

03020681

VOID SHEET

TO: License Fee Management Branch  
FROM: RI  
SUBJECT: ~~VOIDED~~ ABANDONED APPLICATION

125393  
12

Control Number: 125393  
Applicant: E. I. du Pont de Nemours & Co, Inc.  
Date Voided: 9-22-98  
Reason for Void: Licensee did not respond to two NRC  
requests for additional info. After review.  
07-13441-02

Rebecca J. Brown 9/22/98  
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: After review

Log completed  
Processed by: ER

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PDR ADOCK 03020681  
C PDR

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September 22, 1998

Docket No. 030-20681  
Control No. 125393

License No. 07-13441-02

Richard Burnett  
SHRC Facilities Manager  
E. I. du Pont de Nemours & Company, Inc.  
Stine-Haskell Research Center  
P.O. Box 30  
Elkton Road Rt. 2  
Newark, DE 19714-0030

Dear Mr. Burnett:

This concerns the subject application for an amendment to your material license and our letter in which we notified you that the application was deficient and that certain additional information was required. The letter stated that if we did not receive a response from you within 30 calendar days, we would assume that you no longer wished to pursue the action. We subsequently sent an additional letter informing you that we would consider that you had abandoned the action if we did not receive the requested information. To date, we have not received a response to our letters.

We are notifying you that we have deemed your application abandoned. This action is taken without prejudice to the resubmission of your request.

Sincerely,



*Original signed by Elizabeth Ullrich*

John D. Kinneman, Chief  
Nuclear Materials Safety Branch 2  
Division of Nuclear Materials Safety

cc:  
Norm Henry, III, Radiation Safety Officer

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R. Burnett  
E. I. du Pont de Nemours & Company, Inc.

2

DOCUMENT NAME: G:\DNMS\DOCWORK\LICLTR\0713441.02

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OFFICE	DNMS/RI	N	DNMS/RI				
NAME	KBrown <i>KLZ</i>		JKWierman				
DATE	09/22/98		09/ /98	09/ /98		09/ /98	

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August 5, 1998

Docket No. 030-20681  
Control No. 125393

License No. 07-13441-02

Richard Burnett  
SHRC Facilities Manager  
E. I. du Pont de Nemours & Company, Inc.  
Stine-Haskell Research Center  
P.O. Box 30  
Elkton Road Rt. 2  
Newark, DE 19714-0030

Dear Mr. Burnett:

This concerns the subject application for an amendment to your material license and our letter in which we notified you that the application was deficient and that certain additional information was required. To date, we have not received a response to our letter.

You are hereby notified that unless within thirty (30) days from the date of this notice we receive the additional information requested, we will consider that you have abandoned your application. This action is without prejudice to the resubmission of an application.

Sincerely,

***Original signed by Keith D. Brown***

Keith D. Brown  
Health Physicist  
Nuclear Materials Safety Branch 2  
Division of Nuclear Materials Safety

cc:  
Norm Henry, III, Radiation Safety Officer

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R. Burnett  
E. I. du Pont de Nemours & Company, Inc.

2

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OFFICE	DNMS/RI	N	DNMS/RI				
NAME	KBrown <i>ADB</i>						
DATE	08/05/98	08/ /98	08/ /98	08/ /98	08/ /98		

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April 9, 1998

Docket No. 030-20681  
Control No. 125393

License No. 07-13441-02

Richard Burnett  
SHRC Facilities Manager  
E. I. Du Pont de Nemours & Company, Inc.  
Stine-Haske Research Center  
P.O. Box 30  
Elkton Road Rt. 2  
Newark, DE 19714-0030

Dear Mr. Burnett:

This is in reference to your letter dated January 21, 1998 requesting to amend Nuclear Regulatory Commission License No. 07-13441-02. In order to continue our review, we need the following additional information:

1. 10 CFR 51.21 requires that an environmental assessment be performed for all licensing actions except those requiring an environmental impact statement under 10 CFR 51.20(b) and those identified in 10 CFR 51.22(c) as categorical exclusions. Performance of field studies where radioactive material is released into the environment is not included in the categorical exclusions in 10 CFR 51.22(c). For licensing actions that include these types of activities, the Commission must, therefore, publish an environmental assessment in the Federal Register. In order to enable the Commission to prepare the environmental assessment, you are required to submit an environmental report as described in 10 CFR 51.45 and 51.60.

Submit an environmental report for all field studies that you will perform under the license. Since for an environmental assessment was not prepared when field studies were reauthorized as a part of the last renewal of your license, you need to include an environmental report for those field studies. As required by 10 CFR 51.45, the environmental report must discuss both the need for the proposed field study and alternatives to the study. The option of doing nothing should be included as one of the alternatives. As required by 10 CFR 20.1101, the discussion must show that the selected alternative results in doses that are as low as is reasonably achievable. Note that the environmental report must address the characteristics of the each location at which a field study is authorized. The environmental report must include the following information:

- a. Calculations addressing ground water, surface water, and airborne exposure pathways, both from application of material during the study and from the residual remaining upon completion of remediation, which support the conclusion that there will be no significant impact on the environment;

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E. I. Du Pont de Nemours & Company, Inc.

- b. A description of pre-remediation characterization surveys that will be performed, remediation procedures (these can be a restatement of those in your operating procedures), site release criteria, and final survey procedures; and
  - c. A description of the environmental monitoring program you will use to detect the spread of contamination.
2. To support the conclusions in the environmental reports, you will need to provide the following information as it applies to each field study to the extent necessary to support the conclusions:
- a. The activity that will be released to the environment during the field study and the residual activity from the study upon completion of remediation, (note that since your efforts to recover the released activity will not be perfect, this quantity will not be zero);
  - b. The soil classification of the area including (e.g., sand, clay, or gravel silt);
  - c. The stratigraphy of the near surface;
  - d. Hydrogeologic data of the area including porosity, distribution coefficient, hydraulic conductivity, and hydraulic gradient;
  - e. The average and peak precipitation per month;
  - f. A descriptions of aquifers in the area including the depth to each aquifer, the saturated thickness, the fluctuation, and the U.S. Environmental Protection Agency classification;
  - g. The use of each aquifer in the area;
  - h. The location, use, depth, and water level of wells in the vicinity;
  - i. The location and use of surface water in the vicinity;
  - j. The history of erosion, flooding, and subsidence, and any other relevant geologic events for the area;
  - k. The locations of nearby residences;
  - l. The use of the surrounding land;
  - m. Geologic and hydrologic maps of the area.

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. 125393. If you have any technical questions regarding this deficiency letter, please call me at (610) 337-5048.

R. Burnett  
E. I. Du Pont de Nemours & Company, Inc.

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If we do not receive a reply from you within 30 calendar days from the date of this letter, we shall assume that you do not wish to pursue your application.

Sincerely,

*Original signed by Keith D. Brown, Ph.D.*

Keith D. Brown, Ph.D.  
Health Physicist  
Nuclear Materials Safety Branch 2  
Division of Nuclear Materials Safety

Enclosure:  
10 CFR Part 51

cc:  
Norm Henry, III, Radiation Safety Officer



R. Burnett

4

E. I. Du Pont de Nemours & Company, Inc.

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OFFICE	DNMS/RI	N	DNMS/RI				
NAME	KBrown <i>RPB</i>						
DATE	04/09/98	04/ /98	04/ /98	04/ /98	04/ /98		

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## TELEPHONE OR VERBAL CONVERSATION RECORD

TIME 4:50 pm

☐ INCOMING CALL☐ OUTGOING CALL

CALLING PARTICIPANTS John D. Kinneman Norman Henry	OFFICE/ADDRESS U.S. NRC, Region I E.I. du Pont	PHONE NUMBERS (610) 337-5252 (302)366-5250	EXTENSION none
LICENSE NO.	DOCKET NO.	MAIL CONTROL NO.	

SUBJECT

## SUMMARY

I explained that we have begun our review of his request to add additional locations for field studies. I told him:

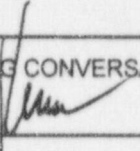
We are unlikely to approve "any" location. Locations must be specified in the application.

Even though previously approved, we must do EA for this application and existing approval. Therefore, need:

Environmental Report for all locations including dose estimates

History of use

I promised him a deficiency letter next week. He indicated that he understood and would begin working on the response as soon as he got the deficiency letter

PERSON DOCUMENTING CONVERSATION John D. Kinneman	SIGNATURE 	DATE 4/1/98
REFERRED TO		
ACTION REQUESTED	INITIALS	
	DATE	
ACTION TAKEN	INITIALS	
	DATE	

This is to acknowledge the receipt of your letter/application dated

1/21/98, and to inform you that the initial processing which includes an administrative review has been performed.

☒ There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information. 07-1344-02

☐ Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned Mail Control Number **125393**.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (R)  
(8-98)

Sincerely,  
Licensing Assistance Team Leader





DuPont Facilities Services

030-20681

January 21, 1998

License No. 07-13441-02  
Docket No. 030-20681

Elizabeth Ullrich  
Nuclear Materials Branch 2  
Division of Radiation Safety and Safeguards  
U.S. Nuclear Regulatory Commission, Region 1  
475 Allendale Rd.  
King of Prussia, PA 19406-1415

Dear Ms. Ullrich:

I am writing to request an amendment to our Stine-Haskell Research Center License (License No. 07-13341-02) to allow for field plot studies in other states regulated by the NRC. Our current license allows for field plot studies on our Stine farm, but additional studies are planned in other states. These field plot sites would be under our Stine-Haskell Research Center (SHRC) license and radioactive waste generated would be returned to SHRC or go directly to the DuPont's Experimental Station. This is consistent with our current license conditions for waste disposal and allowed for in our Decommissioning Funding Plan.

The field plots would be approximately 3' x 12' and located on farms owned by a DuPont development representative who will be trained as a user as defined in our license conditions. The field plots will be treated with C-14 radioactive agricultural chemicals to study their metabolism, stability and environmental fate. The maximum amount of radioactive material used on the field plots at any one time will not exceed 10 mCi C-14. Since the field plots will be located in different states regulated by different NRC regions, each region and agreement state will be notified in advance of the proposed studies. Notification will consist of identifying the location and owner of the field plot site. In addition, all activities regarding the use of these agricultural chemicals will be communicated as to the time of application, tracking, monitoring, security and decommissioning.

It is planned to use our existing field studies procedures reported in Item #6.2 Field Studies of our license. A copy of our Field Plot Test Procedure is enclosed for your review. This is our current AG Global Operating Procedure "SOP" for our Stine Farm Field Studies.

Since the growing season is rapidly approaching, we request your cooperation to review and expedite acceptance of this amendment. The first field plot study is planned to begin in early May on a farm located in St. Cloud, Minnesota in NRC Region III.

125393

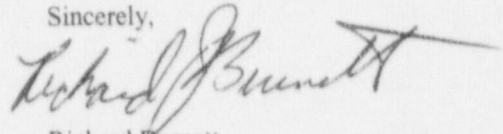
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If you have any questions regarding this request please contact Norm Henry III, RSO for the SHRC (phone 302-366-5250). Thank you in advance for your cooperation and attention to our amendment request.

Sincerely,

A handwritten signature in cursive script, appearing to read "Richard Burnett", with a long horizontal flourish extending to the right.

Richard Burnett  
SHRC Facilities Manager

Enclosures: Field Plot Test Procedure  
Item 6.2 Field Studies  
Check Enclosed

## ITEM #6.2 FIELD STUDIES

E. I. DuPont de Nemours & Co.  
Stine Farm  
Newark, Delaware 19714-0030

Byproduct materials (radiolabeled agricultural chemicals) will be used in small field plots for studies of metabolism, stability, and environmental fate of agricultural chemicals and associated products. No single test plot will use an amount in excess of 1 millicurie of byproduct material. Maximum amount of radioactivity in use at Stine Farm test area at any one time will not exceed 70 millicuries of carbon-14, 5 millicuries of hydrogen-3 and 1 millicurie of tin-119m.

Crops or soil will be sprayed or treated at various times during the growing season using a small hand applicator and protective clothing. The treated plots will be surrounded by a wire fence and adequately labeled with appropriate NRC radiation symbols and wording. All plant material on test plots will be harvested for additional studies or disposal at the DuPont, Experimental Station.

All users will be approved in advance by an Agricultural Products representative of the Site Radiation Safety Committee. A record will be maintained of the action taken in approving each use. In addition, this activity will be provided oversight by the Stine Radiation Safety Officer during the annual management audit of the radioisotope program.

Plots used for field studies will be documented to background levels at the conclusion of each field study. At the conclusion of each field study the procedures provided in Item A (Field Plot Procedure -- Page 17A) will be used for decontamination and survey.



## FIELD PLOT TEST PROCEDURE

The following will be added to DuPont AG Global Technology Standard Operating Procedure #MP0003402.LIS title "SOP for Stine Farm C-14 Field Studies":

### PLOT TESTING FOLLOWING EXPERIMENT TERMINATION

1. Prior to considering the part of the plot in question to be decommissioned, all caution signage designating the area will remain in place, and the following will be done:
  2. All vegetation (if any) will be removed and sent to the Experimental Station for incineration as radioactive waste.
  3. Soil testing
    - 3.1 Six to eight soil core samples will be taken to a depth of approximately 18 inches. Cores will be divided into smaller segments. Corresponding segments from each core will be pooled, thoroughly mixed, and analyzed for carbon-14 by combustion and liquid scintillation counting (LSC).
    - 3.2 Background will be defined by combustion analysis of soil samples taken outside of the plot area. Recovery of carbon-14 from the soil will be determined by analyzing soil from outside the pilot area spiked in the lab with a known quantity of carbon-14. Comparison of these results will be made with LSC analysis of vials spiked with the same quantity of carbon-14.
    - 3.3 Soil will be removed from the plot to the level where soil radioactivity is at background.
    - 3.4 If soil contains radioactivity in the deepest segment deeper cores will be taken for analysis, and further soil removed if needed.
    - 3.5 Removed soil will be sent to the Experimental Station for incineration.
    - 3.6 Soil removed from the plot will be replaced with soil from outside the plot area.

BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

Program Code: 03610  
Status Code: 0  
Fee Category: 3L  
Exp. Date: 20011031  
Fee Comments:  
Decom Fin Assur Req'd: Y

1998 FEB 13 11 08 35

LICENSE FEE TRANSMITTAL

A. REGION

I

1. APPLICATION ATTACHED

Applicant/Licensee: E. I. DU PONT DE NEMOURS & CO., INC  
Received Date: 980202  
Docket No: 3020681  
Control No.: 125393  
License No.: 07-13441-02  
Action Type: Amendment

2. FEE ATTACHED

Amount: \$780.00  
Check No.: 102

3. COMMENTS

Signed M. A. Perkins  
Date 2/4/98

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered / ☒ /)

1. Fee Category and Amount: 3L \$780

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

Amendment ☒  
Renewal ☐  
License ☐

3. OTHER

Signed \_\_\_\_\_  
Date \_\_\_\_\_

Log	<u>Int 2</u>
Remitter	<u>DUPONT AMEX DEPT</u>
Check No.	<u>102</u>
Amount	<u>\$780</u>
Fee Category	<u>3L</u>
Type of Fee	<u>AMU</u>
Date Check Rec'd	
Date Completed	<u>2/27/98</u>
By:	<u>BA</u>

EXPIRING REQUESTS:  
RT notified to  
Proceed w/ review.  
07 for 2/18/98