
Research, Development &
Decommissioning Section B
Division of Radiation Safety
and Safeguards

Enclosure: Regulatory Guide 3.66

bcc:
Reber, E., RI
Kinneman, J., RI

RT:DRSS
Reber, kw

1/6/92

RT:DRSS
Kinneman

2/6/92

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ML 495 REBER - 0002.0.0
01/06/92

AUG 02 1991

MEMORANDUM FOR: Louis M. Bykoski, NRC Project Officer
Low Level Waste Management, Low Level Regulatory Branch

FROM: John D. Kinneman, Chief
Nuclear Materials Safety Section B
Division of Radiation Safety
and Safeguards

SUBJECT: NONSTANDARD FINANCIAL ASSURANCE SUBMITTALS RELATED TO THE
DECOMMISSIONING RULE

John Austin's August 6, 1990 memorandum set forth a procedure for submitting nonstandard financial assurance submittals to you for review by the NRC contractor. We have also included parent company guarantees and decommissioning funding plans.

Licensee	License No.	Control No.
Textron Defense Systems	SUB-1410	113599
Philips Elmet Division of North American	STB-171	114173
E. R. Squibb & Sons, Inc.	29-00139-02	113770
Liposome Company, Inc.	29-19918-01	114548
Department of the Army	SUB-348	112499
Department of the Army	29-00047-02	112495
Department of the Army	29-00047-06	112496
Department of the Army	29-00047-08	112497
Department of the Army	29-00047-09	112498
Bristol-Myers Squibb Co.	06-27843-02	114227
American Cyanamid Company	29-07694-01	112844

If you or the contractors believe any of these cases should more properly be reviewed by the Region, please return them.

Original Signed By:
John D. Kinneman

John D. Kinneman, Chief
Nuclear Materials Safety Section B
Division of Radiation Safety
and Safeguards

cc:
J. Glenn, NMSS
R. Bellamy, RI

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ML 10

FINANCIAL ASSURANCE MEMO/5 - 0001.0.0
07/29/91

Louis M. Bykoski

2

RI:DRSS
Villar/bj
(5)
07/24/91

[Handwritten Signature]
Kinneman/bj

08/1 /91
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FINANCIAL ASSURANCE MEMO/5 - 0002.0.0
07/23/91



DEPARTMENT OF THE ARMY
U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER
PICATINNY ARSENAL, NEW JERSEY 07806-5000

April 11, 1991

REPLY TO
ATTENTION OF

Safety Office

Mr. John D. Kinneman
Nuclear Materials Safety Section B
Division of Radiation Safety and Safeguards
U.S. Nuclear Regulatory Commission - Region I
475 Allendale Road
King of Prussia, Pennsylvania 19406

Dear Mr. Kinneman:

This is in response to your letter, a copy of which is enclosed, dated February 26, 1991, which refers to the decommissioning financial assurance statement, or Statement of Intent, that was initially submitted by the U.S. Army Armament Research, Development and Engineering Center (ARDEC), on April 30, 1990. Please refer to Mail Control Nos. 112495, 112496, 112497, 112498, and 112499.

As requested in your letter, the revised Statement of Intent, also enclosed, proclaims that funds needed for decommissioning will be requested sufficiently in advance of decommissioning activities in order to prevent delay of those activities. However, it must be emphasized that, per congressional mandate, appropriations can be set aside for a specific purpose, such as decommissioning, only within the fiscal year that the activity is to actually take place.

In our original submission of the Statement of Intent, dated April 30, 1990, it was stated that the Commanding Officer of ARDEC, Brigadier General William R. Holmes (then Colonel), would assure that funds required through budgetary procedures in the amounts prescribed by 10 CFR Parts 30, 40, and 70 would be available for such decommissioning. An accompanying letter, resubmitted here as an enclosure, dated December 11, 1989, from Major General Marvin D. Brailsford, Commander of the U.S. Army Armament, Munitions and Chemical Command (AMCCOM), Rock Island, Illinois, verified that then Colonel Holmes had been granted In-Process Review (IPR) authority for ARDEC. This authority essentially allows the ARDEC commander to manage the programs, and, in turn, the finances for those programs at ARDEC, as he deems fit. Copies of the above are again provided with this correspondence.

The initial decommissioning cost estimate of \$187,000 was based on the following considerations. The factor of waste disposal, though an important consideration normally for determining decommissioning funding costs, was not initially

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APR 22 1991

considered, since within the U.S. Army, funding for radioactive waste disposal/burial is borne by AMCCOM, which is not extracted from ARDEC funds. Upon the review of 10 CFR 30.35, a determination had been made that this section did not appear to apply. Item 6.c. of the 29-00047-02 license, Hydrogen 3, metal tritium targets, had been decommissioned and shipped for radioactive waste burial in 1990. Other than for the small quantities of unsealed sources referenced in item 6.b. of that license (primarily Carbon-14) presently in storage, and awaiting disposal, all radioactive material under this license is in a sealed form. Since, at present, there are no facilities under this license that would require major decommissioning clean-up efforts, other than possibly the dismantling and disposal of hoods and ductwork, an estimated cost of \$37,500 was determined (half of the \$75,000 value referenced for sealed sources in 10 CFR 30.35(d)). At this time, that cost estimate will be re-adjusted to \$75,000 in order to agree with 10 CFR 30.35(d).

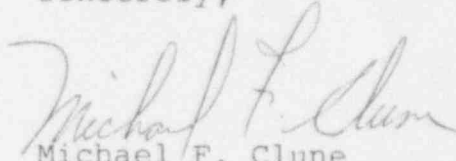
In regard to ARDEC's NRC License No. 29-00047-08, this office is in the process of transferring the Neutron Products, Inc. Cobalt-60 source, Model NPI-XX-XXXXW to another licensee. The activity of the other Cobalt-60 source under this license, American Nuclear Corp Drawing No. P101814, is presently 339 curies. Based on this, it was determined that 10 CFR 30.35 did not apply here either. However, since the license possession limit for this source is 10,000 curies, \$75,000 will be added to the cost estimate for the present Statement of Intent.

In the SUB-348 license, ARDEC is allowed to have up to 11,000 kilograms of depleted uranium (DU), 100 kilograms of natural uranium, and 20 kilograms of thorium powder. Virtually all of the DU at ARDEC is considered to be in a non-dispersable form (penetrators, slugs, etc). Of the remaining materials present, DU contaminants on work surfaces, collected in waste containers, etc. would be estimated to comprise well less than 10mCi of activity. The main source of dispersable source material would come from laboratory-grade uranium compounds in reagent bottles. Based on the quantity of natural uranium allowed by the license, an assessment of \$150,000 was assigned for decommissioning costs. In addition, it is Army policy, at present, not to dispose of penetrators at radioactive waste burial sites, but to recycle them to one of the Army's depleted uranium penetrator manufacturers.

Since the April 30, 1990 submission, this office has composed a decommissioning funding plan in support of the SUB-348 renewal application. The cost estimate obtained during this effort was \$345,000. Therefore, the re-submitted Statement of Intent presented here is for a dollar value of approximately \$495,000. (SUB-348 (345,000); 29-00047-02 (\$75,000); 29-00047-08 (\$75,000))

Should this submission still not be sufficient, or if there are any questions, please contact Mr. Richard Fliszar, ARDEC RPO, at (201)724-3126.

Sincerely,



Michael F. Clune
Chief, Safety Office

Enclosures

Copies Furnished:

DASG-PSP-E (COL Day), 5109 Leesburg
Pike, Falls Church, VA 22041-5050
AMSMC-SFS (K. LaFrenz)/ AMSMC-CPB(D)/
AMSMC-GC(D)
AMCSF-P (P. Elker)/AMXOS-PE
SMCAR-CO



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406
FEB 26 1991

License Nos. 29-00047-02, 06, 08, 09
SUB-348

Docket Nos. 030-05215, 030-05216, 030-12535
030-20846, 040-06477

Control Nos. 112495, 112496, 112497,
112498, 112499

Department of the Army
Commander
U.S. Materiel Command
ATTN: AMSCF-P
5001 Eisenhower Avenue
Alexandra, Virginia 22333-0001

Gentlemen:

This is in reference to your financial assurance submittal dated April 30, 1990. In order to continue our review, we need the following additional information:

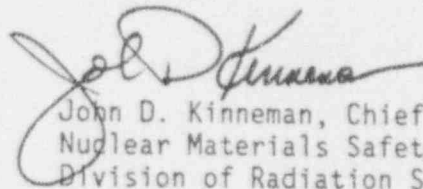
1. Please modify your statement of intent to indicate that funds for decommissioning costs will be requested and obtained sufficiently in advance of decommissioning to prevent delay of required activities.
2. Please provide evidence that the individuals signing the statement of intent are authorized to commit the funds described.
3. In your letter, you state, "the command is aware of the need to obtain funds equal to at least \$187,000 for decommissioning..." Please describe how you arrived at this figure. If your intention was to comply with 10 CFR 30.35 and 10 CFR 40.36 by submitting a statement of intent as described in 10 CFR 30.35(f)(4) and 10 CFR 40.36(e)(4), the amount should be \$1,575,000. Due to the possession limit for cobalt-60 in License No. 29-0047-08, \$75,000 would be required to comply with 10 CFR 30.35(c)(3); due to the possession limit for natural and depleted uranium contained in License No. SUB-348, \$750,000 would be required to comply with 10 CFR 40.36(c)(2); due to the possession limits contained in License No. 29-00047-02, \$750,000 would be required to comply with 10 CFR 30.35(c)(2), for a total of \$1,575,000.

If you would like to submit a Decommissioning Funding Plan with a specific cost estimate, please provide a level of detail similar to that contained in "Standard Format and Content of Financial Assurance Mechanisms Required for Decommissioning Under 10 CFR Parts 30,40,70, and 72," Appendix F, (copy enclosed).

ENC 1

We will continue our review upon receipt of this information. Please reply in duplicate to my attention at the Region I office and refer to Mail Control No. 112499, 112495, 112496, 112497, 112498.

Sincerely,



John D. Kinneman, Chief
Nuclear Materials Safety Section B
Division of Radiation Safety
and Safeguards

Enclosure:
Regulatory Guide 3.66

STATEMENT OF INTENT


The U.S. Army Armament Research Development and Engineering Center (ARDEC) located at Picatinny Arsenal, New Jersey, 07806-5000 is licensee under NRC license numbers: 29-00047-02, 29-00047-06, 29-00047-08, and 29-00047-09, SUB-348 and SNM-561.

ARDEC as licensee under the foregoing NRC licenses is responsible for providing financial assurance on decommissioning costs which would be required if ARDEC were to discontinue any or all operations involving NRC licensed activities.

The Commanding Officer of ARDEC, signatory, on the foregoing NRC licenses will assure that whatever funds required will be programmed through budgetary procedures in the amounts prescribed by 10 CFR Parts 30, 40, and 70 for such decommissioning. The Commander is responsible under Army Regulation 210.10 for all activities assigned to or under the jurisdiction of the installation and the responsibility for ensuring that requisitions and estimates for allotment of funds are properly prepared and submitted.

The funds needed for decommissioning will be requested sufficiently in advance of decommissioning activities in order to prevent delay of those activities.

This is an originally signed duplicate.


WILLIAM R. HOLMES
Brigadier General, USA
Commanding

Date 11 APR 1991



HEADQUARTERS, U.S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND
ROCK ISLAND, ILLINOIS 61299-2000



REPLY TO
ATTENTION OF

AMSMC-CG (70-1p)

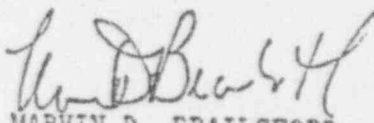
11 DEC 1989

✓ MEMORANDUM FOR Commander, U. S. Army Armament Research, Development and Engineering Center, Picatinny Arsenal, NJ 07806-5000

SUBJECT: U.S. Army Armament, Munitions and Chemical Command (AMCCOM) System In-Process Review (IPR) Authority

1. Colonel William Holmes, as Commander of the U.S. Army Armament Research, Development and Engineering Center (ARDEC) is hereby granted IPR authority for AMCCOM managed systems at ARDEC as outlined in the enclosed Delegation of Authority No. 89-5, 13 February 1989.
2. The point of contact for this action is Mr. C. W. Burgner, AMSMC-RT, AV 793-4551.

Encl


MARVIN D. BRAILSFORD
Major General, USA
Commanding

FEB 26 1991

License Nos. 29-00047-02, 06, 08, 09
SUB-348

Docket Nos. 030-05215, 030-05216, 030-12535
030-20846, 040-06477

Control Nos. 112495, 112496, 112497,
112498, 112499

Department of the Army
Commander
U.S. Materiel Command
ATTN: AMSCF-P
5001 Eisenhower Avenue
Alexandra, Virginia 22333-0001

Gentlemen:

This is in reference to your financial assurance submittal dated April 30, 1990. In order to continue our review, we need the following additional information:

1. Please modify your statement of intent to indicate that funds for decommissioning costs will be requested and obtained sufficiently in advance of decommissioning to prevent delay of required activities.
2. Please provide evidence that the individuals signing the statement of intent are authorized to commit the funds described.
3. In your letter, you state, "the command is aware of the need to obtain funds equal to at least \$187,000 for decommissioning..." Please describe how you arrived at this figure. If your intention was to comply with 10 CFR 30.35 and 10 CFR 40.36 by submitting a statement of intent as described in 10 CFR 30.35(f)(4) and 10 CFR 40.36(e)(4), the amount should be \$1,575,000. Due to the possession limit for cobalt-60 in License No. 29-0047-08, \$75,000 would be required to comply with 10 CFR 30.35(c)(3); due to the possession limit for natural and depleted uranium contained in License No. SUB-348, \$750,000 would be required to comply with 10 CFR 40.36(c)(2); due to the possession limits contained in License No. 29-00047-02, \$750,000 would be required to comply with 10 CFR 30.35(c)(2), for a total of \$1,575,000.

If you would like to submit a Decommissioning Funding Plan with a specific cost estimate, please provide a level of detail similar to that contained in "Standard Format and Content of Financial Assurance Mechanisms Required for Decommissioning Under 10 CFR Parts 30,40,70, and 72," Appendix F, (copy enclosed).

We will continue our review upon receipt of this information. Please reply in duplicate to my attention at the Region I office and refer to Mail Control No. 112499, 112495, 112496, 112497, 112498.

Sincerely,
Original Signed By:
John D. Kinneman

John D. Kinneman, Chief
Nuclear Materials Safety Section B
Division of Radiation Safety
and Safeguards

Enclosure:
Regulatory Guide 3.66

RI:DRSS
Reber vhd

2/1/91

RI:DRSS
Kinneman

2/25/91

OFFICIAL RECORD COPY

ML 358 REBER - 0001.1.0
02/04/91



DEPARTMENT OF THE ARMY
U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER
PICATINNY ARSENAL, NEW JERSEY 07906-5000

030-05215

April 30, 1990

REPLY TO
ATTENTION OF

Safety Office
Health Physics Branch

U.S. Nuclear Regulatory Commission, Region I
Nuclear Materials Safety Section B
475 Allendale Road
King of Prussia, Pennsylvania 19406

Dear Sir or Madam:

Forwarded is the U.S. ARDEC Statement of Intent for decommissioning radioactive material activities IAW, Title 10, Code of Federal Regulations, Parts 30, 40, and 70.

The ARDEC licenses include numbers 29-00047-02, 29-00047-06, 29-00047-08, 29-00047-09, SUB-348, and SNM-561.

The command is aware of the need to obtain funds equal to at least \$187,000 for decommissioning U.S. Nuclear Regulatory Commission (NRC) licensed activities at U.S. Army ARDEC, when and as required.

The Statement of Intent assures the NRC that the U.S. Army ARDEC will obtain adequate finances in an amount based on the type and quantity of licensed byproduct material, source material, and special nuclear material described in the NRC Tables, section 30.35(d), section 40.36(b), and section 70.25(d).


Records of information important to the safe and effective decommissioning of the facility will be either kept in an identified location, or if kept for other purposes reference to these records and their locations may be used until the license is terminated by the Commission.

112495
REC'D LMS
MAY 11, 1990

OFFICIAL RECORD COPY ML 10

The person to contact in the Safety Office concerning decommissioning is Mr. Richard W. Fliszar (201)724-3126.

Sincerely,


MICHAEL F. CLUNE
Chief, Safety Office

Enclosures

Copies Furnished:

COL Day, DASG-PSP-E, 5109 Leesburg Pike, Falls Church, VA 22041-5050

Commander, U.S. Army Material Command, AMCSF-P/
AMXOS-PE

Commander, U.S. Army Armament, Munitions and Chemical Command, AMSMC-SFS/AMSMC-CPB(D)/
AMSMC-GC(D)

SMCAR-CO


STATEMENT OF INTENT

The U.S. Army Armament Research Development and Engineering Center (ARDEC) located at Picatinny Arsenal, New Jersey, 07806-5000 is licensee under NRC license numbers: 29-00047-02, 29-00047-06, 29-00047-08, and 29-00047-09, SUB-348, and SNM-561.

ARDEC as licensee under the foregoing NRC licenses is responsible for providing financial assurance on decommissioning costs which would be required if ARDEC were to discontinue any or all operations involving NRC licensed activities.

The Commanding Officer of ARDEC, signatory, on the foregoing NRC licenses will assure that whatever funds required through budgetary procedures in the amounts prescribed by 10 CFR Parts 30, 40, and 70 will be available for such decommissioning. The Commander is responsible under Army Regulation 210.10 for all activities assigned to or under the jurisdiction of the installation and the responsibility for ensuring that requisitions and estimates for allotment of funds are properly prepared and submitted.

This is an originally signed duplicate.


WILLIAM R. HOLMES
Colonel, Ordnance Corps
Commanding

Date 4/25/90



HEADQUARTERS, U.S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL CENTER
ROCK ISLAND, ILLINOIS 61299-6000



REPLY TO
ATTENTION OF

Handwritten: 11 DEC 1989

11 DEC 1989

AMSMC-CG (70-1p)

MEMORANDUM FOR Commander, U. S. Army Armament Research, Development and Engineering Center, Picatinny Arsenal, NJ 07806-5000

SUBJECT: U.S. Army Armament, Munitions and Chemical Command (AMCCOM) System In-Process Review (IPR) Authority

1. Colonel William Holmes, as Commander of the U.S. Army Armament Research, Development and Engineering Center (ARDEC) is hereby granted IPR authority for AMCCOM managed systems at ARDEC as outlined in the enclosed Delegation of Authority No. 89-5, 13 February 1989.
2. The point of contact for this action is Mr. C. W. Burgner, AMSMC-RT, AV 793-4551.

Handwritten Signature: Marvin D. Brailsford

MARVIN D. BRAILSFORD
Major General, USA
Commanding

Encl

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ACTION

INFO

ACTION:

INFO:

RPT 12ZYU RUFADW6768 3132237-0000--RUFADW6
 7AF 00000
 R 091900Z NOV 89
 FM DA WASHDC//DADS-60M//
 TO RUEDEKA/CDRANCOM RIGATTINY ARSENAL NJ//DA 4440 L 6//
 RUEDEKA/CDRUSARV SO RIGATTINY ARSENAL NJ
 INFO RUFDAAA/CINCSUSA EUR HEIDELBERG G//
 RUCGSHA/USNMP SHAPE BF//CINC//
 RUAGAAA/CDRUSAEIGHT SFOUL KOR//
 RUCJACC/USCINCCENT MACDILL AFB FL//
 RHLBAAA/CINCSO QUARRY HEIGHTS PN//
 RHCBSPB/CINCPACSON FT MONROE VA//
 RUCLAIA/CDRTRADOC FT MONROE VA//
 RUKLDAP/CDRANCO ALEXANDRIA VA//
 RUCJAAA/USCINCPAC MACDILL AFB FL//
 RUMHBCA/CINCPAC HONOLULU HI//
 RUEA740/DA WASHINGTON DC//SALI//
 RUMJHPA/CDRUSATSO FT RUSSELL AZ//
 RUCJHHA/CDRINARA OF JAPAN JAPAN//
 RUCJHQB/CDRUSARV SUPPORT ACTY VA//INARA TEX//COPS//
 RUMJHQA/CDRUSARV WELT POINT VA//
 RUMHBCA/CDRUSARV FT SHELTON HI//

PAGE 02 RUFADW6768 UNCLAS
 RUECEAA/CDRUSAC FT BRAGG NC//
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 RUEAHOE/CDRTRADOC ALEXANDRIA VA//
 RUMJHQB/CDRUSARV WASHINGTON DC//
 RUCBNDL/CDRANCO WASHINGTON DC//AFRE-4000//
 RUCBNDP/CDRINARA SCHWEITZINGEN AF//AFRE-X/CDRUSARV//
 BT

UNCLAS

SUBJECT: GENERAL OFFICER REASSIGNMENT ORDER FOR COL HOLMES
 THIS IS A MESSAGE ORDER. ADDITIONAL COPIES OF THIS MESSAGE MAY BE
 REPRODUCED LOCALLY IF REQUIRED.

1989. HOLMES, WILLIAM R., 260-56-5284, COL, USA ARMYMENT, 1
UNITIONS AND CHEMICAL COMMAND (REGIMENTARY ELEMENT) (WAWY021),
PICATINNY ARSENAL, NJ 07806. YOU ARE REASSIGNED AS INDICATED
BELOW. NO TRAVEL INVOLVED. ASSIGN TO: UNITED STATES ARMY,
ARMAMENT RESEARCH AND DEVELOPMENT AND ENGINEER CENTER (WAWY441),
PICATINNY ARSENAL, NJ 07806 FOR ASSIGNMENT AS COMMANDING GENERAL/
DEPUTY COMMANDING GENERAL, UNITED STATES ARMY ARMYMENT, UNITIONS
AND CHEMICAL COMMAND. REPORTING DATE: MLI 15 NOV 89. TERMINATION
OF ACCESS FORMS FOR SPECIAL ACCESS PROGRAMS FROM YOUR CURRENT

PAGE 03 RUFAR006768 UNCLAS
ASSIGNMENT, SHOULD BE COMPLETED PRIOR TO YOUR REASSIGNMENT. ALL
CLASSIFIED INFORMATION INCLUDING EXTRA COPIES, GENERATED OR
OBTAINED WHILE IN YOUR CURRENT POSITION IS THE PROPERTY OF THE
UNITED STATES GOVERNMENT, AND MUST BE RETURNED TO YOUR DOCUMENT
CONTROL OFFICER. UPON SENATE CONFIRMATION YOU WILL BE REQUIRED TO
FILE A FINANCIAL DISCLOSURE STATEMENT (SF 278) (AW AR 600-90).
MDC: 11700. FORMAT: 820. BY ORDER OF THE SECRETARY OF THE ARMY.

BT
#4768

6/1/89

112435
REC'D LMS
MAY 11, 1990

(FOR LFMS USE)
INFORMATION FROM LTS

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

PROGRAM CODE: 03610
STATUS CODE: 2
FEE CATEGORY: EX 3L
EXP. DATE: 19890831
FEE COMMENTS:

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

APPLICANT/LICENSEE: ARMY, DEPARTMENT OF THE
RECEIVED DATE: 900511
DOCKET NO: 3005215
CONTROL NO.: 112495
LICENSE NO.: 29-00047-02
ACTION TYPE: AMENDMENT

2. FEE ATTACHED

AMOUNT: \$ ~~0~~-----
CHECK NO.: ~~0~~-----

3. COMMENTS

SIGNED R. J. Brown
DATE 5-14-90

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED /__/)

1. FEE CATEGORY AND AMOUNT: -----

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:

AMENDMENT -----
RENEWAL -----
LICENSE -----

3. OTHER ----- -----

SIGNED -----
DATE -----