



E. I. DU PONT DE NEMOURS & COMPANY
INCORPORATED
WILMINGTON, DELAWARE 19898

CENTRAL RESEARCH & DEVELOPMENT DEPARTMENT
EXPERIMENTAL STATION

RECEIVED BY LFMO

Date. 3/15/85
Leg. March 9 I
By. Brown
Orig. To.
Action Compl. ✓

March 1, 1985

Mr. Phillip C. Jerman
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Jerman:

Applicant.
Check No. 381-14800
Amount/Fee Category. N120/3L 2G
Type of Fee. Amendment
Date Check Recd. 4/11/85
Received By. Brown

As principle Radiological Safety Officer of the Du Pont Experimental Station, permission is requested to amend NRC License 07-00455-02 with the following:

- Dr. Richard L. Fisher has been replaced on the Radioisotope Committee by Dr. John Harvey, Jr. Dr. Dale C. Blomstrom has been replaced by Augusto A. Cordova. Their resumes are in Attachment A. The Request for Radioisotope form has been revised and is in Attachment B. Dr. T. M. Reilly will be the Committee chairman in place of Dr. Blomstrom.
- Since the core of the Radioisotope Committee is the Committee chair and principle RSO, permission is requested to change other members with approval of the core and without amending our license. If the principle RSO or Committee chair is to be changed, the NRC will be notified.
- Permission is also requested to change our badge exchange frequency from monthly to quarterly. As discussed in my phone conversation of 10/22/84 with Jack Davis, our badge exposures are zero or well below 10% of the Maximum Permissible Dose.
- Permission is also requested to delete two locations from our license and add one location. The first to be deleted is the Ohlinger Farm, R. D. #1, Rochelle, Illinois. Samples of soil have been analyzed and radiation levels are at background levels when compared to the control. A record of these results is maintained in our files.

RECEIVED-REGION 1
1985 MAR -8 PM 2:35

8506200175 950524
REG1 LIC30
07-00455-02 PDR

"OFFICIAL RECORD COPY"

03505

ML10

MAR 08 1985

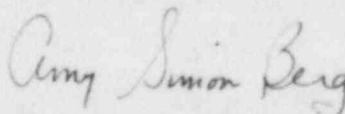
The second location to be deleted is the Plant Research Laboratory, 900 Wilson Road, Wilmington, Delaware. Byproduct material was used for greenhouse studies at this location. During each experiment, all surfaces were covered and saucers were placed under each pot. Following completion of the work, all soil and pots were removed from the greenhouse and discarded. A record of this is in our files.

- The location to be added to our license is the Stine greenhouses in Newark, Delaware. The work to be done is work that had been done at the Plant Research Laboratory. Byproduct materials will be used in greenhouse tests for studies of metabolism, stability, and environmental fate of agricultural chemicals and associated products. No single test will use an excess of 1 millicurie of byproduct material. Maximum amount of radioactivity in use at Stine greenhouses at any one time will not exceed 10 millicuries of carbon-14, 5 millicuries of hydrogen-3, and 1 millicurie of phosphorus-32. Crops or soil will be sprayed or treated at various times during the growing season using a small hand applicator and protective clothing. All materials on test plots will be harvested and returned to the Du Pont Experimental Station for additional studies or disposal. All users will be approved in advance by the Radiological Safety Officers. Uses of small quantities (up to 1 mCi) will be approved by an Agricultural Chemicals member of the Radioisotope Committee.

- With the increase of life science research activities at the Experimental Station, permission is requested to increase our limits for the following isotopes: sulfur-35 from 500 millicuries to 1 curie, nickel-63 from 500 millicuries to 1 curie and polonium-210 from 200 millicuries to 500 millicuries.

A check for \$120 is enclosed to cover the cost of the amendment. If you have any questions, please contact me on (302) 772-2147.

Sincerely,



Amy S. Berg
Radiological Safety Officer

pbr
3/1/85
Attachments
ASB:2.60

Attachment A

Dr. John Harvey, Jr.
Agricultural Chemicals Research

Dr. Harvey attended the University of Pennsylvania and obtained a BA degree in Chemistry in 1949, an MS degree in Organic Chemistry in 1951, and a Ph.D. in Organic Chemistry in 1953. He has worked for Du Pont since 1952. From 1968 to the present, he has conducted laboratory and field studies on the metabolism of pesticides using radiotracer techniques. He has worked with quantities of carbon-14 up to 200 millicuries. He is currently Radiological Safety Officer for an Agricultural Chemicals Department farm site in Florida. Dr. Harvey is a senior research associate and a group leader/metabolism studies. He has published numerous papers on the use of radiotracers in pesticide metabolism studies.

Augusto A. Cordova
Central Research & Development Department

Augusto A. Cordova attended Johns Hopkins University and received a BA degree in Biology in 1978. He gained experience in handling, ordering and monitoring radioisotopes while employed at Johns Hopkins University School of Medicine from 1978 until 1979.

Mr. Cordova has been a scientist at the Du Pont Experimental Station since 1979 and his work since then has involved the use of phosphorous-32, tritium and sulfur-35. Since 1982, he has been responsible for ordering of isotopes for his group. Currently he works with sulfur-35 for labeling of proteins and phosphorous-32 for labeling of DNA for sequencing.

E. I. DU PONT DE NEMOURS & COMPANY
Central Research & Development Department
Experimental Station

Date: _____

TO: (1) Radiological Safety Officer (RSO) - E249/101

(2) Radioisotope Committee Members

(3) Radiological Safety Officer - E249/101

REQUEST FOR RADIOISOTOPE

REQUEST IS MADE FOR _____ (amount) OF _____ (form)
TO BE USED IN BLDG. _____, RM. _____, FOR _____ (application)

THE FOLLOWING EQUIPMENT WILL BE USED:

Gloves _____ Shielding _____ Type: _____
Absorbent paper/containment tray _____ Badges _____
Specify Special Items (e.g., GM Counter) _____

* IF A BLANKET OR PRE-APPROVED ORDER: _____ (amount) WILL BE ORDERED ON A
_____ (frequency) BASIS. _____ (amount)
IS THE MAXIMUM AMOUNT THAT WILL BE USED IN A DAY AND _____ (amount)
IS THE MAXIMUM AMOUNT THAT WILL BE USED IN ANY ONE EXPERIMENT.

Requested by (print) _____ Signature/Ext. _____ Signature of Supervisor _____

PURCHASE ORDER: DOES _____ DOES NOT _____ ACCOMPANY THIS REQUEST.

R. S. O. APPROVAL AND COMMENTS:

*For information on this type of order, contact an RSO

For Radioisotope Committee Use Only

If you consider this proposal unacceptable, please communicate immediately
with the requester. Please sign and return to RSO when you approve.

Signature of Committee Member _____ Date _____

BETWEEN: William O. Miller, Chief
License Fee Management Branch
Office of Administration

John E. Glenn, Chief
Nuclear Materials Section B
Division of Engineering and
Technical Programs

LICENSE FEE TRANSMITTAL

A. REGION 2

Fee Needed

1. APPLICATION ATTACHED

Applicant/Licensee: E. I. du Pont de Nemours and Co., Inc.

Application Dated: 3/1/85

Control No.: 03505

License No.: 07-00455-02

2. FEE ATTACHED

Amount: 0

Check No.: 0

3. COMMENTS

Signed Brenda P. Latchek

Date 3/11/85

B. LICENSE FEE MANAGEMENT BRANCH

1. Fee Category and Amount: 3L 5120

2. Correct Fee Paid. Application may be processed for:

Amendment ✓

Renewal _____

License _____

Signed Frances Brown

Date 4/10/85

4/15/85