

## 07/22/2016 ----- EBTP IMS- PROJECT RECORD -----

PROJECT#: 410221 STATUS: P  
RECEIVED: 05/26/2015 PROJTYPE: BDIU

DISP CODE: C ✓  
ISSUED DT:  
SUP-DISP DATE: 7.25.2016

## STAFF ASSIGNED TO PROJECT:

RUANO, MELISSA

## PROJECT NOTES:

ORIGINAL DEC-2 WAS RECEIVED ON MAY 26, 2015 TO SET ASIDE NOX DERCS FOR THE PURPOSE OF SATISFYING THE NNSR NOX OFFSET REQUIREMENT FOR AND ENGINE, MEOHENG FOR THE USE PERIOD OF 6/22/2015 THROUGH 6/21/2016.

PER THE TECHNICAL CONTACT, RON SEARS, THE COMPANY EXPECTS THAT FIN MEOHENG WILL START FIRST FOR TESTING PURPOSES. THE REST OF THE FACILITIES THAT WILL BE OFFSET (SPECIFIED IN NNSR PERMIT 103626) WILL START OPERATION AT A LATER DATE.

PER DISCUSSION W/ APD ON 6/9/2015, SINCE THE PERMIT SPECIAL CONDITIONS DO NOT SPECIFY THAT OPERATION OF FINS MEOHENG AND MEIHFLR WILL BE STAGGARED, THE FULL AMOUNT OF DERCS TO BE USED AS OFFSETS FOR BOTH UNITS SHOULD BE PROVIDED.

PROJECT ON-HOLD WHILE PENDING AMENDMENT TO ORIGINAL REQUEST. COMPANY SUBMITTED A SUPPLEMENTAL FORM DEC-2 THAT WAS RECEIVED ON JULY 30, 2015. THE REVISED USE PERIOD IS SEPTEMBER 1, 2015 THROUGH AUGUST 31, 2016.

PER APPLICATION, A TOTAL OF 26.6 TONS OF NOX DERCS WILL BE USED TO SATISFY THE NOX OFFSET REQUIREMENT FOR FINS MEOHENG AND MEOHFLR. THIS AMT. WAS UPDATED TO 26.7 BY THE PROJECT MANAGER TO ACCOUNT FOR ROUNDING & TO MATCH THE PERMIT SPECIAL CONDITIONS.

PER APPLICATION, 21.9 TONS OF NOX DERCS WILL BE USED TO SATISFY PART OF THE VOC OFFSET REQUIREMENT FOR THE SITE AT A MODELING RATIO OF 1:1. THIS IP USE WAS APPROVED BY BOTH TCEQ AND EPA. COPIES OF THE APPROVAL LETTERS ARE ON FILE W/ THIS PROJECT.

THE PERMIT SPECIAL CONDITIONS SPECIFY THAT DERC CERTIFICATE D3022 WILL BE USED FOR BOTH THE NOX OFFSET OF MEOHFLR AND MEOHENG AND THE IP USE OF NOX FOR VOC. CERTIFICATE D3119, A DESCENDENT OF D3022, WILL BE USED FOR THIS REQUEST.

PER PHONE DISCUSSION W/ MR. SEARS ON 9/29/2015, THE COMPANY TRIED TO START FIN MEOHENG IN JUNE, BUT HAVE ENCOUNTERED MULTIPLE SET-BACKS. THE REMAINING FINS WERE SUPPOSED TO START ON SEPTEMBER 1, BUT TECHNICAL COMPLICATIONS HAVE PREVENTED FULL START.

10/22/2015: EMAIL RECEIVED FROM RON SEARS AT CELANESE. PER EMAIL, THE NEW METHANOL UNIT OFFICIALLY STARTED ON OCTOBER 8, 2015.

12/23/2015 - AFTER DISCUSSION WITH LINDLEY AND REVIEW OF THE PERMIT CONDITIONS, IT WAS DETERMINED THAT THE COMPANY SHOULD USE 30 YEARS OF DERCS TO SATISFY OFFSET REQUIREMENT. COMPANY WILL BE ASKED TO SUBMIT REVISED APPLICATION FOR 30-YEAR PERIOD.

12/23/2015 - PROJECT ON HOLD FOR HIGHER PRIORITY PROJECTS AND DATABASE UPDATES.

5/26/2016 - I WAS CONTACTED BY THE COMPANY AND PERMIT ENGINEER REGARDING TENTATIVE AMENDMENTS TO PERMIT 103626. I REQUESTED VIA EMAIL THAT THE COMPANY SUBMIT A DERC USE APPLICATION TO SATISFY 30 YEARS OF OFFSETS.

7/13/2016 - USE APPLICATION RECEIVED (411263). BOTH PROJECTS WILL BE COMPLETED TOGETHER TO SATISFY 30 YEAR OFFSET REQUIREMENT.

## PROJECT TRANSACTIONS

## COMPANY DATA

COMPANY NAME: FAIRWAY METHANOL LLC  
CUSTOMER REGISTRY ID: CN604543223

## PORTFOLIO DATA

NUMBER: P3678 NAME: FAIRWAY - CELANESE CLEAR LAKE PLANT- RN100227016

## SITE DATA

ACCOUNT: HG0126Q

REG ENTITY ID: RN100227016

SITE NAME: CELANESE CLEAR LAKE PLANT

COUNTY: HARRIS

NEAREST CITY: PASADENA

LOCATION: 1000 ACRE TRACT IN BAYPORT INDUSTRIAL DISTRICT

## CONTACT DATA

NAME: TOM KELLY

TITLE: CHIEF EXECUTIVE OFFICER

STREET: 222 WEST COLINAS BOULEVARD, SUTE 900 NORTH CITY/STATE, ZIP: IRVING, TX , 75039-5403

PHONE: 972-443-4609 ext 0

Email: tom.kelly@celanese.com

## TRANSACTION DATA

TRANSACTION TYPE: DERC\_INTEN

DATE ENTERED: 2015-06-09 00:00:00.0  
CONTAMINATE: NOX  
ALLOWANCE0

DELETED DATE: EFFECTIVE YEAR:  
TONS: 1457.40 DOLLARS: 0  
CERTIFICATE NO.: D3119 COUNTY : HARRIS

## TRANSACTION DATA

TRANSACTION TYPE: DERC\_RET  
DATE ENTERED: 2015-06-09 00:00:00.0  
CONTAMINATE: NOX  
ALLOWANCE0

DELETED DATE: EFFECTIVE YEAR:  
TONS: 106.70 DOLLARS: 0  
CERTIFICATE NO.: D3257 COUNTY : HARRIS

## TRACKING ACTIVITIES

PROJECT SUBMITTED : 05/23/2015 PM RECEIVED DATE : 05/26/2015  
PROJECT HOLD : .06/09/2015 10/22/2015  
PROJECT HOLD : 12/23/2015 05/26/2016  
PROJECT HOLD : 05/26/2016 07/13/2016 PROJECT COMPLETED :

D3119  
D3257

## DISCRETE EMISSION CREDIT USE TECHNICAL REVIEW

Project Nos.:	410221 and 411263	Customer Reference No.:	CN604543223
Project Type:	BDIU and BUSE	Regulated Entity No.:	RN100227016
Company:	Fairway Methanol, LLC	Site Name:	Celanese Clear Lake Plant
City:	Pasadena	County:	Harris
Project Manager:	Ms. Melissa Ruano	Portfolio Number:	P3678

### PROJECT OVERVIEW

Fairway Methanol, LLC (Fairway) submitted a *Notice of Intent to Use Discrete Emission Credits*, received on May 26, 2015, a supplemental notice of intent application, received on July 30, 2015, and a *Notice of Use of Discrete Emission Credits* application, received on July 13, 2016. Through these application, Fairway is requesting to use nitrogen oxides (NO<sub>x</sub>) discrete emission reduction credits (DERCs) to offset emission increases at the Celanese Clear Lake Plant as specified in nonattainment new source review (NSR) permit number 103626. The use period will be a 30-year period (October 9, 2015 through October 9, 2045).

### DERC USE

On September 16, 2013, the TCEQ issued NNSR permit 103626 to Celanese, Ltd. for the construction and operation of a new Methanol Unit at the Clear Lake Plant. The permit was later transferred to Fairway Methanol, LLC, per a request submitted to the TCEQ on March 25, 2014.

According to permit special condition number 31(B), the company is required to use NO<sub>x</sub> DERCs from DERC certificate D-3022 to cover NO<sub>x</sub> emission increases from an emergency diesel engine, emission point number (EPN) MEOHENG, and a flare, EPN MEOHFLR, at a ratio of 1.3 to 1. A total of 800.4 tons of DERCs will be used over a 30-year period. In addition, special condition 31(C) requires the use of additional NO<sub>x</sub> DERCs from certificate D-3022 to cover a portion of the project's volatile organic compound (VOC) offset requirement. This inter-pollutant use of NO<sub>x</sub> DERCs for VOC offsets was approved by the TCEQ on April 25, 2013 and the U.S. Environmental Protection Agency (EPA) on May 1, 2013 at an inter-precursor ratio of 1:1. A total of 657.0 tons of DERCs will be used for a 30-year period. Copies of the TCEQ and EPA approval letters are on file with these projects.

Fairway had expected to start operation of FIN MEOHENG on June 22, 2015. The remaining facilities were expected to start operation on September 1, 2015. For this reason, Fairway initially provided just the offsets for FIN MEOHENG with a use period of June 22, 2015 through June 21, 2016. However, from discussion with staff in the TCEQ Air Permits Division (APD), it was determined that the permit conditions do not authorize staggered start of operation and that the full amount of DERCs for offsets would need to be provided up-front. Fairway was informed of this determination and submitted the supplemental application on July 30, 2015. The use period on this submission was listed as September 1, 2015 through October 31, 2016. On August 21, 2015, the technical contact submitted an electronic copy of a notification of initial start-up that was submitted to the TCEQ Region 12 office advising that the Methanol Unit was scheduled to begin operation in September 2015.

On September 29, 2015, the technical contact for Fairway indicated by phone that multiple equipment malfunctions had delayed the start of operation of the new facilities. On October 22, 2015, the technical contact emailed a copy of the notification of official startup that was submitted to the EPA Region 6 office. Per the notification, the initial startup date of the Methanol Unit was October 8, 2015. Based on this notification, as well as the requirements under 30 Texas Administrative Code (TAC) §1.7 (Computation of Time), the start date of the DERC use period was assessed to be October 9, 2015.

The *Notice of Intent to Use* applications were submitted to satisfy the offset requirements for the first year of operation. After further discussion with APD technical specialists and the Emissions Banking and Trading team leader, Fairway was advised that they would need to use the full 30 years of DERCs as specified by permit 103626. On July 13, 2016, Fairway submitted the *Notice of Use of Discrete Emission Credits* for the remaining 29 years of operation. The use application, submitted on July 9, 2016 and received July 13, 2016, will be processed in conjunction with the intent to complete the full 30-year use of DERCs as specified in the conditions of permit 103626.

Certificate D-3022 was purchased by Celanese, Ltd., through trade project 408261. Due to the aforementioned permit transfer, the DERCs on certificate D-3022 were moved to Fairway's compliance account through trade project 409302. This trade project produced new certificate number D-3119. A total of 1,457.4 tons of DERCs from certificate D-3119 will be used. The remaining 106.7 tons of DERCs will be returned to Fairway on new certificate D-3257. In accordance with 30 TAC §101.376(b)(2)(D), Fairway must submit an additional application to use DERCs at least 90 days before October 9, 2045 to continue operation.

Certificates used.....	D-3119 (previously D-3022)
Pollutant.....	NO <sub>x</sub>
Amount.....	1,457.4 tons
Use Period.....	10/9/2015 through 10/9/2045
Reason for Use.....	NSR Offsets

## DERC USE CALCULATION METHOD

The number of DERCs needed to satisfy the emission increases at the Celanese Clear Lake Plant is provided in special conditions 31(B) and (C) of NSR permit 103626.

According to condition 31(B), the permit holder must provide total offsets equivalent to 26.68 tpy of NO<sub>x</sub> to offset the NO<sub>x</sub> emission increase from EPNs MEOHFLR and MEOHENG at a ratio of 1.3:1. The condition further indicates that NO<sub>x</sub> DERCs will be used to cover the 26.7 tpy offset requirement with a total of 800.4 tpy of NO<sub>x</sub> DERCs being used over a 30-year period. From review, of these conditions, it appears that the intent was for 800.4 tons of DERCs to be used to provide offsets equivalent to 26.68 tpy for 30 years (i.e., 26.68 tpy x 30 years = 800.4 tons). APD has been notified of the typographical errors for correction in a forthcoming amendment to permit 103626.

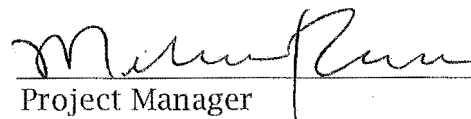
Condition 31(C) requires NO<sub>x</sub> DERCs to be used to offset 21.9 tpy of VOC emissions. This inter-pollutant use was approved by both the TCEQ and the EPA as required by 30 TAC §101.372(f)(7) at an inter-precursor ratio of 1:1. A total of 657.0 tons of NO<sub>x</sub> DERCs will be used to satisfy the offset requirement for 30 years (21.9 tpy x 30 years = 657.0 tons).

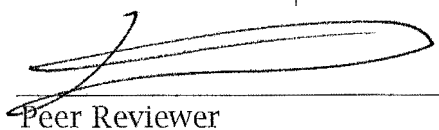
The total amount of NO<sub>x</sub> DERCs from certificate D-3119 needed to satisfy this use request is as follows:

800.4 tons + 657.0 tons = 1,457.4 tons

### CONCLUSION

Fairway has submitted the applications required to use NO<sub>x</sub> DERCs to satisfy the NSR offset requirements specified in permit 103626 for the period of October 9, 2015 through October 9, 2045. To continue operation, Fairway will be required to submit an additional application 90 days prior to October 9, 2045. The remaining 106.7 tons of DERCs from certificate D-3119 will be returned to Fairway on certificate D-3257.

 8/2/16  
Project Manager Date

 8.3.2016  
Peer Reviewer Date

 8/3/16  
Work Leader Date



**Form DEC-2 (Page 1)**  
**Notice of Intent to Use Discrete Emission Credits**  
**(Title 30 Texas Administrative Code § 101.370 - § 101.379)**

<b>I. Company Identifying Information</b>			
A. Company Name: Fairway Methanol LLC			
Mailing Address: 222 W. Las Colinas Blvd., Suite 900 North			
City: Irving	State: TX	Zip Code: 75039	
Telephone: 972-443-4609		Fax:	
B. TCEQ Customer Number (CN): 604543223			
C. Site Name: Fairway Methanol LLC			
Street Address (If no street address, give driving directions to site) 9502 Bayport Blvd.			
Nearest City: Pasadena	Zip Code: 77507	County: Harris	
D. TCEQ Regulated Entity Number (RN): 100227016			
E. TCEQ Air Account Number: (if applicable) HG0126Q			
F. Primary SIC: 2869		Air Permit Number: 103626/N164/PSDTX1296	
<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.) : Ronald Sears			
Technical Contact Title: Environmental Engineer			
Mailing Address: P.O. Box 58190			
City: Houston	State: TX	Zip Code: 77258-8190	
Telephone: 281-474-6178	Fax:	E-mail: Ronald.Sears@celanese.com	
<b>III. Company Contact Identifying Information (If different from Technical Contact)</b>			
A. Company Contact Name: ( <input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.) : Tom Kelly			
Company Contact Title: Chief Executive Officer			
Mailing Address: 222 W. Colinas Blvd., Suite 900 North			
City: Irving	State: TX	Zip Code: 75039	
Telephone: 972-443-4609	Fax:	E-mail: Tom.Kelly@celanese.com	
<b>IV. Mass Emission Cap and Trade Program (MECT)</b>			
Is the DERC use for compliance with 30 TAC Chapter 101 Subchapter H, Division 3? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
Year DERC Generated: _____ Year of Use: _____ Ratio of DERC to Allowance: _____ to _____			
Note: If DERC use is to comply with MECT then go to Section IX			
<b>V. Intended Use Period</b> 10/9/2015 10/8/2016 (MR) (*)			
Intended Use Start Date: <u>09/11/2015</u>		Intended Use End Date: <u>08/31/2016</u>	

TCEQ 10392 (Revised 12/07) Form DEC-2

This form is for use by facilities subject to air quality permit requirements and may be revised periodically.

⊗ updated based on  
 initial start of operation  
 date (10/8/2015)

This is the 2nd intent  
 application, rec'd 7/30/15.

Page 1 of 5

Per company, this is supplement  
 to the 5/26/15 submission (MR)



**Form DEC-2 (Page 2)**  
**Notice of Intent to Use Discrete Emission Credits**  
**(Title 30 Texas Administrative Code § 101.370 - § 101.379)**

**VI. State and Federal Requirements**

Applicable State and Federal requirements that the DERCs will be used for compliance:

**VII. Most Stringent Emission Rate**

Describe basis for most stringent allowable emission rate:

☒ Permit 103626, N164, PSDTX1296 ☐ RACT \_\_\_\_\_ ☐ Other: \_\_\_\_\_

Notes:

**VIII. Protocol**

Protocol used to calculate DERC:

Note: Attach the actual calculations that were used to determine the amounts of DERCs needed to this form

See attachments for calculations

Continue to Section IX (next page)



**Form DEC-2 (Page 3)**  
**Notice of Intent to Use Discrete Emission Credits**  
**(Title 30 Texas Administrative Code § 101.370 - § 101.379)**

IX. Tons of DERCS Required									
Emission Point No.	FIN	Air Contaminant	Calculation of DERCS						
			Expected Activity (units)	Expected Emission Rate (units)	Expected Total Emissions (tons)	Regulated Activity (units)	Regulated Emission Rate (units)	Regulated Total Emissions (tons)	DERCs (tons)
MEOHFLR	MEOHFLR	NOx	638,944 MMBtu/yr	0.0641 lb/MMBtu	20.48				20.48
MEOHENG	MEOHENG	NOx						0.04 per 3/26/15 ←	Previously submitted
REFORM	REFORM	NOx						Submission (MR)	N/A (offset with NOx allowances)
								<b>Total:</b>	20.48 20.52





**Form DEC-2 (Page 3)**  
**Notice of Intent to Use Discrete Emission Credits**  
**(Title 30 Texas Administrative Code § 101.370 - § 101.379)**

<b>IX. Tons of DERCS Required</b>									
<b>Emission Point No.</b>	<b>FIN</b>	<b>Air Contaminant</b>	<b>Calculation of DERCs</b>						
			<b>Expected Activity (units)</b>	<b>Expected Emission Rate (units)</b>	<b>Expected Total Emissions (tons)</b>	<b>Regulated Activity (units)</b>	<b>Regulated Emission Rate (units)</b>	<b>Regulated Total Emissions (tons)</b>	<b>DERCs (tons)</b>
MEOHFUG	MEOHFUG	VOC (as NOx)	8,760 hrs/yr	0.86 lb/hr	3.76				3.76
MEOHFLR	MEOHFLR	VOC (as NOx)	N/A	N/A	2.37				2.37
MEOHANALZ	MEOHANALZ	VOC (as NOx)	8,760 hrs/yr	0.14 lb/hr	0.61				0.61
REFORM	REFORM	VOC (as NOx)	71,494 MMscf/yr	5 ppmvd	23.88				23.88
MEOHMT	MEOHMT	VOC (as NOx)	8,760 hrs/yr	0.83 lb/hr	3.64				3.64
MEOHMSS	MEOHMSS	VOC (as NOx)	N/A	N/A	0.44				0.44
T9801ST or T9801TEMP	T9801ST or T9801TEMP	VOC (as NOx)	693.17 tpy	99.5% DRE	3.47 tpy (total emissions) -1.69 tpy (baseline/previous emissions)				1.78
MEOHENG	MEOHENG	NOx							0.04 (addressed with ERCs)
								<b>Total:</b>	<b>36.53</b>

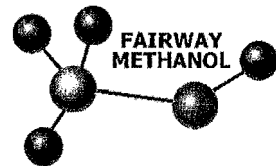


**Form DEC-2 (Page 4)**  
**Notice of Intent to Use Discrete Emission Credits**  
**(Title 30 Texas Administrative Code § 101.370 - § 101.379)**

<b>X. Total DERCS Required for Use (round up to the nearest tenth of a ton)</b>					
Tons of DERCS required (from Sect. VII.)	CO: _____	NO <sub>x</sub> : <u>20.5</u>	PM <sub>10</sub> : _____	SO <sub>2</sub> : _____	VOC: <u>36.5</u>
Offset Ratio (if required)	CO: _____	NO <sub>x</sub> : <u>6.1<sup>2</sup></u>	PM <sub>10</sub> : _____	SO <sub>2</sub> : _____	VOC: <u>11.0</u>
Environmental Contribution (+ 10%)	CO: _____	NO <sub>x</sub> : _____	PM <sub>10</sub> : _____	SO <sub>2</sub> : _____	VOC: _____
Compliance Margin (+ 5%) (If DERC use requires > 10 tons)	CO: _____	NO <sub>x</sub> : _____	PM <sub>10</sub> : _____	SO <sub>2</sub> : _____	VOC: _____
<b>Total DERCS</b>	CO: _____	NO <sub>x</sub> : <u>26.67*</u>	PM <sub>10</sub> : _____	SO <sub>2</sub> : _____	VOC: <u>47.5</u> Minus 25.6 ERCS <b>Total VOC: <u>21.9</u></b> **
<b>XI. DERC Information</b>					
Name of the DERC Generator: <u>NRG</u>					
DERC Generator Regulated Entity Number: <u>RN00888312</u>					
Certificate number of the DERCS acquired or to be acquired: <u>D-3119</u>					
Date on which the DERCS were acquired or will be acquired: <u>06/23/2014</u>					
Note: The certificate number is assigned by the TCEQ					
<b>XII. Certification by Responsible Official</b>					
I, <u>Tom Kelly</u> , hereby certify, to the best of my knowledge and belief, that this application is correct and the use strategy claimed on this notice has met the requirements of all applicable state and federal rules and regulations. I further state that to the best of my knowledge and belief the information in this certification is not in any way in violation of 30 TAC, Subchapter H, Division 4, §101.370-101.379 or any applicable air quality rule or regulation of the Texas Commission on Environmental Quality and that intentionally or knowingly making or causing to be made false material statements or representations in this certification is a CRIMINAL OFFENSE subject to criminal penalties. I hereby also waive the Federal statute of limitations defense in regards to the generation and use of discrete emission credits.					
Signature <u>Th...</u>		Signature Date <u>7/23/15</u>			
Title <u>Chief Executive Officer</u>					

\* 26.7 is the tpy value specified in special condition #31.

\*\* 21.9 tpy is the offset amt. specified in condition #31. Company will offset VOC w/ NOx DERCS @ 1:1 ratio.



Fairway Methanol LLC  
9502 Bayport Blvd.  
Pasadena, TX 77507-1498

July 27, 2015  
RS-072715-1

Certified Mail – Article Number: 7013 2250 0000 5644 1000

Ms. Melissa Ruano  
Texas Commission on Environmental Quality  
Emission Banking and Trading Program, MC-206  
P.O. Box 13087  
Austin, Texas 78711-3087

**Received**  
**JUL 30 2015**  
**Air Quality Division**

Re: Supplement to Notice of Intent to Use Discrete Emission Credits  
Fairway Methanol LLC  
Permits 103626, N164, PSDTX1296  
Celanese Ltd., Clear Lake Plant  
Harris County, Pasadena, Texas  
RN100227016; CN604543223

Dear Ms. Ruano:

On September 16, 2013, TCEQ issued New Source Review (NSR) Permits 103626/PSDTX1296/N164, for the construction and operation of a new Methanol Unit at the Clear Lake Plant in Pasadena, Texas, to Celanese Ltd. that requires the facility to obtain and use emission credits to offset new emissions. The NSR permit has been transferred to Fairway Methanol LLC (Fairway), per a request submitted to the TCEQ on March 25, 2014 (TCEQ Project No. 207881), as well as associated Discrete Emission Reduction Credits (DERCs). Fairway submitted the Notice of Intent to Use Discrete Emission Credits NOx offsets that address the NOx emissions from the engine (EPN: MEOHENG) for 0.1 tons of Discrete Emission Credits on May 26, 2015 (TCEQ Project No. 410441). This submittal is a supplement to the initial DEC-2 submission.

Enclosed is a supplemental Form DEC-2 (Notice of Intent to Use Discrete Emission Credits) to offset the additional 26.6 tons of NOx emissions as required by Special Condition 31, Paragraph B and to offset 21.9 tons of VOC as required by Special Condition 31, Paragraph C for the startup of the remaining Methanol Unit emission sources. Fairway has an expected startup date of the remaining equipment of September 1, 2015.


Emission Reduction Credits that address the VOC emissions from the engine as well as some of the VOC emissions from other equipment have previously been submitted for 25.6 tons of VOC. In addition, there is an amendment currently in progress (TCEQ Project: 219066) that may require future revision of the allowance quantity. Please note that the current fugitive value found in the MAERT has an error (EPN: MEOHFUG); however the correct emission value is listed in the Special Conditions, and is used in the attached update to DEC-2.

July 27, 2015  
TCEQ Emission Banking and Trading Program

Please note that confidential information that has been included in Attachment 1. (X)

Should you have any questions concerning this submittal, please contact me at (281) 474-6178 or at Ronald.Sears@celanese.com. Thank you for your assistance with this application of using DERCs.

Sincerely,



Ronald Sears  
Environmental Engineer  
Environmental, Health, and Safety Section

Enclosure: Form DEC-2 (Notice of Intent to Use Discrete Emission Credits)

Attachment 1: Emission Calculations

cc: Certified Mail – Article Number: 7013 2250 0000 5644 1017  
Air Section Manager  
TCEQ Region 12, Houston  
5425 Polk Street, Suite H  
Houston, Texas 77023-1452

(X) per 30 TAC §101.372(i) information cannot be submitted as confidential. Company technical contact and AAR ~~was~~ were notified that these documents would be removed and destroyed. See 7/22/2016 email. (MR)

410221

1st Application  
Received (MR)

Form DEC-2 (Page 1)  
Notice of Intent to Use Discrete Emission Credits  
(Title 30 Texas Administrative Code § 101.370 - 8)

MAY 26 2015

Air Quality Division

<b>I. Company Identifying Information</b>			
A. Company Name: Fairway Methanol, LLC ✓			
Mailing Address: 222 W. Las Colinas Blvd., Suite 900 North			
City: Irving	State: Texas	Zip Code: 75039	
Telephone: 972-443-4609		Fax:	
B. TCEQ Customer Number (CN): 604543223 ✓			
C. Site Name: <del>Fairway Methanol LLC</del> Celanese Clear Lake Plant			
Street Address (If no street address, give driving directions to site) 9502 Bayport Blvd. ✓			
Nearest City: Pasadena ✓	Zip Code: 77507 ✓	County: Harris ✓	
D. TCEQ Regulated Entity Number (RN): 100227016 ✓			
E. TCEQ Air Account Number: (if applicable)		HG 0126 Q P 3678	
F. Primary SIC: 2869		Air Permit Number: 103626/N164/PSDTX1296	
<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.) : Ronald Sears			
Technical Contact Title: Environmental Engineer			
Mailing Address: 9502 Bayport Blvd.			
City: Pasadena	State: TX	Zip Code: 77507	
Telephone: 281-474-6178	Fax:	E-mail: Ronald.Sears@celanese.com	
<b>III. Company Contact Identifying Information (If different from Technical Contact)</b>			
A. Company Contact Name: ( <input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/> Ms. <input type="checkbox"/> Dr.) : Tom Kelly			
Company Contact Title: Chief Executive Officer			
Mailing Address: 222 W. Las Colinas Blvd., Suite 900 North			
City: Irving	State: TX	Zip Code: 75039	
Telephone: 972-443-4609	Fax:	E-mail: tom.kelly@celanese.com	
<b>IV. Mass Emission Cap and Trade Program (MECT)</b>			
Is the DERC use for compliance with 30 TAC Chapter 101 Subchapter H, Division 3? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
Year DERC Generated: _____ Year of Use: _____ Ratio of DERC to Allowance: _____ to _____			
Note: If DERC use is to comply with MECT then go to Section IX			
<b>V. Intended Use Period</b>			
Intended Use Start Date: 6/22/2015		Intended Use End Date: 06/21/2016	

This is the first (original) DEC-2 submission. A second application was received on July 30, 2015 (MR)



**Form DEC-2 (Page 2)**  
**Notice of Intent to Use Discrete Emission Credits**  
**(Title 30 Texas Administrative Code § 101.370 - § 101.379)**

**VI. State and Federal Requirements**

Applicable State and Federal requirements that the DERCs will be used for compliance:  
NSR Permit 103626/N164/PSDTX1296, 30 TAC §101.376(b)(2)

**VII. Most Stringent Emission Rate**

Describe basis for most stringent allowable emission rate:

☒ Permit 103626, N164, PSDTX1296 ☐ RACT \_\_\_\_\_ ☐ Other: \_\_\_\_\_

*Notes: DERCs are being used to provide NOx offsets for Non-attainment permit.*

**VIII. Protocol**

Protocol used to calculate DERC:

Note: Attach the actual calculations that were used to determine the amounts of DERCs needed to this form

DERCS based on permitted emissions.

Permitted NOx = 0.04 tpy

Offset Ratio = 1.3

Required DERCS -- Permitted NOx \* Offset Ratio

Required DERC = 0.04 tpy \* 1.3 = 0.05 tpy

Continue to Section IX (next page)



**Form DEC-2 (Page 3)**  
**Notice of Intent to Use Discrete Emission Credits**  
**(Title 30 Texas Administrative Code § 101.370 - § 101.379)**

<b>IX. Tons of DERCS Required</b>									
Emission Point No.	FIN	Air Contaminant	Calculation of DERCS						
			Expected Activity (units)	Expected Emission Rate (lbs/hr)	Expected Total Emissions (tons)	Regulated Activity (units)	Regulated Emission Rate (units)	Regulated Total Emissions (tons)	DERCs (tons)
MEOHENG		NOx	4 g/(Kw-hr)	100 hr @ 100 Kw	0.04				0.04
								<b>Total:</b>	0.04



**Form DEC-2 (Page 4)**  
**Notice of Intent to Use Discrete Emission Credits**  
**(Title 30 Texas Administrative Code § 101.370 - § 101.379)**

**X. Total DERCS Required for Use (round up to the nearest tenth of a ton)**

Tons of DERCS required (from Sect. VII.)	CO: <u>NA</u>	NO <sub>x</sub> : <u>0.04</u>	PM <sub>10</sub> : <u>NA</u>	SO <sub>2</sub> : <u>NA</u>	VOC: <u>NA</u>
Offset Ratio (if required)	CO: <u>NA</u>	NO <sub>x</sub> : <u>1.3</u>	PM <sub>10</sub> : <u>NA</u>	SO <sub>2</sub> : <u>NA</u>	VOC: <u>NA</u>
Environmental Contribution (+ 10%)	CO: <u>NA</u>	NO <sub>x</sub> : <u>NA</u>	PM <sub>10</sub> : <u>NA</u>	SO <sub>2</sub> : <u>NA</u>	VOC: <u>NA</u>
Compliance Margin (+ 5%) (If DERC use requires >10 tons)	CO: <u>NA</u>	NO <sub>x</sub> : <u>NA</u>	PM <sub>10</sub> : <u>NA</u>	SO <sub>2</sub> : <u>NA</u>	VOC: <u>NA</u>
<b>Total DERCS</b>	CO: <u>NA</u>	NO <sub>x</sub> : <u>0.1</u>	PM <sub>10</sub> : <u>NA</u>	SO <sub>2</sub> : <u>NA</u>	VOC: <u>NA</u>

**XI. DERC Information**

Name of the DERC Generator: NRG

DERC Generator Regulated Entity Number: RN100888312

Certificate number of the DERCS acquired or to be acquired: D-3119

Date on which the DERCS were acquired or will be acquired: 06/23/2014

Note: The certificate number is assigned by the TCEQ

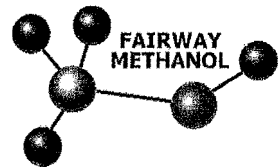
**XII. Certification by Responsible Official**

I, Tom Kelly, hereby certify, to the best of my knowledge and belief, that this application is correct and the use strategy claimed on this notice has met the requirements of all applicable state and federal rules and regulations. I further state that to the best of my knowledge and belief the information in this certification is not in any way in violation of 30 TAC, Subchapter H, Division 4, §101.370-101.379 or any applicable air quality rule or regulation of the Texas Commission on Environmental Quality and that intentionally or knowingly making or causing to be made false material statements or representations in this certification is a CRIMINAL OFFENSE subject to criminal penalties. I hereby also waive the Federal statute of limitations defense in regards to the generation and use of discrete emission credits.

Signature  Signature Date 5/1/15

Title Chief Executive Officer





Fairway Methanol LLC  
9502 Bayport Blvd.  
Pasadena, TX 77507-1498

May 21, 2015  
RJS-052115

Certified Mail – Article Number: 7013 2250 0000 5644 0980

Texas Commission on Environmental Quality  
Emission Banking and Trading Program, MC-206  
P.O. Box 13087  
Austin, Texas 78711-3087

Re: Submittal of Form DEC-2  
Fairway Methanol LLC  
NSR Permits 103626, N164, PSDTX1296  
Celanese Ltd. - Clear Lake Plant  
Harris County, Pasadena, Texas  
RN100227016; CN604543223

Dear Ms. Ruano:

On September 16, 2013, TCEQ issued New Source Review (NSR) Permits 103626/PSDTX1296/N164 for the construction and operation of a new methanol unit at the Celanese Ltd. - Clear Lake Plant, in Pasadena, Texas, to Celanese Ltd. The NSR permits were transferred to Fairway Methanol LLC (Fairway), per a request submitted to the TCEQ on March 25, 2014 (TCEQ Project No. 207881). In addition, the Discrete Emission Reduction Credits (DERCs) associated with the NSR permits were also transferred to Fairway. In accordance with Special Condition 31.C of NSR Permit 103626 and 30 TAC §101.376(d)(1)(B), Fairway is submitting an application to use the DERCs for NOx offsets at least 45 days prior to operation of the emergency generator diesel engine.

Enclosed is a completed DEC-2 (Notice of Intent to Use Discrete Emission Credits) to offset the 0.04 tons of NOx emissions, as required by Special Condition 31.C. Fairway previously submitted the Intent to Use Emission Reduction Credits for VOC offsets that address the VOC emissions from the engine.

Should you have any questions concerning this submittal, please contact Ronald Sears at (281) 474-6178 or at [Ronald.Sears@celanese.com](mailto:Ronald.Sears@celanese.com). Thank you for your time and consideration regarding this matter.

Sincerely,



Ronald J. Sears  
Environmental Engineer

May 21, 2015

TCEQ Emission Banking and Trading Program

Page 2 of 2

Enclosure: Form DEC-2 (Notice of Intent to Use Discrete Emission Credits)

cc: Certified Mail – Article Number: 7013 2250 0000 5644 0959

Air Section Manager

TCEQ Region 12, Houston

5425 Polk Street, Suite H

Houston, Texas 77023-1452

Bryan W. Shaw, Ph.D., *Chairman*  
Carlos Rubinstein, *Commissioner*  
Toby Baker, *Commissioner*  
Zak Covar, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

April 25, 2013

Mr. Paresh J. Bhakta  
Site Director  
Celanese, Ltd.  
PO Box 58190  
Houston, Texas 77258-8190

Re: Request for Discrete Emission Credit Use Approval  
Proposed Celanese Methanol Technology Project  
Celanese Clear Lake Plant

Dear Mr. Bhakta:

This letter is in response to your request on April 3, 2013 to use nitrogen oxides (NO<sub>x</sub>) discrete emission reduction credits (DERC) to satisfy the volatile organic compound (VOC) offset requirement in Nonattainment New Source Review (NNSR) permit number 103626 associated with the proposed methanol technology project at the Celanese Clear Lake Plant.

The submitted photochemical modeling, conducted by Alpine Geophysics, LLC, demonstrates that the use of a 1:1 NO<sub>x</sub> to VOC inter-pollutant ratio for the proposed methanol technology project is conservative for this specific project. Based on this demonstration and the rules in 30 Texas Administrative Code §101.372(a), we approve the use of NO<sub>x</sub> DERCs to offset VOC emission increases for the project at a ratio of 1:1 of any required offset amount specified in the special conditions in permit number 103626. The Texas Commission on Environmental Quality (TCEQ) approval is contingent upon Celanese satisfying the following conditions:

- obtain approval of the photochemical modeling from the United States Environmental Protection Agency (EPA) and submit approval to the TCEQ;
- obtain the NO<sub>x</sub> DERCs from DERC certificate number D-2815<sup>\*</sup> and submit the required DEC-4 form (Application for Transfer of Discrete Emission Credits) to TCEQ no later than May 1, 2013;
- reference the 1:1 inter-pollutant ratio, the NO<sub>x</sub> DERC certificate, and total credit amount needed to satisfy NNSR VOC offset requirements in the special conditions of NNSR permit number 103626. This ensures that the ratio and credits set aside will remain valid and available for use for the duration of the proposed methanol technology project (an estimated 30-year period); and
- comply with the requirements of §101.376(b)(2) for the use of DERCs to meet NNSR permit offset requirements and submit DEC-2 and DEC-3 forms on an annual basis to ensure compliance with the reporting requirements.

Note that if Celanese wishes to change its VOC offset requirement compliance strategy for this project, then such a possible change would need to be authorized by the special conditions of the NNSR permit 103626.

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • [www.tceq.texas.gov](http://www.tceq.texas.gov)

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<sup>printed on recycled paper</sup>  
\* D2815 was acquired by Celanese in project 408261 (rec'd 3/7/13, but submitted date could not be verified). DERCs were later transferred to P3678 (Fairway) for use. current cert # is D3119.

Mr. Paresh J. Bhakta

Page 2

April 25, 2013

If the TCEQ establishes a different NO<sub>x</sub> to VOC ratio in the future that can be applied to this project, you may submit a request to alter NNSR permit number 103626 and revise the 1:1 ratio. Any request to revise the ratio in the permit must receive approval from the EPA and TCEQ. Any final change to the 1:1 ratio would not be applicable to NO<sub>x</sub> DERCs already used at a 1:1 ratio and would thus only be relevant in future years.

Please note that any future rulemaking may affect the value or potential use of any returned credits.

If you have any questions regarding this matter or need further assistance regarding the banking program, please contact Ms. Marie Martinez at (512) 239-2054 or by e-mail at Marie.Martinez@tceq.texas.gov.

Sincerely,



David Brymer, Director  
Air Quality Division  
Texas Commission on Environmental Quality

DB/mm

cc: Air Section Manager, Region 12 – Houston  
Mr. Bob Allen, Director, Harris County Pollution Control Services, Pasadena  
Ms. Kathy Perez-Ashton, Chief Health Inspector, Health Department, City of Pasadena, Pasadena  
Ms. Lourdes Rosenberg, TCEQ Permit Engineer– Austin  
Mr. David F. Garcia, Acting Director, Multimedia Planning and Permitting Division, US EPA Region 6  
Ms. Adina R. Wiley, Environmental Engineer, Air Permits Section, US EPA Region 6  
Ms. Jan Day, Staff Environmental Engineer, Celanese, Ltd., Houston



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS TX 75202-2733

MAY 01 2013

Mr. Paresh J. Bhakta  
Site Director  
Celanese LTD  
P.O. Box 58190  
Houston, TX 77258-8190

RE: Request to Use Nitrogen Oxide (NO<sub>x</sub>) Credits to Offset Volatile Organic Compound (VOC) Emissions  
Proposed Methanol Unit  
Celanese, Ltd. Clear Lake Plant  
Pasadena, TX 77507

Dear Mr. Bhakta:

Thank you for contacting the U.S. Environmental Protection Agency (EPA) Region 6 to determine the available options for offsetting the increased volatile organic compound (VOC) emissions related to the proposed methanol unit at the Celanese Clear Lake plant. We appreciate the opportunity to work with Celanese and the Texas Commission on Environmental Quality (TCEQ) to determine a solution for offsetting VOC emissions.

Region 6 has reviewed your April 3, 2013, request to offset proposed VOC emission increases in the Houston-Galveston-Brazoria (HGB) ozone nonattainment area with banked nitrogen oxide (NO<sub>x</sub>) discrete emission reduction credits (DERCs) generated in the HGB area. In addition to the ozone modeling report provided we appreciate the additional material provided by Mr. Dennis McNally of Alpine Geophysics on April 12, 2013<sup>1</sup>. We agree with Celanese's interpretation of the EPA-approved Texas State Implementation Plan (SIP); the SIP at 30 Texas Administrative Code (TAC) 101.376(b) provides for the use of DERCs as New Source Review (NSR) offsets, subject to specific permitting conditions and, 30 TAC 101.372(a) provides for interprecursor trading, whereby one pollutant reduction is used to satisfy the reduction requirements of another pollutant, subject to urban airshed modeling and the EPA and the TCEQ approval. Therefore, we find that the use of NO<sub>x</sub> DERCs for VOC emission increases is supported through the EPA-approved Texas SIP.

Celanese has an obligation under the Clean Air Act and Texas SIP to offset the VOC emission increases in the HGB ozone nonattainment area at a 1.3:1 ratio. Pursuant to the approved Texas SIP, Celanese is electing to use NO<sub>x</sub> DERCs from the HGB area in place of VOC emission offsets. We have reviewed the submitted photochemical modeling and find that the use of NO<sub>x</sub> DERCs for VOC emission increases at a 1:1 interprecursor trading ratio is appropriate in this instance. This finding is based on the assumption that flare VOC emissions will be approximately 5 tons per year (tpy) and the formaldehyde emissions will be no more than 2.5 tpy (quantified as 42% of the Flare VOCs) and there are no other emissions of either highly reactive VOCs or very reactive VOCs (note that in this context, very reactive

<sup>1</sup> Alpine Geophysics, LLC, VOC/NO<sub>x</sub> Interpollutant Trading Ratio and Ozone Impact of a Proposed Celanese Methanol Technology Project (March 5, 2013), Supplemental modeling information provided April 12, 2013.

VOCs are considered to be those VOCs that can generate more ozone than a same quantity of NO<sub>x</sub>). The understanding of proper flare operation has advanced in recent years due in large part to recent research and studies sponsored by the TCEQ. Additional operating parameters beyond those included in New Source Performance Standards 40 Code of Federal Regulations Part 60.18 have been found to be important to limiting flare emissions. We request that the TCEQ's permit for this project include appropriate limits and monitoring for steam/air assist levels, British Thermal Unit levels, and other parameters that are important to the estimated level of VOC Destruction Removal Efficiency to insure that significantly more formaldehyde than has been evaluated would not be emitted. Formaldehyde is very reactive in the formation of ozone and a large increase in formaldehyde emissions above the 2.04 tpy included in the modeling (4.85 x 42%) could negate the benefits of NO<sub>x</sub> decreases in this evaluation and reverse the EPA's approval of this interprecursor trading for offset requirements. We do not concur with the finding that of 47.3 tons of VOCs are equivalent to 1 ton of NO<sub>x</sub>. However, based on the submitted photochemical modeling and the approved Texas SIP and with the caveats discussed above, we concur with the use of HGB NO<sub>x</sub> DERCs to offset VOC emission increases at a 1:1 trading ratio in this specific situation and believe the trade should result in overall net decrease of ozone levels in Houston. This evaluation is based on using 1.3 tons of NO<sub>x</sub> DERCs to offset every 1.0 ton of VOC emission authorized for the methanol technology project (44.36 tpy of VOC increases to be offset with 57.67 tpy of NO<sub>x</sub> DERCs).

Please note that the use of NO<sub>x</sub> DERCs for VOC offset requirements under NSR will require approval from both the EPA Region 6 and the TCEQ. This letter only provides the EPA's concurrence on the identified approach and does not compel or predict future action by the TCEQ.

We look forward to working with Celanese as you move forward on the proposed Methanol Unit. If you have further questions about the EPA's review of your proposed offset scheme, please feel free to contact me at (214) 665-7200 or contact Mr. Jeff Robinson of my staff at (214) 665-6435.

Sincerely yours,



---

David F. Garcia  
Acting Director  
Multimedia Planning and  
Permitting Division

cc: Mr. David Brymer  
Texas Commission on Environmental Quality

## SPECIAL CONDITIONS

Permit No. 103626, PSDTX1296 and N164

Page 34

service and the liquid stored. Emissions may be estimated based upon the potential to emit as identified in the permit application.

30. Additional occurrences of MSS activities authorized by this permit may be authorized under permit by rule only if conducted in compliance with this permit's procedures, emission controls, monitoring, and recordkeeping requirements applicable to the activity.

### **Nonattainment New Source Review (NNSR) - Emission Reductions**

31. The permit holder shall comply with the following NNSR emission reductions:

- A. EPN REFORM NO<sub>x</sub> - The permit holder shall provide total offsets equivalent to 32.38 tons per year (tpy) of NO<sub>x</sub>, based on 24.91 tpy of NO<sub>x</sub> authorized, at an offset ratio of 1.3:1, prior to the start of operation of the equipment authorized under this permit.

The permit holder shall satisfy the 1:1 portion of the 1.3:1 NO<sub>x</sub> emission offset for EPN REFORM through participation in the Mass Emission Cap and Trade (MECT) Program. Starting with the MECT compliance period in which the facility will commence operation, the permit holder shall obtain by the beginning of, hold during, and surrender at the end of each MECT compliance period 24.9 tpy of MECT allowances, regardless of whether the actual NO<sub>x</sub> emissions from these facilities are lower than this amount. The TCEQ Emissions Banking and Trading Program must be notified and must verify the use of MECT allowances for the 1:1 portion of the NO<sub>x</sub> offset requirement.

If MECT allowances devalue due to future regulatory changes, the permit holder shall acquire additional MECT allowances to hold during and surrender at the end of each MECT compliance period 24.9 tpy of MECT allowances. A total of 24.9 tpy of MECT allowances will be permanently retired upon the permanent shutdown of these facilities.

To satisfy the 0.3 portion of the 1.3:1 of the NO<sub>x</sub> emissions offsets for EPN REFORM the permit holder shall permanently retire 7.5 tpy of MECT allowances prior to start of operation of these facilities.

- B. EPN MEOHFLR and MEOHENG NO<sub>x</sub> - The permit holder shall provide total offsets equivalent to 26.68 tons per year (tpy) of NO<sub>x</sub>, based on 20.52 tpy of NO<sub>x</sub> authorized, at an offset ratio of 1.3:1, prior to the start of operation of the equipment authorized under this permit.

SPECIAL CONDITIONS

Permit No. 103626, PSDTX1296 and N164

Page 35

- (29.6 tpy)  
ERC usage was  
approved in projects  
409235 + 407537*
- \* NOx discrete emission reduction credits (DERCs) will be used to cover the 26.7 tpy NOx offset requirement. The permit holder shall use 800.4 tpy of NOx DERCs from DERC Certificate D-3022 to satisfy the 1.3:1 NOx offset requirement for a 30-year period in accordance with 30 TAC §101.376. The permit holder shall acquire additional offsets if the operation of the facility exceeds 30 years.

- C. The permit holder shall provide total offsets equivalent to 47.49 tpy of VOC, based on 36.53 tpy of VOC authorized, at an offset ratio of 1.3:1, prior to the start of operation of the equipment authorized under this permit.

*✓*

The permit holder shall retire 25.6 tpy of VOC ERCs from TCEQ ERC Certificate Numbers 2387, 2648, 2658, and 2660 to satisfy part of this VOC offset requirement in accordance with 30 TAC §101.306.

- \* NOx discrete emission reduction credits (DERCs) will be used to cover the remaining 21.9 tpy VOC offset requirement and the permit holder must use inter-pollutant trading as follows. Based on the rules under 30 TAC §101.372(a) and the TCEQ and EPA approved NOx to VOC 1:1 inter-pollutant ratio, a total of 657.0 tons of NOx DERCs will be set aside from DERC Certificate D 3022 to satisfy the remaining 1.3:1 VOC offset requirement for a 30-year period. The permit holder must acquire additional offsets if the operation of the facility exceeds 30 years. If the TCEQ establishes a different NOx to VOC ratio in the future, the permit holder may submit a request to alter this permit and revise the 1:1 ratio. Any request to revise the ratio must receive approval from the TCEQ and the EPA. Any final change to the 1:1 ratio would not be applicable to DERCs already used at a 1:1 ratio and would thus be prospective only in nature. Any DERCs set aside based upon the 1:1 ratio that are no longer needed to satisfy the VOC offset requirement if the ratio is revised will be returned to the permit holder for future use. Future rulemaking may affect the value and/or potential use of any returned credits.

Dated September 16, 2013



# Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 103626, PSDTX1296 and N164

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
MEOHFUG	Methanol Unit Fugitives (5)	CO	0.26	1.14
		VOC	0.83	3.65
		NH <sub>3</sub>	0.03	0.11
MEOHFLR	MSS Flare	VOC	17.69	2.37
		NO <sub>x</sub>	137.88	20.48
		CO	2078.40	348.69
		SO <sub>2</sub>	0.21	0.03
MEOHANALZ	Methanol Unit Analyzer	VOC	0.14	0.61
		CO	0.10	0.42
REFORM	Methanol Reformer	VOC	32.05	23.88
		NO <sub>x</sub>	27.28	24.91
		CO	169.34	219.26
		SO <sub>2</sub>	2.09	8.30
		PM	8.13	32.37
		PM <sub>10</sub>	8.13	32.37
		PM <sub>2.5</sub>	8.13	32.37
		NH <sub>3</sub>	4.63	18.44

## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
MEOHMT	Cooling Tower	VOC	0.83	3.64
		PM	0.83	3.62
		PM <sub>10</sub>	0.51	2.25
		PM <sub>2.5</sub>	0.17	0.76
MEOHMSS	Methanol MSS	VOC	194.31	0.44
MEOHENG	Methanol Engine	VOC	0.88	0.04
		NO <sub>x</sub>	0.77	0.04
		CO	0.88	0.04
		PM	0.04	0.01
55T9801ST or 55T9801TEMP	Methanol Scrubber of Temporary Methanol Scrubber	VOC	12.91	3.47

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1  
 NO<sub>x</sub> - total oxides of nitrogen  
 SO<sub>2</sub> - sulfur dioxide  
 PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented  
 PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented  
 PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter  
 CO - carbon monoxide  
 NH<sub>3</sub> - Ammonia
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: September 16, 2013

## Melissa Ruano

---

**From:** Melissa Ruano  
**Sent:** Friday, July 22, 2016 11:54 AM  
**To:** Sears, Ronald, Celanese (Ronald.Sears@celanese.com)  
**Cc:** 'Tom.Kelly@celanese.com'; 'douglas.wallace@celanese.com'  
**Subject:** Fairway Methanol, LLC, DERC Use for Offsets Request - Supporting Documents

Mr. Sears,

I am processing the Notice of Use of DERCs that was submitted to us last week. During review of this application along with the Notice of Intent to Use DERCs applications that were previously submitted, I saw that several of the supporting documents are stamped as Confidential. Specifically, these documents were provided with the Form DEC-2, received on July 30, 2015, and are listed as "Attachment 1".

Per 30 TAC §101.372(i) information submitted with notices, reports, and trades regarding the nature, quantity of emissions, and sales prices associated with the use or generation of discrete emission credits is public information and may not be submitted as confidential. Based on this requirement, these documents cannot be accepted as part of Fairway's request. After review of the documents, I have determined that they are not needed, since I have copies of the approved permit special conditions and MAERT table. Therefore, I wanted to notify you that I will be removing these documents from the application and will destroy them via shredding.

For future submissions to the DERC program, please keep in mind that information may not be submitted as confidential. If you have any questions or concerns regarding this notification, please feel free to contact me.

Thank you,

Melissa Ruano  
Texas Commission on Environmental Quality  
Emissions Banking and Trading Program  
Phone: (512) 239-4496  
Fax: (512) 239-6188  
[Melissa.Ruano@tceq.texas.gov](mailto:Melissa.Ruano@tceq.texas.gov)

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**Sign up to receive e-mail updates** on emissions banking and trading programs. Select *Emissions Banking and Trading (EBT) Programs* under the *Air Quality* heading

## Melissa Ruano

---

**From:** Sears, Ronald, Celanese <Ronald.Sears@celanese.com>  
**Sent:** Thursday, August 27, 2015 9:59 AM  
**To:** Melissa Ruano  
**Subject:** RE: Methanol Unit Reformer Startup Notification

Good morning Ms. Ruano:

We do not have a specific date yet. As of today, they are looking at the second half of September.

Ron Sears

---

**From:** Melissa Ruano [<mailto:melissa.ruano@tceq.texas.gov>]  
**Sent:** Tuesday, August 25, 2015 3:36 PM  
**To:** Sears, Ronald, Celanese  
**Subject:** RE: Methanol Unit Reformer Startup Notification

Hi Mr. Sears,

Thank you for the update. Do you have the date in September for when the startup will occur?

Melissa Ruano  
Texas Commission on Environmental Quality  
Emissions Banking and Trading Program  
Phone: (512) 239-4496  
Fax: (512) 239-6188  
[Melissa.Ruano@tceq.texas.gov](mailto:Melissa.Ruano@tceq.texas.gov)

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[www.tceq.texas.gov/goto/customersurvey](http://www.tceq.texas.gov/goto/customersurvey)

---

**From:** Sears, Ronald, Celanese [<mailto:Ronald.Sears@celanese.com>]  
**Sent:** Friday, August 21, 2015 1:58 PM  
**To:** Lourdes Rosenberg; Erin Guerra; Melissa Ruano  
**Cc:** Jesse Lovegren  
**Subject:** Methanol Unit Reformer Startup Notification

I thought you might like to know we are planning to startup the Methanol Unit in September. Thank you for your continuing work with the air permits and emission credits.

Ron Sears

Chemicals Division  
Clear Lake Plant

Celanese Ltd.  
9502 Bayport Blvd.  
Pasadena, TX 77507  
Mailing Address:  
P.O. Box 58190  
Houston, TX 77258-8190

Telephone: 281-474-6200  
[www.celanesechemicals.com](http://www.celanesechemicals.com)



August 20, 2015  
RJS-082015-1

Certified Mail – Article Number: 7013 2250 0000 5644 1055  
Return Receipt Requested

Mr. Andy Goodridge, Air Section Manager  
Texas Commission on Environmental Quality  
Region 12 - Houston  
5425 Polk Street, Suite H  
Houston, Texas 77023

Re: Notification of Initial Startup of Methanol Reformer (EPN: REFORM)  
Fairway Methanol LLC  
NSR Permit Number: 103626  
EPA GHG PSD Permit Number: PSD-TX-1296-GHG  
FOP Number: O-3678 (Permit in Progress)  
Celanese Clear Lake Plant  
Harris County, Pasadena, Texas  
RN100227016; CN604543223; TCEQ Account Number: HG-0126-Q

Dear Mr. Goodridge:

On behalf of Fairway Methanol LLC, Celanese Ltd. is submitting this notification to satisfy the requirements of General Condition Number 4: Start-up Notification (reference 30 TAC 116.115). You were previously notified the flare is scheduled to start-up during the week of August 17<sup>th</sup>. The methanol reformer is scheduled to start-up September 1, 2015. The temperature will be brought up slowly, over a period of at least 24 hours, in order to avoid damaging the refractory. Commencement of initial production operations will begin after the reformer has been deemed operational.

If you should have any questions regarding this submittal, please contact Ronald Sears at (281) 474-6178 or at [Ronald.Sears@celanese.com](mailto:Ronald.Sears@celanese.com).

Thank you,

A handwritten signature in black ink, appearing to read "Ronald J. Sears".

Ronald J. Sears  
Environmental Engineer  
Environmental, Health and Safety Section



## Melissa Ruano

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**From:** Melissa Ruano  
**Sent:** Thursday, May 26, 2016 9:24 AM  
**To:** Sears, Ronald, Celanese (Ronald.Sears@celanese.com)  
**Subject:** Celanese Clear Lake Plant - DERC Use

Good Morning Mr. Sears,

This email is to follow up on our discussion this week regarding the use of NOx DERCs to offset emissions at the Celanese Clear Lake Plant in accordance with the conditions in NSR permit 103626. As discussed, the permit conditions require the use of DERCs from certificate D3022 to offset emissions for a 30-year period.

To satisfy the permit conditions for the 30-year period, please submit an application to use DERCs, Form DEC-3. According to the information in our database, the certificate available in the site's portfolio (P3678) is number D3119 (previously D3022). From the permit conditions, I calculated that 1,457.4 tons of DERCs will be needed to cover the 30-year period, but please verify this value with your permit engineer before submitting the form. From our previous correspondence, I understand that the initial startup date for the Methanol Unit was October 8, 2015; therefore, the 30-year use period will run from October 8, 2015 through October 8, 2045. Please verify that the start-up date and use period are correct.

Please know that we now require that an Authorized Account Representative (AAR) be registered for each of our banking portfolios. This person must meet, or be authorized by someone that meets, the responsible official qualifications in 30 TAC §122.165(c) and is required to certify (sign) all applications submitted for the portfolio (including the Form DEC-3). Our records show that we do not have a registered AAR for P3678. To register the AAR, please submit an Authorized Account Representative Registration Form. This form can be submitted together with the Form DEC-3. Please send both forms to the address listed at the end of this email.

If possible, please submit the forms by **June 9, 2016**. If you have any questions, please don't hesitate to contact me.

Thank you,

Melissa Ruano  
Texas Commission on Environmental Quality  
Emissions Banking and Trading Program  
Phone: (512) 239-4496  
Fax: (512) 239-6188  
[Melissa.Ruano@tceq.texas.gov](mailto:Melissa.Ruano@tceq.texas.gov)

### Mailing Address

Texas Commission on Environmental Quality  
Emissions Banking and Trading Program, MC-206  
PO Box 13087  
Austin, TX 78711-3087

**How is our customer service?** Fill out our online customer satisfaction survey at

[www.tceq.texas.gov/goto/customersurvey](http://www.tceq.texas.gov/goto/customersurvey)

**Sign up to receive e-mail updates** on emissions banking and trading programs. Select *Emissions Banking and Trading (EBT) Programs* under the *Air Quality* heading

## Melissa Ruano

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**From:** Sears, Ronald, Celanese <Ronald.Sears@celanese.com>  
**Sent:** Thursday, October 22, 2015 5:32 PM  
**To:** Melissa Ruano  
**Subject:** Methanol Unit Startup Notification  
**Attachments:** Methanol Unit - Notification of EPA of Initial Startup.pdf

Melissa:

It took longer than expected, but the new Methanol Unit was finally started up. Attached is a copy of the notification provided to the EPA to meet a GHG permit requirement.

Regards,

Ronald Sears  
Environmental Engineer  
Celanese Ltd. - Clear Lake Plant  
Office: (281) 474-6178



Chemicals Division  
Clear Lake Plant

Celanese Ltd.  
9502 Bayport Blvd.  
Pasadena, TX 77507  
Mailing Address:  
P.O. Box 58190  
Houston, TX 77258-8190

Telephone: 281-474-6200  
[www.celanesechemicals.com](http://www.celanesechemicals.com)



October 20, 2015  
RJS-102015-1

Certified Mail – Article Number: 7013 2250 0000 5644 1093  
Return Receipt Requested

Compliance Assurance and Enforcement Division  
EPA Region 6  
1445 Ross Avenue (6EN)  
Dallas, Texas 75202

Re: Notification of Initial Startup  
Fairway Methanol LLC  
Clear Lake Plant  
PSD Permit Number: PSD-TX-1296-GHG  
Harris County, Pasadena, Texas  
RN100227016; CN600130850; TCEQ Account Number: HG-0126-Q  
TCEQ Permit Numbers: 103626, N164, and PSDTX1296

To Whom It May Concern:

As required by Paragraph B. of the General Permit Conditions in PSD Permit Number PSD-TX-1296-GHG, the initial startup date for the Methanol Unit owned by Fairway Methanol LLC was October 8, 2015.

If you should have any questions regarding this submittal, please contact Ronald Sears at (281) 474-6178 or at [Ronald.Sears@celanese.com](mailto:Ronald.Sears@celanese.com).

Thank you,

A handwritten signature in black ink that reads "Ronald J. Sears".

Ronald J. Sears  
Environmental Engineer  
Environmental, Health and Safety Section

Bryan W. Shaw, Ph.D., P.E., *Chairman*  
Toby Baker, *Commissioner*  
Jon Niermann, *Commissioner*  
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
*Protecting Texas by Reducing and Preventing Pollution*

August 3, 2016

Mr. Tom Kelly  
Chief Executive Officer  
Fairway Methanol, LLC  
222 West Colinas Boulevard, Suite 900 North  
Irving, Texas 75039-5403

Re: Use of Discrete Emission Credits  
Celanese Clear Lake Plant  
Pasadena, Harris County  
Regulated Entity Reference Number: RN100227016  
Customer Reference Number: CN604543223  
Portfolio Number: P3678

Dear Mr. Kelly:

This letter is in response to the *Notices of Intent to Use Discrete Emission Credits* received on May 26, 2015 and July 30, 2015 and the *Notice of Use of Discrete Emission Credits* received on July 13, 2016 from Fairway Methanol, LLC, regarding the use of nitrogen oxides (NO<sub>x</sub>) discrete emission reduction credits (DERC) for the purpose of compliance with the offset special conditions of nonattainment new source review permit number 103626 for the period of October 9, 2015 through October 9, 2045 at the Celanese Clear Lake Plant.

We have reviewed your application and agree that the use of 1,457.4 tons of NO<sub>x</sub> DERCs meets the offset requirements specified by special condition numbers 31(B) and (C) for a period of 30 years. These credits have been used from certificate D-3119 (previously D-3022). The remaining 106.7 tons of DERCs from certificate D-3119 have been issued on the certificate D-3257, listed below.

DERC Certificate Number:	D-3257
Amount:	106.7 tons
Pollutant:	NO <sub>x</sub>
Generation Period:	04/01/2000 - 04/01/2001
County:	Fort Bend
Owner:	Fairway Methanol, LLC.
Customer Reference Number:	CN604543223
Regulated Entity Number:	RN100227016
Portfolio Number:	P3678

Mr. Tom Kelly  
Page 2  
August 3, 2016

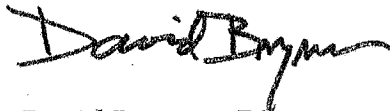
This certificate is available in the TCEQ Emission Credit Registry and may be used, transferred, or sold to another owner as indicated in the requirements of 30 Texas Administrative Code §101.370 through §101.379.

In accordance with 30 Texas Administrative Code §101.376(b)(2)(D) a completed application to use DERCs must be submitted at least 90 days before October 9, 2045 to continue operation of the facilities using DERCs as offsets, as specified in this use request.

Thank you for your cooperation in this matter. If you have questions concerning this review or need further assistance regarding the banking program, please contact Ms. Melissa Ruano at (512) 239-4496, or write to the Texas Commission on Environmental Quality, Office of Air, Air Quality Division (MC-206), PO Box 13087, Austin, Texas 78711-3087.

This action is taken under authority delegated by the executive director of the TCEQ.

Sincerely,

A handwritten signature in black ink that reads "David Brymer". The signature is stylized with a large, sweeping "D" and a cursive "Brymer".

David Brymer, Director  
Air Quality Division

DB/MR/kjy

cc: Air Section Manager, Region 12 - Houston  
Mr. Ronald Sears, Environmental Engineer, Fairway Methanol, LLC  
Mr. Douglas C. Wallace, Environmental, Health, and Safety Section Leader, Fairway Methanol, LLC

Project Numbers: 410221 and 411263

# Banking and Trading Route Slip

AIR QUALITY DIVISION Emissions Banking and Trading Program										
Company Name: Fairway Methanol, LLC										
Project Number: 410221 + 411263										
Type of Letter Correspondence: DCTR + DCUS										
Letter Document Number(s): 26909 + 26910 (profiled under 410221)										
Certificate Number(s): D-3119, D3257										
Review and Approval	Initial and Date	Comments/Special Instructions								
Deric Patton, Work Lead EBTP	DP 7/26/16									
Author/Creator Review	MR 7/26/16									
Peer Review Completed	KJY 7.25.2016									
Author/Creator	MR 7/22/16	<table border="1"> <tr> <td>Copies Made</td> <td>Date</td> </tr> <tr> <td colspan="2"><del>                    </del></td> </tr> <tr> <td>eMailed</td> <td>Date</td> </tr> <tr> <td>MR</td> <td>8/3/16</td> </tr> </table>	Copies Made	Date	<del>                    </del>		eMailed	Date	MR	8/3/16
Copies Made	Date									
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eMailed	Date									
MR	8/3/16									
Please return <b>Routing Slip</b> and <b>Project Paperwork</b> to Deric Patton, MC-206, Ext. 3159										

411263  
C  
MR  
8/3/16  
410221  
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DP  
7/26/16