AIR DERC 100925551-409464_ USE_20141114_Use_D3081

D-3081

12/18/2014 ----- EBTP IMS- PROJECT RECORD

PROJECT#: 409464

STATUS: P

DISP CODE:

RECEIVED: 11/14/2014

PROJTYPE: BDIU

ISSUED DT:

SUP-DISP DATE: 12/18/14

STAFF ASSIGNED TO PROJECT:

RUANO, MELISSA

PROJECT NOTES:

USE PERIOD 1/1/2015 - 12/31/2015

PROJECT TRANSACTIONS

COMPANY DATA

COMPANY NAME: NOVA MOLECULAR TECHNOLOGIES INC

CUSTOMER REGISTRY ID: CN600364822

PORTFOLIO DATA

NUMBER: P3627 NAME: NOVA MOLECULAR TECHNOLOGIES - RN100925551

SITE DATA

ACCOUNT: HG6473T

REG ENTITY ID: RN100925551

SITE NAME: NOVA MOLECULAR TECHNOLOGIES

NEAREST CITY: PASADENA COUNTY: HARRIS

LOCATION: 10200 BAY AREA BLVD PASADENA, TX 77507-

1852

CONTACT DATA

TITLE: SENIOR DIRECTOR, TECHNICAL SERVICES NAME: PHILIP EVANS

STREET: PO BOX 3247 CITY/STATE, ZIP: HUMBLE, TX, 77347-3247

PHONE: 281-446-7070 ext 0 Email: pevans@wcmgroup.com

TITLE: VICE PRESIDENT, OPERATIONS NAME: ABE ZAHAND

STREET: 10200 BAY AREA BOULEVARD CITY/STATE,ZIP: PASADENA, TX , 77507-0

PHONE: 281-474-5550 ext 0

Email: azahand@novamolecular.com

TRANSACTION DATA

TRANSACTION TYPE: DERC_INTEN

DATE ENTERED: 2014-11-18 00:00:00.0

DELETED DATE:

EFFECTIVE YEAR:

CONTAMINATE: NOX

TONS: 2.40 DOLLARS: 0 CERTIFICATE NO.: D3081 COUNTY: HARRIS

ALLOWANCE0

TRANSACTION DATA

CONTAMINATE: NOX

TRANSACTION TYPE: DERC_RET

DATE ENTERED: 2014-11-18 00:00:00.0

DELETED DATE:

EFFECTIVE YEAR:

TONS: 0.60

DOLLARS: 0

ALLOWANCE0

CERTIFICATE NO.: D3149 COUNTY: HARRIS

TRACKING ACTIVITES

PROJECT SUBMITTED: 11/13/2014 PM RECEIVED DATE:

11/19/2014 PROJECT COMPLETED:

DISCRETE EMISSION CREDITS INTENT TO USE TECHNICAL REIVEW

Project Number:	409464	Project Type:	BDIU
Regulated Entity Reference Number:	RN100925551	Customer Reference Number:	CN600364822
Company:	Nova Molecular Technologies, Inc.	Site Name:	Nova Molecular Technologies
City:	Pasadena	County:	Harris
Project Manager:	Ms. Melissa Ruano	Portfolio Number:	P3627

Project Overview

Nova Molecular Technologies, Inc. (Nova), submitted a Notice of Intent to Use Discrete Emission Credits (Form DEC-2) received November 14, 2014 for the purpose of complying with the requirements of 30 Texas Administrative Code (TAC) §117.2010(c)(1)(A) for one hot oil heater at the Nova Molecular Technologies site. The company intends to use 2.4 tons of nitrogen oxides (NO $_X$) mobile discrete emission reduction credits (MDERC), including the required 10% environmental contribution, to cover excess emissions from the heater for the period of January 1, 2015 through December 31, 2015 (2015 use period).

During an audit, Nova identified that the heater, Facility Identification Number (FIN) H-02, is required to comply with the emissions specification under §117.2010. Nova has previously indicated that the Nova Molecular Technologies site is not subject to the Mass Emissions Cap and Trade Program because the site is not classified as a major source of NO_x, FIN H-02 is the only facility at the site that is subject to §117.2010, and the uncontrolled design capacity to emit NO_x from FIN H-02 is less than ten tons per year. Therefore, the company has chosen to use MDERCs to comply with the emission specification under §117.2010 for FIN H-02. Refer to the e-mails that were received on November 27 and December 23, 2013, on file with MDERC certificate number D-2995.

Nova is using MDERC certificate D-3081 for this request. The remaining 0.6 ton of MDERCs from certificate D-3081 will be returned to Nova on certificate D-3149.

Discrete Emission Credit Intent to Use

Per §117.2010(c)(1)(A), the emission specification for gas-fired process heaters located at a minor source in the Houston-Galveston-Brazoria nonattainment area is 0.036 pound per million British thermal units (lb/MMBtu). The company expects to exceed their regulated NOx emissions by 2.1 tons during the 2015 use period. The total amount of MDERCs needed, including the 10% environmental contribution required by 30 TAC §101.376(d)(2)(D), is 2.4 tons.

Certificates used	D-3081
Pollutant	
Amount	2.4 tons
Regulation	ξ117.2010(c)(1)(A)
Regulation	+ /+ /00+E +0/01/001E
Use Period	1/1/2015 - 12/31/2015

Credit Use Calculation Method

Per §101.376(d)(2)(B):

(ELA) x (EER - RER) = discrete emission credits (DEC) needed

Where: ELA = expected level of activity

EER = expected emission rate per unit activity RER = regulatory emission rate per unit activity Project Number: 409464

Page 2

FIN H-02 is a GTS MEG, Model DH-V050/40 natural gas hot oil heater with a maximum rated capacity of 23.5 MMBtu/hr. The heater specifications were provided by e-mail on December 2, 2013 and are on file with certificate D-2995. Nova provided the expected heat input, expressed in million British thermal units (MMBtu), for the ELA. The emission rate is based on a stack test that was conducted on July 2, 2012. A copy of the stack test results was submitted as supporting documentation.

ELA = 160,000 MMBtu

EER = 0.0617 lb/MMBtu (per 7/2/2012 stack test)

RER = 0.036 lb/MMBtu (per 117.2010(c)(1)(A))

 $(160,000 \text{ MMBtu}) \times (0.0617 \text{ lb/MMBtu} - 0.036 \text{ lb/MMBtu}) (1 \text{ ton/ } 2000 \text{ lbs}) = 2.056 \text{ tons}$

Total DECs needed (rounded up to a tenth of a ton) = 2.1 tons 10% Environmental Contribution (rounded up to a tenth of a ton) = 0.3 ton Total DECs needed = (2.1 tons + 0.3 ton) = 2.4 tons

Conclusion

Nova has submitted the required documentation for this intent to use project. A total of 2.4 tons of MDERCs will be set aside from certificate D-3081. The remaining 0.6 ton will be returned to the company in new certificate D-3149.

Project Manager

Available Certificates in P3627

Certificate	Туре	Pollutant	Amount	Gen Started	Gen Ended	Gen County	Gen Cert	Gen RN
D3081 /	MDERC	NOX	3	5/1/2003	4/30/2004	HARRIS	D1255	N/A

DERC History

INTENT	INTENT	INTENT	POLLUTANT	INTENT	TOTAL	PERIOD	PERIOD END	COMPLIANCE	INTENT
PROJECT	RECEIVED	CERTIFICATE	PULLUTANT	AMOUNT	AMOUNT	START DATE	DATE	WITH	FLAG
408491	11/18/2013	D2995	NOX	2	5	1/1/2014	12/31/2014	117.2010(c)(1)(A)	YES
409464	11/14/2014	D3081	NOX	2,4	3.0	1/1/2015	12/31/2015		



Form DEC-2 (Page 1)

MR

Notice of Intent to Use Discrete Emission Credits NOV 1 4 2014
(Title 30 Texas Administrative Code § 101.370 - § 101.379)

409464 Air Quality Division

\mathbf{I}_{\bullet}	I. Company Identifying Information									
A.	. Company Name: Nova Molecular Technologies, Inc.									
	Mailing Address: 10200 Bay A	ea Blvd.		•						
	City: Pasadena	State: Texas		Zip Cod	e: 77507					
	Telephone: 281-474-5550		*	Fax: 28	1-474-9160					
B.	TCEQ Customer Number (CN):	CEQ Customer Number (CN): 600364822								
C.	Site Name: Nova Molecular Tec	hnologies, Inc.								
	Street Address (If no street address	ess, give driving direction	ns to site) 10200) Bay Area Bl	vd					
	Nearest City: Pasadena	Zip Code: 775	507	County	: Harris					
D.	TCEQ Regulated Entity Number	r (RN): 100925551			10 - 0					
E.	TCEQ Air Account Number: (ij	fapplicable) HG-6473-T	-		13627					
F.	Primary SIC: 2869			Air Peri	nit Number: 79193					
Щ.	Technical Contact Identifying	g Information	1997 (1998) (1998) 1998 (1998)							
A.	Technical Contact Name: (N	Mr. 🗌 Mrs. 📗 Ms. 🔲	Or.): Philip Ev	ans						
	Technical Contact Title: Vice I	resident, Technical Servic	es							
	Mailing Address: P.O BOX 324	17								
	City: Humble		State: Texas		Zip Code: 77347-3247					
	Telephone: 281-446-7070	Fax: 281-446-3348		E-mail: p	evans@wcmgroup.com					
ш	. Company Contact Identifying	g Information (If differen	t from Technic	al Contact)						
A.	Company Contact Name: (X)	Mr. Mrs. Ms. D	r.): Abraham 2	Zahand						
	Company Contact Title: Vice P	resident, Operations								
	Mailing Address: 10200 Bay A	rea Blvd.								
	City: Pasadena		State: Texas		Zip Code: 77507					
	Telephone: 281-474-5550	Fax: 281-474-9160)	E-mail: azal	nand@novamolecular.com					
IV	. Mass Emission Cap and Trac	le Program (MECT)								
Is t	the DERC use for compliance wi	th 30 TAC Chapter 101 S	ubchapter H, D	livision 3?	□YES ⊠ NO					
Ve	Very DEDC Congreted: Very of Use: Patio of DEDC to Allowance: to									
	Year DERC Generated: Year of Use: Ratio of DERC to Allowance:to									
No	Note: If DERC use is to comply with MECT then go to Section IX									
y.	Intended Use Period									
Int	ended Use Start Date: 01/01/20	15 Inten	ded Use End D	ate: 12/31/	2015					



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: 30 TAC117.2010(c) (1)(A)
VII. Most Stringent Emission Rate
Describe basis for most stringent allowable emission rate:
☐ Permit ☐ 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

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)

			Calculation of DERCs							
Emission Point No.	FIN	FIN Air Contaminant	Expected Activity (units)	Expected Emission Rate (units)	Expected Total Emissions (tons)	Regulated Activity (units)	Regulated Emission Rate (units)	Regulated Total Emissions (tons)	DERCs (tons)	
H-02	H-02	NOx	160,000 MMBtu	0.0617 lb/MMBtu	4.94	160,000 MMBtu	0.036 lb/MMBtu	2.88	2.06	
	•							·		
		-		-						
				-						
										
·										
		<u> </u>				<u> </u>	<u> </u>	Total:	2.1 ✓	

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.



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 Re	equired for Use (1	round up to the n	earest tenth of a	ton)	
Tons of DERCs required (from Sect. VII.)	CO:	NO _x : <u>2.1</u> ·	PM ₁₀ :	SO ₂ :	VOC:
Offset Ratio (if required)	CO:	NO _x : <u>N/A</u>	PM ₁₀ :	SO ₂ :	VOC:
Environmental Contribution (+ 10%)	CO:	NO _x : <u>0.21</u>	PM ₁₀ :	SO ₂ :	VOC:
Compliance Margin (+ 5%) (If DERC use requires > 10 tons)	20	NO NI/A	DIA.	80.	VOC:
210 1013)	CO:	NO _X : N/A	PM ₁₀ :	SO ₂ :	VUC:
Total DERCs	CO:	NO _x : 2.31 or 2.4	PM ₁₀ :	SO ₂ :	VOC:
XI. DERC Informati	ion		W Y		
Name of the DERC DERC Generator R Certificate number Date on which the I by Nova Technologies Note: The certific	Regulated Entity Nof the DERCs acc DERCs were acqu (a, Inc.)	Number: quired or to be acq tired or will be acq	quired: uired: <u>DERC Cer</u>		Currently held
XII. Certification by	Responsible Offi	cial			
I, Abraham Zahand, use strategy claimed on further state that to the violation of 30 TAC, Sthe Texas Commission false material statement penalties. I hereby also emission credits. Signature Title Vice President, Commission, Commission Credits.	a this notice has more best of my know Subchapter H, Division Environmental ants or representation waive the Federal	et the requirements wledge and belief t ision 4, \$101.370-1 l Quality and that i ions in this certifi	of all applicable st he information in 1 01.379 or any appl ntentionally or kno cation is a CRIMI ons defense in regar	ate and federal rules this certification is rule icable air quality rule wingly making or ca INAL OFFENSE su	and regulations. I not in any way in le or regulation of ausing to be made abject to criminal



Element Materials Technology 222 Cavakade Street Houston, TX 77009-3213 USA P 713 692-9151 F 713 698-9274 T 888 786 7555 www.element.com Info.houston@element.com

AIR EMISSIONS TESTING

Nova Molecular Technologies, Inc. 10200 Bay Area Boulevard Pasadena, Texas 77507

Date:

July, 2012

Author:

Wes Bear

Report Number:

EHO003631P

2012

COMPLIANCE EMISSIONS TEST PROGRAM HOT OIL HEATER TCEQ RULE 117



Nova Molecular Technologies, Inc.

Element Project No. EHO003631P

INTRODUCTION

A compliance emissions test program on the Hot Oil Heater located at the Nova Molecular Technologies, Inc. (Nova) Bayport Industrial Complex in Pasadena, Texas was performed by personnel of Element Materials Technology Houston, Inc. (Element) Air Emissions Services (AES) Division. Present at times during the sample program were: Mr. Bob Wolff, Jr. and staff of Nova and Mr. Wes Bear of Element. Testing for NOx, CO and O₂ emissions was performed on July 2, 2012.

Sampling was conducted to determine the emissions of nitrogen oxides (NOx), carbon monoxide (CO) and oxygen (O₂) from the heater for an evaluation of pollutant levels. A total of three (3) sixty (60) minute sample runs were performed for each pollutant. In general, Environmental Protection Agency (EPA) Reference Methods 3A, 7E, 10 and 19 and Texas Commission on Environmental Quality (TCEQ) protocols were utilized during the sampling and analytical program. Testing was performed to satisfy TCEQ Rule 117 (30 TAC 117) requirements.

RESULTS

Results of the individual runs, calculated in accordance with EPA and TCEQ procedures, are contained in the Tables section of this report. The average emissions are shown as follows.

		Average	Average Emission Rate	
Source	Pollutant	ppmvd	ppmvd @ 3% O ₂	lb/mmBtu**
Hat Oil Haston	NOx*	42.59	50.80	0.0617
Hot Oil Heater	CO	<0.10	<0.12	< 0.0001
* Calculated as	NO ₂ .			
** Calculated at	0% O2 using the EPA pu	blished fuel F factor fo	r natural gas (8,710 dscf/mm)	Btu).

The NOx emissions exceeded the limits of 0.036 lb/mmBtu [117.2010(c)(1)(A)] or alternately, 30 ppmvd @ 3% O₂. The CO emissions were below the limit of 400 ppmvd @ 3% O₂ [117.2010(i)]. The TECQ Rule 117 standards were provided by Nova personnel.



TABLE NO. 2 $\label{eq:summary of sampling results - Nox, CO} \ \mbox{and O}_2$

Nova Molecular Technologies, Inc. Pasadena, Texas

Element Project No. EHO003631P

		· · · · · · · · · · · · · · · · · · ·	Nitr	ogen Oxides (N	Ox)*	C	arbon Monoxid	e (CO)	Oxygen (O ₂)
Run No.	Date	Time Period	ppmvd	ppmvd @ 3% O ₂	lb/mmBtu	ppmvd	ppmvd @ 3% O₂	lb/mmBtu	% (dry)
Hot Oil He	eater								
1	7/2/2012	1410-1510	42.17	50.94	0.0619	<0.10	<0.12	<0.0001	6.08
2	7/2/2012	1527-1627	43.01	50.74	0.0616	<0.10	<0.12	<0.0001	5.72
3	7/2/2012	1644-1744	42.59	50.73	0.0616	<0.10	<0.12	<0.0001	5.87
		Average:	42.59	50.80	0.0617	<0.10	<0.12	<0.0001	5.89

NOx emissions rate data are quantified as NO₂.



November 12, 2012

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY Emissions Banking and Trading TCEQ MC -206 P.O. Box 13087 Austin, Texas 78711-3087

Subject:

Notice of Intent to Use DERCs (Form DEC-2)

Nova Molecular Technologies, Inc.

10200 Bay Area Boulevard, Pasadena, Harris County

CN600364822; RN100925551

Dear Sir or Madame:

Enclosed is a completed Notice of Intent to Use Discrete Emission Reduction Credits (Form DEC-2) for the referenced facility covering the compliance period from 01/01/2014 through 12/31/2014. The notice is being submitted in accordance with 30 TAC 101.376 to comply with the emission control requirements of 30 TAC 117.2010(b) and (c)(1)(A) as allowed by 30 TAC 117.9800(a).

Please do not hesitate to contact me if you have questions or require further information regarding this matter.

Sincerely,

Abraham Zahand

Vice President, Operations

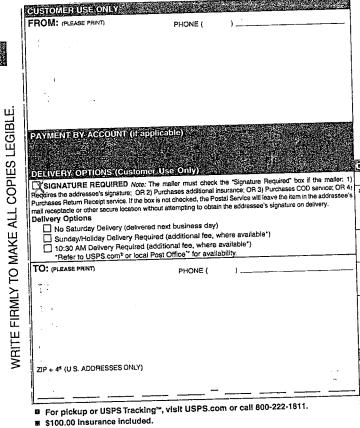




U.S. POSTAGE PAID LA PORTE.TX 7757! NOV 13.14 AMOUNT

\$24.65

When used internationally affix customs declarations (PS Form 2976, or 2976A).



-	SECURITIONS CO. S.				A THE PROPERTY OF THE PARTY OF	HANGE GEOGRAPHICA TOTAL CONTROLLED TOTAL
,	IRBIBIR HAIT	F V	7 7 7 1 1	11 4 3 4	2.11	

UNITED STΔTES POSTAL SERVICE ® PRIORITY

* MAIL *

EXPRESS™

RECEIVED

ORIGIN (POSTAL SERVIC	E USE ONLY		20 - 1 - 2 A	
[a]t-Day	2 Day		Military	DPO
O ZIP Code	heatled Delize	14e	Postage	1
	MINIOPINA! TO			į
7050	MAIL CE	NTE	3	
Date Accepted (MM/DD YY)	Sched accelivery	Time	Insurance Fee	CGD Fee
Date Accepted (Visitob (1)		3:00 PM	s	s
	☐ 12 NOON		<u></u>	
Time Accepted	10 30 AM Delivery Fee		Return Receipt Fee	Live Animal Transportation Fee
□ AM □ PM	s		\$	\$
Weight	Sunday/Holiday Premium Fee		Total Postage & Fees	
	s		}	
	Acceptance Employee Initials]	• •
bs ozs.	7 - 4	(-	\$	
DESVERY(POSTAL SE	RVICEUSEONLY	()		
Delivery Attempt (MM/DD YY)			Signature	
	□ AM			
	□ РМ			
Delivery Attempt I.'M.DD:YY:	Time	Employee	Signature	
	☐ AM			
	□РМ			
LABEL 11-B, JANUARY 2014	PSN 7690-0	2-000-9996	3-	ADDRESSEE COP

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Zak Covar, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 23, 2015

Mr. Abraham Zahand Vice President, Operations Nova Molecular Technologies, Inc. 10200 Bay Area Boulevard Pasadena, Texas 77507

Re: Notice of Intent to Use Discrete Emission Credits

Nova Molecular Technologies Pasadena, Harris County

Regulated Entity Reference Number: RN100925551

Customer Reference Number: CN600364822

Portfolio Number: P3627

Dear Mr. Zahand:

This letter is in response to a Notice of Intent to Use Discrete Emission Credits (Form DEC-2) received from Nova Molecular Technologies, Inc., on November 14, 2014. We understand that Nova Molecular Technologies, Inc., intends to use 2.4 tons of nitrogen oxides (NO_X) mobile discrete emission reduction credits (MDERC) for the purpose of compliance with 30 Texas Administrative Code (TAC) §117.2010(c)(1)(A) for the use period of January 1, 2015 through December 31, 2015.

We have reviewed your application and have found that the credits to be used meet the requirements of 30 TAC §§101.370 through 101.379. A total of 2.4 tons (including the required 10% environmental contribution of 0.3 ton) of NO_X MDERCs will be set aside from certificate D-3081.

Enclosed is a copy of MDERC certificate D-3149 issued in the amount of 0.6 ton of MDERCs retained from certificate D-3081. Certificate D-3149 has been deposited in the Texas Commission on Environmental Quality (TCEQ) Discrete Emission Credit Registry. This certificate may be transferred or sold to another owner for use per the requirements of §§101.370 through 101.379.

A Notice of Use of Discrete Emission Credits (Form DEC-3) must be submitted within 90 days of the end of the use period.

Thank you for your cooperation in this matter. If you have questions concerning this review, 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.

Mr. Abraham Zahand Page 2 January 23, 2015

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

Sincerely,

David Brymer, Director Air Quality Division

DB/MR/jm

cc: Air Section Manager, Region 12 - Houston

Ms. Kathy Perez-Ashton, Chief Health Inspector, Health Department, City of Pasadena

Mr. Bob Allen, Director, Harris County Pollution Control Services Department, Harris County

Mr. Philip Evans, Vice President, Technical Services, The WCM Group, Inc.

Project Number: 409464

Banking and Trading Route Slip

Emiss	AIR QUALITY Dions Banking and Tradi				
Company Name:	Molecular To	echnologies, Inc.			
Project Number: 409464					
Type of Letter Correspondence:	DCTR, DOU	A, DCCT			
Letter Document Number(s):	24790, 242	91, 24292			
Certificate Number(s): D3149					
Review and Approval	Initial and Date	Comments/Special Instructions			
Brandon Greulich, Work Lead EBTP	BG-1/23/15 MP 12/23/14				
Author/Creator Review	MP 12/23/14				
Peer Review Completed	JM 12/23/14				
Author/Creator	MR 12/18/14	Copies Made Date W.Z. 42315 Mailed Date W.Z. 1/2315			
Please return Routing Slip and Project Paperwork to Brandon Greulich, MC-206, Ext. 4904					