

Project#: 65299 PrePerm: / / Group: CORE Permit #: M  
 Received: 03/31/1999 Reg6NOV: / / TechEngr: DON1 ProjType: VDRC  
 Fee Date: / / Date BO: / / (Don Duke)  
 Fee Amt.: \$0 Bd-Ord#: - - NewJobs:

Issued To: E.I. DUPONT DE NEMOURS & COMPANY

AIR DERC\_100216035-65299\_  
 CE\_19990430\_Certification\_D1015

<Primary Contact Information>

Email:

Name: Mr. Richard H. Haar Title: Senior Engineer  
 Building: Phone: ( ) -  
 Street: ~~P.O. Box 3269~~ Fax: ( ) -  
 City, State, Zip: Beaumont, Texas, 77704-

<Project Information>

Unit: DuPont Beaumont Works SIC: \_\_\_\_\_ Region: 10  
 Account: JE-0033-C Capacity: SCC: \_\_\_\_\_ County: JEFFERSON  
 UnitType: CapUnits: Lat: \_\_\_\_\_ City: Beaumont  
 Location: Long: \_\_\_\_\_ CtyCo: JEFFERSON  
 Detail:

CORE Recd: 03/31/1999 ESOC: / / Deficient: / / RFC-SR: / /  
 CORE Engr: SMH1/ARL1 ASOC: / / Tech.Comp: / / RFC-DSC: / /  
 AdminComp: / / ESOC: / / Comp.Ltr.: / / Renewal:NO FIND  
 TransEngr: / / ASOC: / /

<Public Meeting - Hearing>

PN Required: ???  
 Date PN: / / Requested: / / / /  
 Date Pub: / / Disposed: / / / /  
 PN/Sign/Cert: / / Disp Code:

<TONs/Yr Reduction>

NOX: \_\_\_\_\_ 0.0  
 CO: \_\_\_\_\_ 0.0  
 VOC: \_\_\_\_\_ 0.0  
 PM: \_\_\_\_\_ 0.0  
 SO2: \_\_\_\_\_ 0.0

Status:

<Project Activity History>

No	Date	Code	Date	Code	TelCons	Mis Date	Mis Code
1	/ /		/ /		/ /	/ /	
2	/ /		/ /		/ /	/ /	
3	/ /		/ /		/ /	/ /	
4	/ /		/ /		/ /	/ /	
5	/ /		/ /		/ /	/ /	
6	/ /		/ /		/ /	/ /	
7	/ /		/ /		/ /	/ /	
8	/ /		/ /		/ /	/ /	
9	/ /		/ /		/ /	/ /	
10	/ /		/ /		/ /	/ /	

<Codes: E=Engineer, C=Company, O=Other, ?=Partial, \*=Complete>

NSPS Code:	N.A. County: YES	Non-PSD-Major: ???	<Local Programs>
NESHAP Code:	N.A.Net.Reg: ???	PSD Net. Req: ???	County: U
MACT Code: ???	N.A.Rev.Reg: ???	PSD Rev. Req: ???	City: ???

<Project Disposal>

Chief Sign: 4/30/99 [Signature]  
 Date Issued: / / Code: C

Processing Days as of 04/23/1999

Eng: 23 Comp: 0 Other: 0

Warn: NONE

Project#: 65299 PrePerm: / / Group: CORE Permit #: M  
Received: 03/31/1999 Reg6NOV: / / TechEngr: DON1 ProjType: VDRC  
Fee Date: / / Date BO: / / (Don Duke) STDX1:  
Fee Amt.: \$0 Bd-Ord#: - - NewJobs: 0 182(f): NO  
PSD-TX #: <NONE>  
ProjLink: <NONE>

Issued To: E.I. DUPONT DE NEMOURS & COMPANY

<Primary Contact Information>

Email:

Name: Mr. Richard H. Haar Title: Senior Engineer  
Building: Phone: ( ) -  
Street: ~~P.O. Box 3269~~ Fax: ( ) -  
City, State, Zip: Beaumont, Texas, 77704-

<Project Information>

Unit: DuPont Beaumont Works SIC: \_\_\_\_\_ Region: 10  
Account: JE-0033-C Capacity: SCC: \_\_\_\_\_ County: JEFFERSON  
UnitType: CapUnits: Lat: \_\_\_\_:\_\_\_\_:\_\_\_\_ City: Beaumont  
Location: Long: \_\_\_\_:\_\_\_\_:\_\_\_\_ CtyCo: JEFFERSON  
Detail:

CORE Recd: 03/31/1999 ESOC: / / Deficient: / / RFC-SR: / /  
CORE Engr: SMH1/ARL1 ASOC: / / Tech.Comp: / / RFC-DSC: / /  
AdminComp: / / ESOC: / / Comp.Ltr.: / / Renewal:NO FIND  
TransEngr: / / ASOC: / / <TONs/Yr Reduction>

<Public Meeting - Hearing>

PN Required: ???  
Date PN: / / Requested: / / / /  
Date Pub: / / Disposed: / / / /  
PN/Sign/Cert: / / Disp Code: \_\_\_\_\_  
NOX: \_\_\_\_\_ 0.0  
CO: \_\_\_\_\_ 0.0  
VOC: \_\_\_\_\_ 0.0  
PM: \_\_\_\_\_ 0.0  
SO2: \_\_\_\_\_ 0.0

Status:

<Project Activity History>

No	Date	Code	Date	Code	TelCons	Mis Date	Mis Code
1	/ /		/ /		/ /	/ /	
2	/ /		/ /		/ /	/ /	
3	/ /		/ /		/ /	/ /	
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6	/ /		/ /		/ /	/ /	
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8	/ /		/ /		/ /	/ /	
9	/ /		/ /		/ /	/ /	
10	/ /		/ /		/ /	/ /	

<Codes: E=Engineer, C=Company, O=Other, ?=Partial, \*=Complete>

NSPS Code:	N.A. County: YES	Non-PSD-Major: ???	<Local Programs>
NESHAP Code:	N.A.Net.Reg: ???	PSD Net. Req: ???	County: U
MACT Code: ???	N.A.Rev.Reg: ???	PSD Rev. Req: ???	City: ???

<Project Disposal>

Chief Sign: / / \_\_\_\_\_  
Date Issued: / / Code: \_\_\_\_\_

Processing Days as of 04/23/1999

Eng: 23 Comp: 0 Other: 0

Warn: NONE

Project#: 65299      Group:      CORE      Permit #: M      STDX1/SP:  
Received: 03/31/1999 TechEngr: DON1      ProjType: VDRC      PSD-TX #: <NONE>  
IssuedTo: E.I. DUPONT DE NEMOURS & COMPANY      ProjLink: <NONE>  
Unit:      DuPont Beaumont Works      Account: JE-0033-C

Emission Rates: No Emission Rates found for this project.

<No Valid Relations Exist>.
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REC#	ENGR	PERMIT#	TYPE	COMPANY	UNIT	RECEIVED	DISPOSED	CODE	ER
						/ /	/ /		



ESTABLISHED 1802

**E. I. DU PONT DE NEMOURS & COMPANY**

INCORPORATED

**BEAUMONT WORKS**

P. O. BOX 3269, BEAUMONT, TEXAS 77704

RAIL ADDRESS, DOWLING, TEXAS

409 / 722-3451

March 30, 1999

Ms. Susana Hildebrand  
Core Section, New Source Review Permits  
Office of Air Quality  
Texas Natural Resource Conservation Commission  
P.O. Box 13087, MC-162  
Austin, TX 78711-3087

182964

**DuPont Beaumont Works**  
**Beaumont, Jefferson County, TX**  
**Account I.D. No. JE-0033-C**

Re: Application for 1998 Discrete Emission Reduction Credits (DERC's)

Dear Ms. Hildebrand:

In response to 30 TAC 101.29, DuPont Beaumont Works is submitting documentation for Discrete Emission Reduction Credits (DERC's) generated in calendar year 1998.

Enclosed is documentation requesting **332** tons of NOx DERC's and **183.27** tons of creditable NOx emissions. We would want the NOx reductions beyond NOx RACT to result in creditable NOx emissions to be used in netting.

We have been accumulating NOx ERC's and DERC's since we made NOx reductions in our Ammonia Reformer (AMM-STK26) in October, 1994, in anticipation of upcoming NOx RACT requirements. Our initial submittal for NOx DERC's from October, 1994 through December 1997, was submitted in June 1998. This submittal is to claim the continuing generation of NOx DERC's in 1998.

If you have any questions, please call me at (409) 727-9128, or Dennis Isaacs at (409) 727-9528.

Sincerely,

Richard H. Haar  
Senior Engineer

RHH/rh  
Attachment

**RECEIVED**  
MAR 31 1999

PERMITS PROGRAM

There's a world of things we're doing something about

## **Table of Contents**

**Introduction**

**Application Forms**

**Calculations**

**Summary Results of 1993 and 1994 Stack Tests**



## **INTRODUCTION**

## **Creation of Discrete Emission Reduction Credits for the DuPont Beaumont Works, Beaumont, TX**

DuPont Beaumont Works, Beaumont, TX requests to be credited with Discrete Emission Reduction Credits (DERCs) which were created when a nitrogen rich stream from the Ammonia Reformer (EPN: AMM-STK26) was diverted to a flare (EPN: AMM-CBF266).

In October, 1994 Du Pont diverted a nitrogen rich stream from the Ammonia Reformer (EPN: AMM-STK26) to a flare (FIN: AMM-CBF266), resulting in a reduction of NO<sub>x</sub> emissions from the Ammonia Reformer. To quantify the reduction in NO<sub>x</sub> emissions, stack tests were conducted at the reformer, before and after the change (diversion of stream). These tests indicated that the NO<sub>x</sub> emissions from the Ammonia Reformer before the change were 0.27 lb/MMBTU and after the change were 0.10 lbs/MMBTU. Thus the baseline emission rate for the ammonia reformer is 0.27 lbs/MMBTU and the actual emission rate for the reformer would be 0.10 lbs/MMBTU

Title 30 of Texas Administrative Code, §117.205 sets the limit for NO<sub>x</sub> emissions from a high heat release process heater operating within a temperature range of 1800 -2150°F at 0.15 lbs/MMBTU. This limit will come into effect in 1999. DuPont would like to use 0.147 lbs NO<sub>x</sub> /MMBTU as a conservative strategic emission rate. As the test in 1994 demonstrated, this rate is much greater than the actual emission rate (0.10 lbs/MMBTU). DuPont would also like to retain the emissions credits created due to the difference in the strategic emission rate used for the calculation of DERCs (0.147 lbs/MMBTU) and the actual emission rate (0.10 lbs/MMBTU) as a Creditable Emission Reduction that can be used at a later date.

The nitrogen rich stream diverted from the reformer goes to the Refrigeration Flare (EPN: AMM-CBF266). The manufacturer of this flare (John Zinc) specifies that the flare produces 0.12 lbs of NO<sub>x</sub>/ 100 lbs of NH<sub>3</sub> burned. The NO<sub>x</sub> emissions from the flare due to the stream are documented in the emission inventory of 1998. Emissions from this flare due to the diverted stream have been taken into account as DERCs cannot be created using reductions that would otherwise counter an increase at the same site.

After taking the emissions from the flare into account, Discrete Emission Reduction Credits have been calculated yearly as the difference in emissions due to a change in emission rate from the baseline emission rate to the strategic emission rate for the period January, 1998, through December, 1998.

The application along with necessary documentation and calculations is enclosed. If you need additional information please call me at 409-727-9128.

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MAR 3 1 1999

PERMITS PROGRAM

## **APPLICATION FORMS**





**Form D-1 (Page 1)**  
**Notice of Generation**  
**of Discrete Emission Reduction Credits**  
**(Title 30 Texas Administrative Code § 101.29)**

A notice of generation and generator certification must be submitted to the Texas Natural Resource Conservation Commission (TNRCC) DERC Registry in accordance with the following requirements if the reduction is to be creditable and marketable:

<b>I. COMPANY IDENTIFYING INFORMATION</b>		
A. Company Name: E. I. duPont de Nemours & Company		
B. Owner or Operator of Generator Source: E. I. duPont de Nemours & Company		
C. Plant/Site Name: DuPont Beaumont Works		
D. Street Address: State Highway 347		
E. Nearest City: Beaumont	F. Zip Code: 77704	
G. County: Jefferson	H. Primary SIC: 2869	
I. TNRCC Account No.: JE-0033-C		
J. Telephone: 409-727-9128	K. Fax: 409-727-9412	
L. Mailing Address: P.O. Box 3269		
City: Beaumont	State: Texas	Zip Code: 77704
<b>II. TECHNICAL CONTACT IDENTIFYING INFORMATION</b>		
A. Technical Contact Name: ( <input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.) Richard H. Haar		
B. Technical Contact Title: Senior Engineer		
C. Telephone: 409-727-9128	D. Fax: 409-727-9412	
E. Mailing Address: P. O. Box 3269		
F. City: Beaumont	State: Texas	Zip Code: 77704
<b>III. CONTACT FOR SALE OF CERTIFICATE</b>		
A. Contact Name: ( <input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.) W. Dennis Isaacs		
B. Sale Contact Title: Senior Specialist		
C. Telephone: 409-727-9528	D. Fax: 409-727-9412	
E. Mailing Address: P. O. Box 3269		
F. City: Beaumont	State: Texas	Zip Code: 77704
<b>IV. Generation Period</b>		
<input checked="" type="checkbox"/> 12 months		
<input type="checkbox"/> Other _____ Days/months		
<b>V. Generation Activity</b>		
<input type="checkbox"/> Shutdown <input type="checkbox"/> Additional Control <input checked="" type="checkbox"/> Other: Diversion of nitrogen containing stream from the ammonia reformer (AMM-STK26) to the refrigeration flare (AMM-CBF266).		



**Form D-1 (Page 2)**  
**Notice of Generation**  
**of Discrete Emission Reduction Credits**  
**(Title 30 Texas Administrative Code § 101.29)**

**VI. EMISSIONS RATE DATA**

Attach documentation which demonstrates the basis for each value represented in the following table.

If  $SA \geq BA$ , then:  $(BER*BA) - (SER*SA) = \text{reduction}$

If  $SA < BA$ , then:  $(BER*BA) - (SER*BA) = \text{reduction}$

Emission Point No.	FIN	Air Contaminant	Calculation of DERCs					DERCs (T)
			Baseline Activity (units)	Baseline Emission Rate (units)	Strategy Activity (units)	Strategy Emission Rate (units)	Most stringent emission rate (units)	
AMM-STK26	AMM/STK26	NO <sub>x</sub>	6,704,384	0.27	7,798,933	0.147	0.15	332
			MMBTU	Lb/MMBTU	MMBTU	lb/MMBTU	lb/MMBTU	

**VII. Shutdown Emission Reduction Strategies**

Has production shifted from the shutdown facility to another facility in the same nonattainment area? ☐ Yes\* ☒ No

\*If Yes, DERC can not be claimed.

**VIII. VOC**

List Specific Compounds reduced:

Emission Point No	FIN	Name of Air Contaminant	DERCs (T)



**Form D-1 (Page 3)**  
**Notice of Generation**  
**of Discrete Emission Reduction Credits**  
**(Title 30 Texas Administrative Code § 101.29)**

**VIII. Most Stringent Emission Rate**

Describe basis for most stringent emission rate: ☐ Permit \_\_\_\_\_ ☒ RACT \_\_\_\_\_ ☐ Other: \_\_\_\_\_

Title 30 Texas Administrative Code Chapter 117.205 (Effective 1999)

**IX. Protocol**

Protocol used to calculate DERC: Calculated based on Emission Banking and Trading rules as cited in 30 TAC 101.29 and the June 5, 1998 Guidance Document. Emission rates are based on stack tests conducted in 1993 and 1994 under actual operating conditions.

**VIII. CERTIFICATION BY RESPONSIBLE OFFICIAL**

All representations in this registration of emissions, with regard to emissions, shall become conditions upon which the stationary source shall operate. It shall be unlawful for any person to vary from such representation unless the registration is first revised. This registration of emissions shall include documentation of the basis of emission rates and the certification below, in accordance with Title 30 Texas Administrative Code § 122.165 (relating to Certification of a Responsible Official), that the maximum emission rates listed on the registration reflect the reasonably anticipated maximums for operation of the stationary source.

I, Roy E. Wells, hereby certify that the emission reductions claimed on this notice are real, surplus, and  
(Name printed or typed)

not based on an emission reduction strategy prohibited in 10 TAC §101.29 to the best of my knowledge and belief and that the information entered in this application is correct to the best of my knowledge and belief.

Signature: Roy E. Wells Signature Date: March 30, 1999

Title: Industrial Park Manager

## **CALCULATIONS**

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MAR 31 1999

PERMITS PROGRAM

Monthly Data Before

Monthly Heat Input to the Ammonia Reformer (AMM-STK26)

Month	'1992		'1993		'1994	
	Average hours	Ave. Usage MMBTU/hr	Average hours	Ave. Usage MMBTU/hr	Average hours	Ave. Usage MMBTU/hr
January			342.90	686.41	731.42	878.06
February			333.44	1,412.43	145.01	1,456.03
March			787.67	836.97	744.00	871.10
April			527.35	892.34	696.00	893.46
May			672.00	810.44	758.80	931.78
June			768.00	803.96	720.00	914.91
July			712.10	841.17	693.92	898.19
August			764.03	819.79	792.00	932.03
September			549.58	923.45	720.00	933.85
October	720	787.44	696.00	828.61		
November	744	761.37	756.41	843.49		
December	744	734.97	720.00	838.78		
Total Hours (hrs)	2,208.00		7,629.48		6,001.15	
Total Usage (MMBTU)		1,680,233.76		6,549,728.66		5,522,901.34
Average Usage (MMBTU/hr)		760.98		858.48		920.31

(Monthly Data After)

Monthly Heat Input to the Ammonia Reformer (AMM-STK26)

Month	'1998	
	Average hours	Ave. Usage MMBTU/hr
January	720.00	883.90
February	580.00	948.50
March	739.67	906.10
April	720.00	894.00
May	636.00	944.60
June	768.00	904.00
July	744.00	887.50
August	672.00	903.40
September	774.17	944.50
October	720	937.7
November	624	901.5
December	864	887.9
Total Hour	8,561.85	
Total Usage (MMBTU		7,798,933.30
Average Usage (MMB		910.89

Annual Emissions Caused at the Flare by the diverted stream

1998

0.60 tons

(BER)(BA)

EPN: AMM-STK26

High heat release Process Heater

Maximum Heat Capacity = > 100 MMBTU/hr

Operational firebox temperature= 1870-2100 °F

Emission Specification according to §117.205(b)(2)(B)(iii)

0.15 lb NOx/MMBTU

### Hourly Heat Input

Heat input to the Ammonia Reformer during the period Oct -Dec 92 (BER)

760.98 MMBTU/hr

Heat input to the Ammonia Reformer in the year 1993 (BER)

858.48 MMBTU/hr

Heat input to the Ammonia Reformer during the period Jan-Sept 94 (BER)

920.31 MMBTU/hr

Average Hourly Heat Input

846.59 MMBTU/hr

Number of Hours the Reformer was in Use

For the Period Oct - Dec 92

2,208.00 hours

For the Year 1993

7,629.48 hours

For the Period Jan - Dec 94

6,001.15 hours

Number of hours in an annualized two-year timeframe

7,919.32 hours

Baseline Activity (BA) =

6,704,384 MMBTU

Average rate of emissions of NOx before the change (ref. 1993 Stack test report) (

0.27 lbs/MMBTU

Average annualized NOx emissions over a two year frame

905.09 tons

905

(SA)

EPN: AMM-STK26

High heat release Process Heater

Maximum Heat Capacity = > 100 MMBTU/hr

Operational firebox temperature= 1870-2100 oF

Emission Specification according to §117.205(b)(2)(B)(iii)

0.15 lb NOx/MMBTU

**Hourly Heat Input**

Heat input to the Ammonia Reformer in the year 1998 (SER)

910.89 MMBTU/hr

**Number of Hours the Reformer was in Use**

For the Year 1998

8,561.85

**Strategic Activity (SA)**

for the year 1998

7,798,933 MMBTU



# DERC's

EPN: AMM-STK26

High heat release Process Heater

Maximum Heat Capacity = > 100 MMBTU/hr

Operational firebox temperature= 1870-2100 oF

For process heaters with firebox temperature > or = 1800oF,

(According to §117.205)

0.15 lbs/MMBTU

The 1994 tests indicate that the average rate of emissions from the reformer after the change are well below the limit set by the NOx RACT.

Hence we could claim DERCs as the difference between baseline activity (0.27 lb/MMBTU) and the current strategically reduced activity (0.10 lb/MM BTU)

However to be on the conservative side, we will calculate DERCs obtained as the difference between the emissions before the change

and a level slightly below the maximum emissions allowable according to §117.205.

Thus the Strategic Activity (SA) for the reformer that will be used to calculate DERCs will be 0.147 lb/MMBTU

The difference between the current emission rate (0.10 lbs/MMBTU) and the strategic emission rate used to calculate DERCs (0.147 lbs/MMBTU) will be retained by DuPont as Creditable Emissions that can be used later.

Average emissions prior to the change are (BER)(BA) = 905.09 tons/yr

Using the Strategic Activity (SA) = 0.147 lbs/MMBTU

Strategic Emissions for the year 1998 = (SER)(SA) = 573 tons

DERCs for each of these time periods will be (BER)(BA)-[(SER)(SA)+Emissions caused by the diverted streamat the flare]

		Rounding down
Year of 1998	332.09 tons	332 tons

## Credit Emissions

EPN: AMM-STK26

High heat release Process Heater

Maximum Heat Capacity = >100 MMBTU/hr

Operational firebox temperature= 1870-2100 °F

For process heaters with firebox temperature > or = 1800°F, 0.15 lbs/MMBTU

The difference between the current emission rate (0.10 lbs/MMBTU) and the strategic emission rate used to calculate DERs (0.147 lbs/MMBTU) will be retained by DuPont as Creditable Emissions that can be used later and is calculated as follows

Strategic Activity Rate = 0.147 lbs/MMBTU

Actual Emission Rate (Ref 1994 Stack Test Report) 0.1 lbs/MMBTU

**Creditable Emissions for the year 1998 = 183.27 tons**

**SUMMARY RESULTS OF 1993 AND 1994 STACK TESTS**

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PERMITS PROGRAM

**SOURCE EMISSIONS SURVEY  
OF  
E.I. DU PONT DE NEMOURS  
& COMPANY, INC.  
AMMONIA REFORMER EXHAUST DUCT AND  
EAST AND WEST AUXILIARY  
BOILERS EXHAUST DUCTS  
BEAUMONT, TEXAS**

**NOVEMBER 1993**

**FILE NUMBER 93-308A**

## SUMMARY OF RESULTS

## Ammonia Reformer Exhaust Duct

Condition	Run Number	Oxides of Nitrogen Emissions			Carbon Monoxide Emissions			Oxygen Concentration (%)
		(ppm)	(ppm*)	(lbs/million Btu**)	(ppm)	(ppm*)	(lbs/million Btu**)	
-2- I	1	227	214	0.260	< 0.5	< 0.5	< 0.001	1.9
	2	237	228	0.277	< 0.5	< 0.5	< 0.001	2.3
	3	<u>232</u>	<u>224</u>	<u>0.273</u>	<u>&lt; 0.5</u>	<u>&lt; 0.5</u>	<u>&lt; 0.001</u>	<u>2.4</u>
	Average	232	222	0.270	< 0.5	< 0.5	< 0.001	2.2
II	4	99	93	0.113	< 0.5	< 0.5	< 0.001	1.8
III	5	97	90	0.109	1.5	1.4	0.001	1.6

\* Corrected to 3 percent Oxygen.

\*\* Calculated using an  $F_d$  factor of 8,710 dscf/million Btu.



**METCO**  
ENVIRONMENTAL  
P.O. Box 598  
Addison, TX 75001  
(214) 931-7127

**SOURCE EMISSIONS SURVEY  
OF  
E.I. DU PONT DE NEMOURS &  
COMPANY, INC.  
AMMONIA REFORMER EXHAUST DUCT  
(EPN AMM-STK26)  
BEAUMONT, TEXAS**

**DECEMBER 1994**

**FILE NUMBER 94-292**

# SUMMARY OF RESULTS

Ammonia Reformer Exhaust Duct (EPN AMM-STK26)

<u>Condition</u>	<u>Run Number</u>	Oxides of Nitrogen Emissions		Carbon Monoxide Emissions	
		<u>(ppm)</u>	<u>(lbs/hr)</u>	<u>(ppm)</u>	<u>(lbs/hr)</u>
I	1	80.5	108.24	< 0.5	< 0.41

1994calc

Ammonia Reformer Exhaust Duct (EPN: AMM-STK26)

Result of Test Conducted in December 1994

Oxides of Nitrogen Emissions      80.5 ppm  
   108.24 lbs/hr

$$\text{lbs/MMBTU} = (\text{ppm} \cdot \text{CF} \cdot F_d \text{ factor} \cdot 20.9 \% \text{ O}_2) / (20.9 \% \text{ O}_2 - \% \text{O}_2 \text{ measured})$$

CF = Conversion factor for ppm to lbs/dscf =      1.19E-07

$F_d$  = Oxygen based F factor =      8,710 dscf/MMBTU

So 80.5 ppm is =      0.10 lbs/MMBTU



ERL / SMH  
COPY

Robert J. Huston, *Chairman*  
R. B. "Ralph" Marquez, *Commissioner*  
John M. Baker, *Commissioner*  
Jeffrey A. Saitas, *Executive Director*



## TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

*Protecting Texas by Reducing and Preventing Pollution*

June 14, 1999

Mr. Rich Haar  
Senior Engineer  
E. I. Dupont De Nemours  
& Company  
P.O. Box 3269  
Beaumont, Texas 77704

Re: Administrative Review  
Discrete Emission Reduction Credits  
Dupont Beaumont Works  
Beaumont, Jefferson County  
Account ID No. JE-0033-C

Dear Mr. Haar:

This is in response to your conversations with Ms. Susana Hildebrand and your FAX to her dated June 1, 1999. At your request we have reevaluated your registration request dated March 30, 1998 and have revised your DERC credits. The revised credits will be deposited in the Texas Natural Resource Conservation Commission Emissions Registry:

Nitrogen Oxides      1,105 tons

This review verifies that all information needed for credit review has been received. However, the DERCs' actual credit has not yet been verified. Upon submittal of a notice of intent to use, the credits will be assigned to a technical engineer who will review the reductions for creditability. At that time, the credits may be adjusted accordingly.

Thank you for your cooperation in this matter. We regret any inconvenience our error in interpreting your request might have caused. If you have questions concerning the review or this notice, please contact me at (512) 239-1314 or write to me at Texas Natural Resource Conservation Commission, Office of Air Quality, New Source Review Permits Division (MC-162), P.O. Box 13087, Austin, Texas 7811-3087.

Mr. Rich Haar

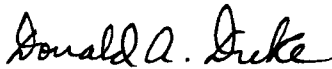
Page 2

June 14, 1999

Re: Discrete Emission Reduction Credits

If you need further assistance regarding the banking program or future transactions, please call Ms. Susana Hildebrand at (512) 239-1255 or write to her at Texas Natural Resource Conservation Commission, Office of Air Quality, New Source Review Permits Division (MC-162), P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,



Donald A. Duke, P.E.

Permit Engineer

Core Section

New Source Review Permits Division

DD/pl

cc: Mr. Marion Everhart, Air Program Manager, Beaumont

Project#: 65908 PrePerm: / / Group: CORE Permit #: M  
 Received: 09/22/1998 Reg6NOV: / / TechEngr: DON1 ProjType: VDRC  
 Fee Date: / / Date BO: / / (Don Duke) STDx1:  
 Fee Amt.: \$0 Bd-Ord#: - - NewJobs: 0 182(f): NO  
 PSD-TX #: <NONE>  
 Issued To: E.I. DUPONT DE NEMOURS & COMPANY ProjLink: 59892

<Primary Contact Information>

Name: Mr. Rich Haar Title: Senior Engineer  
 Building: Phone: ( ) -  
 Street: P.O. Box 3269 Fax: ( ) -  
 City, State, Zip: Beaumont, Texas, 77704-

<Project Information>

Unit: DUPONT BEAUMONT WORKS SIC: \_\_\_\_\_ Region: 10  
 Account: JE-0033-C Capacity: SCC: \_\_\_\_\_ County: JEFFERSON  
 UnitType: CapUnits: Lat: \_\_\_\_:\_\_\_\_:\_\_\_\_ City: BEAUMONT  
 Location: SH 347 Long: \_\_\_\_:\_\_\_\_:\_\_\_\_ CtyCo: JEFFERSON  
 Detail:

CORE Recd: 09/22/1998 ESOC: / / Deficient: / / RFC-SR: / /  
 CORE Engr: DON1/ ASOC: / / Tech.Comp: / / RFC-DSC: / /  
 AdminComp: / / ESOC: / / Comp.Ltr.: / / ED Post: / /  
 TransEngr: / / ASOC: / /

<Public Notice Required: ???>

<Public> Requested Disposed Code Date Notified: / /  
 Meeting: / / Date Published: / /  
 Hearing: / / Date PN/Sign/Cert: / /

<TONs/Yr Reduction> <NOX> <CO> <VOC> <PM> <SO2>

NSRP Reductions 0.0 0.0 0.0 0.0 0.0  
 VERP 766(A), 7(B): 0.0 0.0 0.0 0.0 0.0

Status: TRANSFERRED TO DON 5/7/99.

<Project Activity History>

No	Date	Code	Date	Code	TelCons	Mis Date	Mis Code
1	/ /		/ /		/ /	/ /	
2	/ /		/ /		/ /	/ /	
3	/ /		/ /		/ /	/ /	
4	/ /		/ /		/ /	/ /	
5	/ /		/ /		/ /	/ /	
6	/ /		/ /		/ /	/ /	
7	/ /		/ /		/ /	/ /	
8	/ /		/ /		/ /	/ /	
9	/ /		/ /		/ /	/ /	
10	/ /		/ /		/ /	/ /	

<Codes: E=Engineer, C=Company, O=Other, ?=Partial, \*=Complete>

NSPS Code:	N.A. County: YES	Non-PSD-Major: ???	<Local Programs>
NESHAP Code:	N.A.Net.Reg: ???	PSD Net. Req: ???	County: U
MACT Code: ???	N.A.Rev.Reg: ???	PSD Rev. Req: ???	City: ???

<Project Disposal>

Chief Sign: 05/13/1999 Eng: 233 Comp: 0 Other: 0  
 Date Issued: / / Code: C

Warn: NONE

Project#: 65908      Group: CORE      Permit #: M      STDX1/SP:  
Received: 09/22/1998 TechEngr: DON1      ProjType: VDRC      PSD-TX #: <NONE>  
IssuedTo: E.I. DUPONT DE NEMOURS & COMPANY      ProjLink: 59892  
Unit: DUPONT BEAUMONT WORKS      Account: JE-0033-C

Emission Rates: No Emission Rates found for this project.

Projects below are related by one or more of: [Link]

REC#	ENGR	PERMIT#	TYPE	COMPANY	UNIT	RECEIVED	DISPOSED	CODE
59892	RRC1	M	DERC	E.I. DUPONT	DUPONT	06/23/1998	08/27/1998	C

ERC  
COP9 / SMH

Robert J. Huston, *Chairman*  
R. B. "Ralph" Marquez, *Commissioner*  
John M. Baker, *Commissioner*  
Jeffrey A. Saitas, *Executive Director*



## TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

*Protecting Texas by Reducing and Preventing Pollution*

May 13, 1999

Mr. Rich Haar  
Senior Engineer  
E. I. Dupont De Nemours & Company  
P.O. Box 3269  
Beaumont, Texas 77704

Re: Administrative Review  
Discrete Emission Reduction Credits  
Dupont Beaumont Works  
Beaumont, Jefferson County  
Account ID No. JE-0033-C

Dear Mr. Haar:

This will acknowledge receipt of your letter dated June 26, 1998, and additional information received September 22, 1998, regarding the generation of Discrete Emission Reduction Credits (DERCs). We have determined that the information contained in your registration is complete. We regret the long delay in addressing this matter. The following credits will be deposited in the Texas Natural Resource Conservation Commission Emissions Registry:

Nitrogen Oxides 1540 tons

This review verifies that all information needed for credit review has been received. However, the DERCs' actual credit has not yet been verified. Upon submittal of a notice of intent to use, the credits will be assigned to a technical engineer who will review the reductions for creditability. At that time, the credits may be adjusted accordingly.

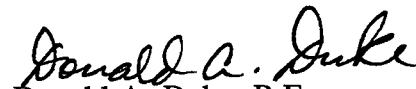
Thank you for your cooperation in this matter. If you have questions concerning the review or this notice, please contact me at (512) 239-1314 or write me at Texas Natural Resource Conservation Commission, Office of Air Quality, New Source Review Permits Division MC-162), P.O. Box 13087, Austin, Texas 7811-3087.

Mr. Rich Haar  
Page 2  
May 13, 1999

Re: Discrete Emission Reduction Credits

If you need further assistance regarding the banking program or future transactions, please call Ms. Susana Hildebrand at (512) 239-1255 or write her at Texas Natural Resource Conservation Commission, Office of Air Quality, New Source Review Permits Division (MC-162), P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,

A handwritten signature in cursive script that reads "Donald A. Duke".

Donald A. Duke, P.E.  
Permit Engineer  
Core Section  
New Source Review Permits Division

DD/jo

cc: Mr. Marion Everhart, Air Program Manager, Beaumont

June 1, 1999

Don,

I talked to Richard Haar of duPont and duPont had only wanted to claim the credits for the difference between 0.23 lb/mmbtu and 0.147 lb/mmbtu instead of the 0.10 lbs/mmbtu that they achieved. The difference between 0.147 and 0.10 is going to be sought as an ERC. Could you send them a letter correcting the amount of DERC registered based on the information in this fax?

Thank you,  
Susana

cc: Matt

Beaumont Works  
P. O. Box 3289 - Beaumont, TX 77704  
Delivery Address: Hwy. 347 South - Beaumont, TX 77705  
Fax: 409 / 727-9412  
Fax Operator: 409 / 727-9479

E. I. du Pont de Nemours & Co., Inc.

# Fax

To: Susana Hildebrand From: Rich Haar  
Fax: 512-239-4500 Date: 6/1/99  
Phone: \_\_\_\_\_ Pages: 2 (Including cover sheet)  
Re: Revised DERC's CC: \_\_\_\_\_

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

•Comments: I've revised the DERC spread sheet to  
reflect over control down to the upcoming NOx RACT  
level for process heaters of 0.15 lb NOx / MM BTU.  
Over control to 0.10 level will be applied to ERC's.  
The grand total of DERC's according to this  
revised calc is 1107 tons NOx

Thanks Rich Haar

"Confidentiality Note"

The documents accompanying this facsimile transmission contain information from DuPont, which is confidential and/or legally privileged. This information is intended only for the use of the individual or entity named on this transmission sheet. If you are not the intended recipient, you are hereby notified that any disclosure or the taking of any action in reliance on the contents of this facsimile information is strictly prohibited, and that the documents should be returned to DuPont immediately. In this regard, if you have received this facsimile in error, please notify us by telephone immediately so that we can arrange for the return of the original documents to us at no cost to you.



The Miracles of Science



## DERC CALCULATIONS - DUPONT BEAUMONT WORKS

PERIOD	BA	BER	B%	SA	SER	S%	DERC
1994 6,704,384	<del>1676096</del>	0.27	1	1938153	0.147	1	83.8
1995 6,704,384	<del>7764530</del>	0.23	1	7764530	0.147	1	322.2
1996 6,704,384	<del>7702603</del>	0.239	0.9604	7702603	0.147	0.9137	366.7
1997 6,704,384	<del>7030109</del>	0.239	0.9604	7030109	0.147	0.9137	334.7
TOTAL							1107.4 TONS

83

322

366

334

1105

NOTE: THESE REVISED CALCULATIONS ARE BASED ON MEETING THE NOX RACT LIMIT FOR  
PROCESS HTRS OF 0.15 LBS NOX/MM BTU. OVER CONTROL BEYOND NOX RACT WILL BE  
APPLIED TO ERC'S

905

905

FILE/DON

Robert J. Huston, *Chairman*  
R. B. "Ralph" Marquez, *Commissioner*  
John M. Baker, *Commissioner*  
Jeffrey A. Saitas, *Executive Director*



## TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

*Protecting Texas by Reducing and Preventing Pollution*

April 30, 1999

Mr. Richard H. Haar  
Senior Engineer  
E.I. Dupont de Nemours and Company  
P.O. Box 3269  
Beaumont, Texas 77704

Re: Administrative Review  
Discrete Emission Reduction Credits (DERCs)  
DuPont Beaumont Works  
Beaumont, Jefferson County  
Account ID No. JE-0033-C

Dear Mr. Haar:

This will acknowledge receipt of your letter dated March 30, 1998, regarding the generation of DERCs. We have determined that the information contained in your registration is complete. The following credits will be deposited in the Texas Natural Resource Conservation Commission Emissions Registry:

Nitrogen Oxides 332 tons

20398 - 20729

This review verifies that all information needed for credit review has been received. However, the DERCs' actual credit has not yet been verified. Upon submittal of a notice of intent to use, the credits will be assigned to a technical engineer who will review the reductions for creditability. At that time, the credits may be adjusted accordingly.

Mr. Richard H. Haar

Page 2

April 30, 1999

Re: Emission Reduction Credits

Thank you for your cooperation in this matter. If you have questions concerning the review or this notice, please contact me at (512) 239-1314 or write me at Texas Natural Resource Conservation Commission, Office of Air Quality, New Source Review Permits Division (MC-162), P.O. Box 13087, Austin, Texas 78711-3087. If you need further assistance regarding the banking program or future transactions, please call Ms. Susana Hildebrand at (512) 239-1255 or write her at Texas Natural Resource Conservation Commission, Office of Air Quality, New Source Review Permits Division (MC-162), P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,

A handwritten signature in cursive script, appearing to read "Susana Hildebrand for".

Donald A. Duke, P.E.

Permit Engineer

Core Section

New Source Review Permits Division

DD/gg

Enclosures

cc: Mr. Marion Everhart, Air Program Manager, Beaumont