

VOID SHEET

070 00263

TO: License Fee Management Branch

FROM: Region I

SUBJECT: VOIDED APPLICATION

Control Number: 119084

Applicant: Department of the Army

Date Voided: 3/15/94

Reason for Void: Request withdrawn by licensee for license no. SNM-244 (070-00263).
After review.

M. A. Perkins 3/15/94
Signature Date

Attachment:
Official Record Copy of
Voided Action

FOR LFMB USE ONLY

Final Review of VOID Completed:

Refund Authorized and processed

No Refund Due

Fee Exempt or Fee Not Required

Comments: _____

Log completed

Processed by: _____

100175

OFFICIAL RECORD COPY

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PDR ADOCK 07000263
C PDR

March 15, 1994

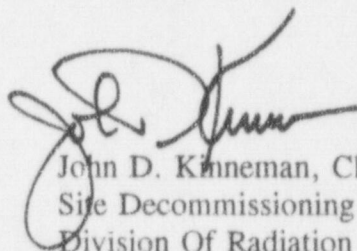
License No. 20-01010-04
SNM-00244
SUB-00238
Docket No. 030-04593
070-00263
040-02253
Control No. 119083
119084
118747

MEMORANDUM TO: Files

FROM: John D. Kinneman, Chief
Site Decommissioning Section
Division of Radiation Safety
and Safeguards

SUBJECT: VOID OF LICENSE ACTION FOR ARL'S PART 20
EXEMPTION REQUEST.

In a memorandum, dated December 6, 1993, Region I requested NMSS to approve the U.S. Army Research Laboratory's (ARL) request for an exemption to the Revised 10 CFR 20. In a telephone conversation between myself and a representative from NMSS, NMSS requested that we have ARL provide information comparable to the Cintichem Environmental Assessment for the ARL facility. Region I issued a deficiency letter to ARL based on NMSS's request. This item is closed for NMSS unless Region I forwards additional information to NMSS. NMSS was contacted by telephone to verify that this item was closed for NMSS. On February 8, 1994, ARL withdrew their exemption request.



John D. Kinneman, Chief
Site Decommissioning Section
Division Of Radiation Safety
and Safeguards

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REPLY TO
THE ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. ARMY RESEARCH LABORATORY
ARSENAL STREET
WATERTOWN, MASSACHUSETTS 02172-0001



MS 16
J-8

8 February 1994

Commander

License No. SUB-238
20-01010-04
SNM-244

Mr. John D. Kinneman
Chief, Research Development
and Decommissioning Section
Division of Radiation Safety and Safeguards
U.S. Nuclear Regulatory Commission/Region I
475 Allendale Road
King of Prussia, PA 19406-1416

Dear Mr. Kinneman,

Reference our letters of 17 September and 8 November 1993 requesting a waiver to the implementation of 10 CFR 20.

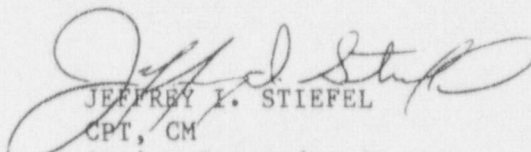
Reference your request of 14 January 1994 for additional information in order to complete a brief environmental assessment.

As Peter Cornetta indicated during his 31 January 1994 conversation with Mr. Mark Bouwens, we are no longer pursuing an exemption to the implementation of the new 10 CFR 20 regulations. The impact of passing time has prompted a reassessment of our needs.

Weighing the amount of work remaining and assessing the application of the new regulation versus the old at the time of estimated approval has lead to the decision that reverting back to the old regulations would not be cost effective or productive.

In fact we now have our new procedures in place and have been functioning in compliance with these new regulations. If further information pertaining to this action is desired, Peter Cornetta may be reached at (617) 923-5225.

Sincerely,


JEFFREY I. STIEFEL
CPT, CM
Acting Commander

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ML 10

118247/119083/119084

FEB 02 1994

JAN 14 1994

License Nos. 20-01010-04

SNM-00244

SUB-00238

Docket Nos. 030-04593

070-00263

040-02253

Control Nos. 119083

119084

118747

Department of the Army

U.S. Army Research Laboratory

SLCMT-DDM(5-10c)

ATTN: Jeffery I. Stieffel

Captain, CM

Acting Commander

405 Arsenal Street

Watertown, Massachusetts 02172-0001

Dear Captain Stieffel:

This is in reference to your request in a letter dated September 17, 1993 to amend License No. SUB-00238 to exempt your activities from the new 10 CFR 20. We have determined that in order to complete the action on this request we must prepare a brief Environmental Assessment. In order to prepare this assessment, we need the following additional information:

1. Estimate the cost to implement the requirements in 10 CFR 20.1001-20.2401.
2. Briefly describe the implementation of your ALARA program over the last year and discuss how your policies and procedures have maintained occupational radiation exposures as low as is reasonably achievable. Specify the administrative limits which you place on external and internal exposure and state whether they have been exceeded.
3. Estimate the percentage of the remediation activities that are completed.
4. Describe the current status of the remediation activities at the facility. Briefly list the activities remaining.
5. Estimate the fraction of radioactive contamination that has been removed from the facility and estimate the quantity of radioactive material remaining at the facility.

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Include radioactive material which is present as contamination on surfaces and in the soil in excess of release criteria.

6. Estimate the dose equivalent to the potentially worst case exposed member of the public during 1993 and 1994 as a result of the activities conducted under your licenses, including the facility remediation.
7. What was the maximum whole body dose equivalent and the maximum airborne exposure to any individual worker during 1993?
8. Estimate the maximum whole body dose equivalent and the maximum airborne exposure that will be received by any one worker in 1994.
9. Estimate the average worker whole body dose equivalent expected for 1994.
10. Estimate the total whole body dose equivalent for remediating the facility and the fraction of that total which has been delivered to date.

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. 119083, 119084, and 118747. The reviewer for this license action is Mark R. Bouwens. If you have any questions regarding this letter please call the reviewer at (610) 337-6910.

Sincerely,

Original Signed By:
John D. Kinneman

John D. Kinneman, Chief
Decommissioning Section
Division of Radiation Safety
and Safeguards

cc:

Peter Cornetta, Radiation Protection Officer

U.S. Army Materiel Command
ATTN: AMCSF-P (Mr. John Manfre)
5001 Eisenhower Avenue
Alexandria, Virginia 22333-0001

U.S. Army ARL

3

Department of the Army
Corps of Engineers, New England Division
ATTN: Richard D. Reardon,
Director of Engineering
424 Trapelo Road
Waltham, Massachusetts 02254-9149

Commander
Department of the Army
Corps of Engineers, New England Division
ATTN: CENED-PD-L (Mr. Dennis Waskiewicz)
424 Trapelo Road
Waltham, Massachusetts 02254-9149

Commander
U.S. Army Toxic and Hazardous Materials Agency
ATTN: CETHA-BC (Mr. Salvatore Torrisi)
Aberdeen Proving Ground, Maryland 21010-5401

Commonwealth of Massachusetts
Department of Health
ATTN: Robert Hallisey
Director
Radiation Control Program
150 Tremont Street
Boston, Massachusetts 02111

U.S. Environmental Protection Agency
ATTN: Ms. Anne Fenn
JFK Federal Building (PAS)
Boston, Massachusetts 02203

Commonwealth of Massachusetts
Department of Environmental Protection
Bureau of Waste Site Clean-Up
ATTN: Ms. Anne Malewicz
1 Winter Street, Fifth Floor
Boston, Massachusetts 02108

U.S. Army ARL

4

U.S. Army Research Laboratory
Adelphi Laboratory Center
ATTN: AMSRL-OP-RK-S (M. Borisky)
2800 Powder Mill Road
Adelphi, Maryland 20783

Watertown Main Library
ATTN: Reference Department
123 Main Street
Watertown, MA 02172

U.S. Army ARL


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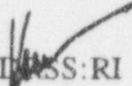
bcc:

M. Bouwens, RI

DRSS:RI

Bouwens


01/14/94


DRSS:RI
Kinneman

01/14/94

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REGIONAL TECHNICAL ASSISTANCE REQUEST FORM

Date: December 6, 1993

Mail or E-Mail to: Carl J. Paperiello (CJP1), Mail Stop: 6H3-OWFN, **If E-mail, cc:** CLE
Division of Industrial and Medical Nuclear Safety, NMSS

From: James H. Joyner (JHJ) (Name and E-mail initials) **Region** 1
Chief, Facilities Radiological Safety and Safeguards Branch

Licensee: U.S. Army Research Laboratory **License No.:** SUB-238

- ☐ **Control No.** 118747 (if applicable)
- ☐ **Letter dated:** September 17, 1993 (if applicable)
- ☐ **Suggested change in licensing procedure (enclosed):** _____

☐ **Problem/Issue:** The Department of the Army requested an exemption from implementation of
the Revised 10 CFR Part 20 for the U.S. Army Research Laboratory in Watertown, Massachusetts
(Watertown Arsenal).

☐ **Action Required:** Approve an exemption from the Revised 10 CFR Part 20 for the U.S. Army
Research Laboratory, License Nos. 20-01010-04, SNM-244, and SUB-238.

Recommended Action (with revisions): ☐ **Approve** or ☐ **Reject**

Remarks: _____

Headquarter Reviewer: _____

Regional Reviewer: Mark R. Bouwens

Reviewer Code: J8

Reviewer Phone No.: (215) 337-6910

FAX No.: (215) 337-5368

Request Needed by: 12/20/93 (date)

Form TAR-10
9/93

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December 6, 1993

License No. SUB-238
Docket No. 040-02253
Control No. 118747

MEMORANDUM FOR: Carl J. Paperiello, Director
Division of Industrial and
Medical Nuclear Safety, NMSS

FROM: James H. Joyner, Chief
Facilities Radiological Safety
and Safeguards Branch
Division of Radiation Safety
and Safeguards, RI

SUBJECT: TECHNICAL ASSISTANCE REQUEST: U.S. ARMY RESEARCH
LABORATORY (WATERTOWN ARSENAL)

The active portion of the Watertown Arsenal site [U.S. Army Research Laboratory (ARL), Watertown, Massachusetts] is composed of about 14.6 hectare (36 acres) located along the north branch of the Charles River approximately 7 miles west of Boston, Massachusetts. Work with various radioactive materials has been conducted at various locations within the Arsenal since at least 1946. This work has been under AEC and NRC license since February 6, 1958. The Department of the Army (Army) began remediation activities at ARL under an NRC approved Decommissioning Plan in July 1992 and the facility is scheduled by the Army for closure by 1996. The primary contaminant on the site is depleted uranium (DU).

The Army requested an exemption from the implementation of the Revised 10 CFR Part 20 for ARL, License No. SUB-238. The majority of the remediation of the site has been completed; however, the Army expects that some remediation activities will not be completed until after December 31, 1993. The Army requested the waiver to avoid additional expenses that will be incurred by retraining employees and developing a radiation protection program to meet the requirements of the Revised 10 CFR Part 20. An acceptable radiation safety program is in place and provides adequate protection to workers and the public. The radioactive material remaining on-site is mostly isolated DU contamination which is not likely to produce exposures to workers or the public even approaching the current or Revised 10 CFR Part 20 dose limits.

We have reviewed the Army's request and conclude it should be approved based on the following:

1. Remediation of the site is almost complete; there will be little handling of radioactive material in 1994 and 1995.
2. The inventory of radioactive material on-site is very small.
3. The Army expects to request termination of License Nos. 20-01010-04 and SNM-244 (Docket Nos. 030-04593 and 070-00263) in February 1994.
4. The Army will complete decommissioning activities at the facility and submit the final Termination Survey by May 1994.
5. Region I inspected the decommissioning activities at ARL from November 30, 1992 to December 3, 1992 and October 4-6, 1993. Dosimetry records and results of effluent sampling showed adequate control of exposures to workers and members of the public. No safety concerns or violations were identified. Exposures recorded were well below the limits in the Revised 10 CFR Part 20.
6. An exemption to the Revised 10 CFR Part 20 was (or will be) issued for decommissioning activities at the Shoreham Nuclear Power Station, Unit 1, License No. NFP-82. Reference letter, dated November 5, 1993, from Clayton L. Pittiglio, Jr., NRC, to Arthur J. Bortz, Long Island Power Authority.

However, the approval of the Army's request should incorporate the following conditions.

1. The exemption will be for the three active licenses at the ARL facility. We have requested that ARL provide a formal request for an exemption to the Revised 10 CFR Part 20 for License Nos. 20-01010-04 and SNM-244 (Docket Nos. 030-04593 and 070-00263).
2. The exemption will continue until license termination.
3. Remediation activities at the ARL facility must continue toward completion of the decommissioning of the facility and license termination.
4. The approval is for decommissioning activities at the ARL facility, Mall Property, and GSA Property.
5. We will make clear that the dose limit of not more than 100 millirem to a member of the public in 10 CFR 20.1301 may be used to evaluate contamination remaining at any of the sites.

There is no benefit to workers or public by requiring the implementation of the Revised 10 CFR Part 20 at this facility. We recommend you concur in the issuance of an exemption to the Revised 10 CFR Part 20 for the U.S. Army Research Laboratory, License Nos. 20-01010-04, SNM-244, and SUB-238.

We appreciate your assistance with the issues at this SDMP Site.

James H. Joyner, Chief
Facilities Radiological Safety
and Safeguards Branch
Division of Radiation Safety
and Safeguards

cc:

J. Austin, NMSS

U.S. Army MTL TAR

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bcc:

M. Bouwens, RI (w/o enclosures)

RI:DRSS
Bouwens
MB
12/6/93

RI:DRSS
[Signature]
Kineman
12/7/93

RI:DRSS
[Signature]
Joyner
12/7/93

RI:DRSS
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Helli
12/7/93

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REPLY TO
THE ATTENTION OF

DEPARTMENT OF THE ARMY
ARMY RESEARCH LABORATORY
ARSENAL STREET
WATERTOWN, MASSACHUSETTS 02172-0001



17 September 1993

040-02253

Commander

License No. SUB-238
Docket No. 40-02253
Control No. 113651

Mr. John D. Kinneman
Chief, Research Development, and Decommissioning Section
Division of Radiation Safety and Safeguards
U.S. Nuclear Regulatory Commission/Region I
475 Allendale Road
King of Prussia, PA 19406-1416

Dear Dr. Kinneman,

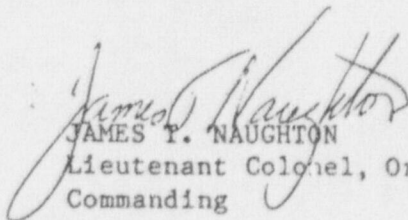
Request your agency approve a waiver to implementation of the new 10 CFR 20 at the Watertown site. The limited period of application of 10 CFR 20 at Watertown would not justify the expense or the effort involved in making such a change.

While it is our intent to complete decontamination activities prior to the end of this year, unforeseen requirements such as may be involved with the remediation of the contaminated pipe extending from under Building 43 out under Arsenal Street, the possibility of difficulties arising during the mixed waste processing in Building 43, and tasks associated with the GSA site cleaning may extend beyond our control into next year.

Furthermore, extensive radiation protection procedures covering regulations under the old 10 CFR 20 were written at considerable expense to the Army by our contractor, Scientific Ecology Group. As you are aware, preparations for the implementation of the new 10 CFR 20 involve retraining of radiation workers as well as detailed radiation protection program development tasks relating to topics such as ALARA, record keeping, exposure determination, waste disposal, planned special exposures surveys and new rules on precautionary measures, etc. Additional expenditure in these areas would not contribute significantly to a reduction in personnel exposure due to the nature of the radioactive contamination involved and we expect to terminate our byproduct and other special nuclear materials licenses shortly.

Your consideration and assistance in this matter is appreciated.

Sincerely,


JAMES T. NAUGHTON
Lieutenant Colonel, Ordnance Corps
Commanding

118747

"SECTION COPY"

SEP 23 1993



REPLY TO
THE ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. ARMY RESEARCH LABORATORY
ARDENAL STREET
WATERTOWN, MASSACHUSETTS 02172-0001



6 December 1993

030-0493 / 070-00263

Commander

Mr. John D. Kinneman
Chief, Research Development, and Decommissioning Section
Division of Radiation Safety and Safeguards
U.S. Nuclear Regulatory Commission/Region I
475 Allendale Road
King of Prussia, PA 19406-1416

Dear Mr. Kinneman,

Reference our letters of 17 September and 8 November 1993 concerning a request for a waiver to the implementation of the new 10 CFR 20 regulations.

Further discussions between Mr. Mark Bouwens and Mr. Peter Cornetta have prompted this letter to also include License Numbers 20-01010-4 and SNM-244 in the request for a waiver to the implementation to of the new 10 CFR 20 regulations.

Sincerely,

James T. Naughton
Lieutenant Colonel, Ordnance Corps
Commanding

119083/119084

FAX REC'D

DEC 07 1993

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DEC 10 1993



DEPARTMENT OF THE ARMY
U.S. ARMY RESEARCH LABORATORY
ARSENAL STREET
WATERTOWN, MASSACHUSETTS 02172-0001



REPLY TO
THE ATTENTION OF

8 November 1993

Commander

License No. SUB-238
Docket No. 40-02253

Mr. John D. Kinneman
Chief, Research Development and Decommissioning Section
Division of Radiation Safety and Safeguards
U.S. Nuclear Regulatory Commission/Region I
475 Allendale Road
King of Prussia, PA 19406-1416

Dear Mr. Kinneman:

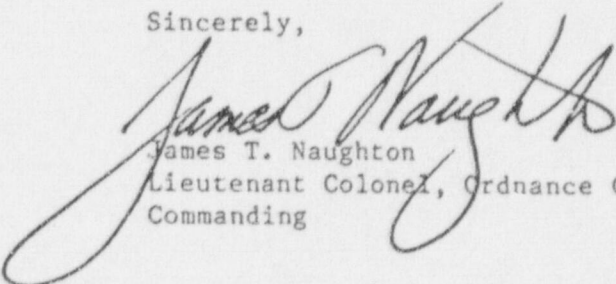
The additional information requested by your office concerning our request for a waiver to the implementation of the new 10 CFR 20 and how it would effect individual members of the public is included here.

The radioactive sources in our possession that have significant ambient radiation fields associated with them are: 1) the 5Ci PuBe source; 2) three, 500 mCi plutonium foils; and 3) the reactor beam tubes. The PuBe source is stored in a steel container that is filled with paraffin. The ambient field measured from the container due to the x-ray and neutron emissions is 5mRem/hr. on contact and not measurable outside the cement walls of the facility. The dose rate on contact with the steel container holding the 500mCi Pu-239 foils is approximately 5mR/hr. These sources are locked in our calibration facility as stated in license number SNM - 244. Compliance with 20.1302 is satisfied by the results of monthly surveys of this building which indicate background levels of radiation and also meet the requirement (20.1301) that the effective dose equivalent to individual members of the public should not exceed 0.1 Rem in a year and that the dose in any unrestricted area from external sources does not exceed 0.002 Rem in any one hour.

These plutonium sources are being stored-awaiting shipment to the Department of Energy. Access is restricted in accordance with license SNM-244 and our Radiation Safety program, thus keeping exposures as low as reasonably achievable. Finally the beam tubes (enclosed in lead) that are being stored inside LSA boxes will be cut, marked, encapsulated and shipped this month.

Further questions concerning compliance with "Dose limits for Individual Members of Public" may be directed to Peter Cornetta at (617) 923-5225.

Sincerely,


James T. Naughton
Lieutenant Colonel, Ordnance Corps
Commanding



DEPARTMENT OF THE ARMY
U.S. ARMY RESEARCH LABORATORY
ARSENAL STREET
WATERTOWN, MASSACHUSETTS 02172-0001



REPLY TO
THE ATTENTION OF

17 September 1993

Commander

License No. SUB-238
Docket No. 40-02253
Control No. 113651

Mr. John D. Kinneman
Chief, Research Development, and Decommissioning Section
Division of Radiation Safety and Safeguards
U.S. Nuclear Regulatory Commission/Region I
475 Allendale Road
King of Prussia, PA 19406-1416

Dear Dr. Kinneman,

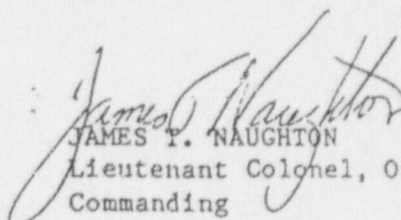
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Your consideration and assistance in this matter is appreciated.

Sincerely,


JAMES T. NAUGHTON
Lieutenant Colonel, Ordnance Corps
Commanding

118747

"SECTION COPY"

SEP 23 1993

040-02253

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

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: PROGRAM CODE: 22111
: STATUS CODE: 0
: FEE CATEGORY: EX 14 10
: EXP. DATE: 19971231
: FEE COMMENTS: -----
: DECOM FIN ASSUR REQD: Y

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A. REGION

APPLICANT/LICENSEE: ARMY, DEPARTMENT OF THE
RECEIVED DATE: 931207
DOCKET NO: 7000263
CONTROL NO.: 119084
LICENSE NO.: SNM-244
ACTION TYPE: AMENDMENT

AMOUNT: \$7000
CHECK NO.: 10

Reference 119083

Brown, R. J.
12-09-73

1. FEE CATEGORY AND AMOUNT: _____

[illegible]

SIGNED
DATE

[illegible]