AIR DERC_101062099-406247_
USE_20120409_Use_D2737

03/13/2012 ---------- EBTP IMS- PROJECT RECORD ----------

PROJECT#: 406247 STATUS: P DISP CODE: C ✓
RECEIVED: 01/03/2012 PROJTYPE: BDIU ISSUED DT:
SUP-DISP DATE: 4/9/2012

STAFF ASSIGNED TO PROJECT:
RUANO, MELISSA

PROJECT NOTES:

THIS FORM DEC-2 IS SUPPLEMENTAL TO THE DEC-2 THAT WAS RECEIVED ON JAN 24, 2011 (PROJECT 405238). MEMC DETERMINED THAT NOX EMISSIONS WERE HIGHER THAN EXPECTED AND THAT THEY WOULD EXCEED THE 2.0 TONS SET ASIDE IN PROJECT 405238 (MR)

PROJECT PUT ON DEFICIENCY CYCLE. PENDING 2011 ACTIVITY INFO FROM COMPANY TO DETERMINE IF THERE HAS BEEN A VIOLATION OF 30 TAC 101.376 (MR)

MEMC SUBMITTED A FORM DEC-3 FOR THE 1/1/2011 - 12/31/2011 USE PERIOD ON MARCH 1, 2012. TO MINIMIZE THE NUMBER OF RETAINED CERTIFICATES AND TO FACILITATE FUTURE TRACKING, THE INTENT TO USE AMT WAS MATCHED TO THE ACTUAL USE OF 3.3 TON.

GROUPWISE DOCS: DCTR 18188, DCUA 18189, DCCT 18190 (D-2878)NOTE THAT THE TECHNICAL REVIEW AND LETTER ARE THE SAME AS FOR USE PROJECT NUMBER 406724

PROJECT TRANSACTIONS

COMPANY DATA

COMPANY NAME: MEMC PASADENA INC

CUSTOMER REGISTRY ID: CN600619415

File with
D2706
D2737
D2856
D2878

PORTFOLIO DATA

NUMBER: P0442 NAME: MEMC PASADENA - RN101062099

SITE DATA

ACCOUNT:
HX0029W

REG ENTITY ID: RN101062099

SITE NAME: MEMC PASADENA

COUNTY: HARRIS NEAREST CITY: PASADENA

LOCATION: 3000 N. SOUTH STREET

CONTACT DATA

NAME: FLORENCE RODRIGUEZ TITLE: ENVRIONMENTAL ENGINEER

STREET: PO BOX 2012 CITY/STATE,ZIP: PASADENA, TX , 77501-0

PHONE: 713-740-1548 ext 0

FAX: 713-740-1499 ext 0

Email: frodriguez@memc.com

TRANSACTION DATA

TRANSACTION TYPE: DERC_INTEN

DATE ENTERED: 2012-01-05 00:00:00.0 DELETED DATE: EFFECTIVE YEAR:

CONTAMINATE: **NOX** TONS: **0.20** DOLLARS: **0**

ALLOWANCE**0** CERTIFICATE NO.: **D2706** COUNTY : **HARRIS**

COMPANY DATA

COMPANY DATA

COMPANY NAME: MEMC PASADENA INC
CUSTOMER REGISTRY ID: CN600619415

PORTFOLIO DATA

NUMBER: P0442 NAME: MEMC PASADENA - RN101062099

SITE DATA

ACCOUNT:
HX0029W
REG ENTITY ID: RN101062099
SITE NAME: MEMC PASADENA
COUNTY: HARRIS NEAREST CITY: PASADENA
LOCATION: 3000 N. SOUTH STREET

CONTACT DATA

TRANSACTION DATA

TRANSACTION TYPE: DERC_INTEN
DATE ENTERED: 2012-03-13 00:00:00.0 DELETED DATE: EFFECTIVE YEAR:
CONTAMINATE: **NOX** TONS: **1.00** DOLLARS: **0**
ALLOWANCE**0** CERTIFICATE NO.: **D2737** COUNTY : **HARRIS**

COMPANY DATA

COMPANY NAME: MEMC PASADENA INC
CUSTOMER REGISTRY ID: CN600619415

PORTFOLIO DATA

NUMBER: P0442 NAME: MEMC PASADENA - RN101062099

SITE DATA

ACCOUNT:
HX0029W
REG ENTITY ID: RN101062099
SITE NAME: MEMC PASADENA
COUNTY: HARRIS NEAREST CITY: PASADENA
LOCATION: 3000 N. SOUTH STREET

CONTACT DATA

TRANSACTION DATA

TRANSACTION TYPE: DERC_INTEN
DATE ENTERED: 2012-03-13 00:00:00.0 DELETED DATE: EFFECTIVE YEAR:
CONTAMINATE: **NOX** TONS: **0.10** DOLLARS: **0**
ALLOWANCE**0** CERTIFICATE NO.: **D2856** COUNTY : **HARRIS**

TRANSACTION DATA

TRANSACTION TYPE: DERC_RET
DATE ENTERED: 2012-03-13 00:00:00.0 DELETED DATE: EFFECTIVE YEAR:
CONTAMINATE: **NOX** TONS: **2.20** DOLLARS: **0**
ALLOWANCE**0** CERTIFICATE NO.: **D2878** COUNTY : **HARRIS**

TRACKING ACTIVITES

TR - ENGINEER RECEIVE PROJECT : 02/14/2012 TR - DEFICIENCY CYCLE : 02/28/2012 03/13/2012 TR - PROJ TECH COMPLETE :

TR - SUP/MANGR APP/RVW RQSTD : FA - PROJECT ISSUED : TR - DATE SUP/MNGR REQ ADDL TR :

DISCRETE EMISSION CREDITS USE TECHNICAL REVIEW

Project No.:	406247, 406724	Customer Reference No.:	CN600619415
Project Type:	BDIU , BUSE	Regulated Entity No.:	RN101062099
Company:	MEMC Pasadena, Inc.	Facility Name:	MEMC Pasadena
City:	Pasadena	County:	Harris
Project Reviewer:	Ms. Melissa Ruano	Portfolio Name:	P0442

Project Overview

On January 3, 2012, MEMC Pasadena, Inc., (MEMC) submitted a Form DEC-2 (Notice of Intent to Use Discrete Emission Credits) to supplement the nitrogen oxides (NO_X) Discrete Emission Reduction Credits (DERC) previously set aside in DERC intent to use project number 405238 for the use period of January 1, 2011, through December 31, 2011 (2011 use period).

In project 405238, received on January 24, 2011, MEMC set aside 2.0 tons of NO_X DERCs from DERC certificate number D-2733 to comply with the requirements of 30 Texas Administrative Code (TAC) §117.2010(c)(1)(A) for four furnaces, Facility Identification Numbers (FIN) Y-C-1, Y-C-101, Y-C-201, and Y-C-301. On February 17-18, 2011, engineering tests performed as part of a burner adjustment showed that the NO_X emissions from FINs Y-C-201 and Y-C-301 were higher than expected and that they would exceed the 2.0 tons of DERCs set aside in project 405238.

On March 1, 2012, MEMC submitted a Form DEC-3 (Notice of Use of Discrete Emission Credits) for the 2011 use period. Upon request, the technical contact for MEMC submitted a revised Form DEC-3 via e-mail on March 9, 2012, with supplemental documentation and actual activity data for all four furnaces. A second revision was received via e-mail on March 13, 2012, due to calculation errors by the company on the actual emissions for FINs Y-C-201 and Y-C-301. According to the revised Form DEC-3, a total of 3.3 tons of NO_X DERCs (including the 10% environmental contribution) were used during the 2011 use period. To minimize the number of certificates retained and to facilitate future tracking by MEMC, the amount of DERCs set aside for the intent to use will be matched to the actual use reported on the Form DEC-3. Because 2.0 tons of NO_X DERCs have already been set aside in project number 405238, an additional 1.3 tons will be set aside in project 406247 to make the 3.3 tons used. The DERCs will be set aside from MEMC's DERC certificate numbers D-2706 (0.2 ton), D-2737 (1.0 ton), and D-2856 (0.1 ton)

Discrete Emission Credit Use

MEMC is using DERCs to allow an increase in emissions above their ESAD in 117.2010(c)(1)(A). The emission rates for FINs Y-C-1 and Y-C-101 were based on emissions testing conducted on July 21, 2005, and February 17, 2005, respectively. For FINs Y-C-201 and Y-C-301, the company used the emission rates based on vendor data for the period of January 1, 2011, through February 17, 2011, and the emission rates from the engineering tests for the period of February 18, 2011 – December 31, 2011. The engineering tests do not comply with the requirements of §117.8000. The region will be notified of a potential deviation. Copies of the vendor data and testing results are available on file.

Certificates to be used.....D-2706, D-2733 D-2737, D-2856
Pollutant.....NO_X
Amount to be set aside in project #406247.....1.3 tons
Amount to be used for project #406724.....3.3 tons
Regulations..... §117.2010(c)(1)(A)
Use period .....1/1/2011 - 12/31/2011

Credit Use Calculation Method

Because the DEC-2 and DEC-3 have been received for the use period, the calculations below reflect the DERC use only.

Per 30 TAC §101.376(e)(2)(A)

DERCs Used = (ALA) x (AER – RER)

Where:

ALA = actual level of activity
AER = actual emission rate per unit activity
RER = regulatory emission rate per unit activity = 0.036 for all furnaces

FIN Y-C-1

(31,701 MMBtu) x (0.071 lb/MMBtu – 0.036 lb/MMBtu) ÷2000 lb/ton = 0.5548 ton

FIN Y-C-1 01

(44,767 MMBtu) x (0.074 lb/MMBtu – 0.036 lb/MMBtu) ÷2000 lb/ton = 0.8506 ton

FIN Y-C-201

January 1, 2011 – February 17, 2011 (AER = vendor data)
(4,329 MMBtu) x (0.039 lb/MMBtu – 0.036 lb/MMBtu) ÷ 2000 lb/ton = 0.0065 ton

February 18, 2011 – December 31, 2011 (AER = engineering test data)
(27,040 MMBtu) x (0.088 lb/MMBtu - 0.036 lb/MMBtu) ÷ 2000 lb/ton = 0.7030 ton

FIN Y-C-301

January 1, 2011 – February 17, 2011 (AER = vendor data)
(6,815 MMBtu) x (0.039 lb/MMBtu – 0.036 lb/MMBtu) ÷ 2000 lb/ton = 0.0102 ton

February 18, 2011 – December 31, 2011 (AER = engineering test data)
(24,346 MMBtu) x (0.105 lb/MMBtu – 0.036 lb/MMBtu) ÷ 2000 lb/ton = 0.8399 ton

Total tons: 2.9650
Rounded up to the nearest tenth of a ton = 3.0 tons
10% environmental contribution (rounded to the nearest tenth) = 0.3 ton
Total DERCs used = 3.3 tons
DERCs to be set aside in intent to use project 406724: 1.3

Conclusion

MEMC has submitted the required documentation in order to use DERCs to comply with emission control requirements specified in §117.2010(c)(1)(A). An amount of 3.3 tons of NO_X DERCs will be used from DERC certificates D-2706, D-2733, D-2737, and D-2856. New certificate, D-2878, will be issued to MEMC for the remaining balance of 2.2 tons from certificate D-2856. Certificates D-2706 and D-2737 will be canceled.

Account Manager — Date: 4/9/12

Peer Reviewer for Ivan Gray — Date: 4/9/2012

Work Lead — Date: 4/9/2012

Received
JAN 0 [illegible] MR
Air Quality Division

TCEQ

Form DEC-2 (Page 1)
Notice of Intent to Use Discrete Emission Credits
(Title 30 Texas Administrative Code § 101.370 - § 101.379)
406247

I. Company Identifying Information		
A. Company Name: MEMC Pasadena		
Mailing Address: P. O. Box 2012		
City: Pasadena	State: Texas	Zip Code: 77501
Telephone:713-740-1548		Fax: 713-740-1499
B. TCEQ Customer Number (CN): CN600619415		
C. Site Name: MEMC Pasadena		
Street Address (If no street address, give driving directions to site): 3000 N. South St		
Nearest City: Pasadena	Zip Code: 77503	County: Harris
D. TCEQ Regulated Entity Number (RN): RN101062099		
E. TCEQ Air Account Number: (*if applicable*) HX-0029-W		P0442
F. Primary SIC: 2819		Air Permit Number: NSR 9597
II. Technical Contact Identifying Information		
A. Technical Contact Name: (☐ Mr. ☐ Mrs. ☒ Ms. ☐ Dr.) :Florence Rodriguez		
Technical Contact Title: Environmental Engineer		
Mailing Address: P. O. Box 2012		
City: Pasadena	State: Texas	Zip Code: 77501
Telephone: 713-740-1548	Fax: 713-740-1499	E-mail: frodriguez@memc.com
III. Company Contact Identifying Information (*If different from Technical Contact*)		
A. Company Contact Name: (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.) : Edgardo Colon		
Company Contact Title: ESH Manager		
Mailing Address: P. O. Box 2012		
City: Pasadena	State: Texas	Zip Code: 77501
Telephone: 713-740-1589	Fax:	E-mail: ecolon@memc.com

IV. Mass Emission Cap and Trade Program (MECT)

Is the DERC use for compliance with 30 TAC Chapter 101 Subchapter H, Division 3? ☐YES ☒ 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

V. Intended Use Period

Intended Use Start Date: 01 /01/2011 Intended Use End Date: 12 / 31 /2011

VI. State and Federal Requirements

Applicable State and Federal requirements that the DERCs will be used for compliance:
30 TAC 117.2010(c)(1)(A)

VII. Most Stringent Emission Rate

Describe basis for most stringent allowable emission rate:

☐ Permit _____ ☐ RACT _____ ☒ Other: 0.036 lbs NOx/ MMBtu (1)

Notes:

(1) Corresponds to 30 TAC 117.2010(c)(1)(A)

VIII. Protocol

Protocol used to calculate DERC: 30 TAC §101.376(d)(2

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)

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)
Y-C-1	Y-C-1	NOx	33638 MMBtu/yr	0.071 (lbs/MMBtu)	1.1941	N/A	0.036 (lbs/MMBtu)	0.6055	0.5887
Y-C-101	Y-C-101	NOx	54049 MMBtu/yr	0.074 (lbs/MMBtu)	1.9998	N/A	0.036 (lbs/MMBtu)	0.9729	1.0269
Y-C-201	Y-C-201	NOx 36681	6856 MMBtu/yr	0.039 (lbs/MMBtu)	0.134	N/A	0.036 (lbs/MMBtu)	0.123	0.01
			29825 MMBtu/yr	0.088 (lbs/MMBtu)	1.312			0.537	0.775
Y-C-301	Y-C-301	NOx 53452	6856 MMBtu/yr	0.039 (lbs/MMBtu)	0.134	N/A	0.036 (lbs/MMBtu)	0.123	0.01
			46596 MMBtu/yr	0.105 (lbs/MMBtu)	2.446			0.537	1.608
								Total:	~~4.02~~ 4.1

* Form DEC-3 was rec'd 3/1/2012. To minimize retained certificates and facilitate record keeping, intent amt will be matched to use (MR)

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

Tons of DERCs required (from Sect. VII.)	CO:	NO_X: ~~4.0~~ 4.1	PM_{10}:	SO_2:	VOC:
Offset Ratio (if required)	CO:	NO_X:	PM_{10}:	SO_2:	VOC:
Environmental Contribution (+ 10%)	CO:	NO_X: ~~0.4~~ 0.5	PM_{10}:	SO_2:	VOC:
Compliance Margin (+ 5%) *(If DERC use requires >10 tons)*	CO:	NO_X:	PM_{10}:	SO_2:	VOC:
Total DERCs	**CO:**	**NO_X:** ~~4.4~~ 4.6	**PM_{10}:**	**SO_2:**	**VOC:**

XI. DERC Information

Name of the DERC Generator: Osprey Line LLC and Dow Chemical Company (Dow Chem. Co.)
DERC Generator Regulated Entity Number: 24642 and 100225945
Certificate number of the DERCs acquired or to be acquired: D2231 (Parent Certificate: D1255) and D2551
Date on which the DERCs were acquired or will be acquired: 11/7/2011
Note: The certificate number is assigned by the TCEQ

XII. Certification by Responsible Official

I, Edgardo Colón, 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 Edgardo Colón Signature Date 12/28/2011

Title ESH Manager

NOx Credits Required for Compliance with 30 TAC 117 Limit
MEMC Pasadena, Inc. – Pasadena, Texas
01/01/2011 – 12/31/2011

Discrete emission credit use was calculated using 30 TAC §101.376 guidelines. Under 30 TAC §101.376(d)(2), the number of emission credits needed to maintain compliance with Chapter 117, is determined according to the following equation plus additional 10% to be retired as an environmental contribution.

$$DECs = ELA \times (EER - RER)$$

Where:

ELA = expected annual activity
EER = expected emission rate per unit of activity
RER = regulatory emission rate per unit of activity (required by Chapter 117)

Furnace F-9180 (Y-C-1) Discrete Emission Credit Use:

EER = 0.071 lbs/MMBtu [Measured emission rate during July 2005 stack test]
RER = 0.036 lbs/MMBtu [30 TAC 117.475(c)(1)(A)]
ELA = annual activity level [Maximum heat output from stack test]

$$= \frac{3.84 \text{ MMBtu}}{\text{hr}} \times \frac{8760 \text{ hr}}{\text{yr}} = 33{,}638 \text{ MMBtu/yr}$$

DECs = ELA x (EER – RER)
DECs = 33,638 MMBtu x (0.071-0.036) lbs/MMBtu
DECs = 1177.34 lbs = 0.5887 tons

Furnace F-91180 (Y-C-101) Emission Credit Use:

EER = 0.074 lbs/MMBtu [Measured emission rate during February 2005 stack test]
RER = 0.036 lbs/MMBtu [30 TAC 117.475(c)(1)(A)]
ELA = annual activity level [Maximum heat output from stack test]

$$= \frac{6.17 \text{ MMBtu}}{\text{hr}} \times \frac{8760 \text{ hr}}{\text{yr}} = 54{,}049 \text{ MMBtu/yr}$$

DECs = ELA x (EER – RER)
DECs = 54,049 MMBtu x (0.074-0.036) lbs/MMBtu
DECs = 2053.87 lbs = 1.0269 tons

Furnace F-91280 (Y-C-201) Emission Credit Use:

January 1, 2011 to February 17, 2011:

EER = 0.039 lbs/MMBtu [**Vendor data**]
RER = 0.036 lbs/MMBtu [30 TAC 117.475(c)(1)(A)]
ELA = annual activity level [Maximum heat output from stack test]
= 5.9 MMBtu / hr x 1162 hr / period = 6855.8 MMBtu/period

DECs = ELA x (EER – RER)
DECs = 6855.8 MMBtu x (0.039-0.036) lbs/MMBtu
DECs = 20.567 lbs = 0.01 tons

→ Per contact stack test conducted in Feb 2011 showed that low NOx burners were not working. Possible that burners were not working prior to stack test?

February 18, 2011 to December 31, 2011

EER = 0.088 lbs/MMBtu [Measured emission rate during February 2011 stack test]
RER = 0.036 lbs/MMBtu [30 TAC 117.2010(c)(1)(A)]
ELA = annual activity level [Maximum heat output from stack test]
= 3.93 MMBtu / hr x 7589 hr / period = 29825 MMBtu/period

DECs = ELA x (EER – RER)
DECs = 29825 MMBtu x (0.088-0.036) lbs/MMBtu
DECs = 1550.888 lbs = 0.775 tons

Furnace F-91380 (Y-C-301) Emission Credit Use:

January 1, 2011 to February 18, 2011:

EER = 0.039 lbs/MMBtu [**Vendor data**]
RER = 0.036 lbs/MMBtu [30 TAC 117.475(c)(1)(A)]
ELA = annual activity level [Maximum heat output from stack test]
= 5.9 MMBtu / hr x 1162 hr / yr = 6855.8 MMBtu/yr

DECs = ELA x (EER – RER)
DECs = 6855.8 MMBtu x (0.039-0.036) lbs/MMBtu
DECs = 20.567 lbs = 0.01 tons

February 18, 2011 to December 31, 2011

EER = 0.105 lbs/MMBtu [Measured emission rate during February 2011 stack test]
RER = 0.036 lbs/MMBtu [30 TAC 117.2010(c)(1)(A)]
ELA = annual activity level [Maximum heat output from stack test]
= 6.14 MMBtu / hr x 7589 hr / period = 46596 MMBtu/period

DECs = ELA x (EER – RER)
DECs = 46596 MMBtu x (0.105-0.036) lbs/MMBtu
DECs = 3215.156 lbs = 1.608 tons

Number of NOx credits required for compliance with 30 TAC 117.475(c)(1)(A):

NOx credits = ($DEC_{s, F9180}$ + $DEC_{s, F91180}$ + DEC_{91280} + DEC_{F91380})
= (0.5887 + 1.0269 + 0.01+ 0.775+ 0.01 + 1.608) tons
= 4.02 tons
= ~~4.0~~ 4.1 tons (rounded up to nearest tenth of a ton)

Environmental Contribution (+10%):

Contribution = (DERCs required) x (0.10) = 0.41
= (4.02 tons)(0.10) = 0.5
= 0.4019 tons
= 0.4 tons (rounded up to nearest tenth of a ton)

Total DERCs Required for One Year:

Total DERCs = (NOx Credits) + (Env Contribution)
= (4.0 + 0.4) tons (4.1 + 0.5) = 4.6
= 4.4 tons

AIR SAMPLING ASSOCIATES, INC.

PA-21

Table 2: Summary of Tests

Run No.	1	2	3	Average
Date	07/21/05	07/21/05	07/21/05	
Time	1119-1219	1242-1342	1400-1500	
Stack Temperature (°F)	818	839	837	831
Stack Gas Moisture Content (%)	17.20	16.30	15.91	16.47
Carbon Dioxide Content (% Vol.)	7.7	7.4	7.8	7.6
Oxygen Content				
- (% Vol.) Method 3A	6.0	6.8	6.6	6.5
- (%Vol.) Method 3B	6.6	6.8	6.8	6.7
% Excess Air	41.0	42.7	43.0	42.2
Stack Gas Flow Rate (dscfm)	804	950	966	907
Oxides of Nitrogen Emissions				
- ppm	49.8	44.0	47.1	47.0
- ppm @ 3% O2	59.8	55.9	59.0	58.2
- lbs/million Btu	0.073	0.068	0.072	0.071
- lbs/hr	0.29	0.30	0.33	0.31
Allowable Oxides of Nitrogen Emissions - ppm @ 3% O2	30.0	30.0	30.0	30.0
Carbon Monoxide Emissions				
- ppm	107.0	95.0	67.1	89.7
- ppm @ 3% O2	128.5	120.6	84.0	111.0
- lbs/hr	0.38	0.39	0.28	0.35
Allowable Carbon Monoxide Emissions - ppm @ 3% O2	400.0	400.0	400.0	400.0
Unit Operating Level - Gas Flow (lbs/hr)	168.68	183.83	184.25	178.92

Note: The oxygen values measured using EPA Method 3A were used to correct the oxides of nitrogen and carbon monoxide emissions to 3% oxygen. The oxygen values measured using EPA Method 3B were used to determine the molecular weight of the stack gas to calculate the stack gas flow rate (dscfm).

See Back →

PA-22

AIR SAMPLING ASSOCIATES, INC.

Compliance Summary

Test Performed For:
CS2 / MEMC
Pasadena, Texas
PA-22 Stack
Project No. 05-03
Date: 2/17/05

Test Performed By:
Air Sampling Associates, Inc.
Dallas-Fort Worth
ASAI-1
Mullins, Hefley

Run Number	Units	Run 1	Run 2	Run 3	Average	Standard
Date of Run		17-Feb	17-Feb	17-Feb		
Start Time		9:35	11:10	12:22		
Stop Time		10:35	12:10	13:22		
NO_X / O_2	Lbs/mmBtu	0.072	0.077	0.074	0.074	
NO_X / O_2	ppm@3% O2	59.5	63.6	60.8	61.3	30.0
NOx / Flow	Lbs/Hr	0.47	0.48	0.44	0.46	
CO / O_2	Lbs/mmBtu	0.018	0.012	0.014	0.015	
CO / O_2	ppm@3% O2	24.0	15.9	19.2	19.7	400.0
CO / Flow	Lbs/Hr	0.11	0.07	0.08	0.09	

Melissa Ruano - RE: Form DEC-2 - MEMC Pasadena

From: Florence Rodriguez <FRodriguez@memc.com>
To: Melissa Ruano <Melissa.Ruano@tceq.texas.gov>
Date: 2/15/2012 2:40 PM
Subject: RE: Form DEC-2 - MEMC Pasadena
Attachments: 2011 Syltherm Furnace Activity 2012.2.15.xlsx

Ms. Ruano,

Attached is a spreadsheet with the monthly activity of furnaces Y-C-201 and Y-C-301 in MMBtu. Please let me know if you need anything else.

Sincerely,

Florence Rodríguez
Environmental Engineer
MEMC Pasadena, Inc.
3000 N. South St
Pasadena, TX 77503
P: 713-740-1548
M: 281-935-7609
F: 713-740-1499

From: Melissa Ruano [mailto:Melissa.Ruano@tceq.texas.gov]
Sent: Tuesday, February 14, 2012 3:21 PM
To: Florence Rodriguez
Subject: Form DEC-2 - MEMC Pasadena

Dear Ms. Rodriguez,

Thank you for your time over the phone this afternoon.

Per our conversation, I am processing the supplemental DEC-2 that was submitted for the MEMC Pasadena site. In order to determine how to proceed with this project, I will need the monthly activity for furnaces Y-C-201 and Y-C-301 (preferably in units of MMBtu). If you could please provide me with this information, I would greatly appreciate it.

Thank you for your help. If you have any questions, please feel free to contact me.

Sincerely,

Melissa Ruano
Texas Commission on Environmental Quality
Chief Engineer's Office MC-206
Emissions Banking and Trading Program
Phone: (512) 239-4496
Fax: (512) 239-6188

Melissa.Ruano@tceq.texas.gov
How is our customer service? Fill out our online customer satisfaction survey at
www.tceq.texas.gov/goto/customersurvey

2011 Sylltherm Furnace Activity Level

Month (2011)	Y-C-201	Y-C-301
	MMBtu	MMBtu
January	2,768.8	4,338.5
February	2,898.2	4,298.3
March	2,777.3	4,173.4
April	2,963.2	2,595.6
May	2,548.7	2,660.1
June	2,467.8	2,506.3
July	1,989.4	1,625.8
August	2,298.3	1,668.0
September	2,339.8	1,688.1
October	2,413.9	1,795.9
November	2,826.2	1,889.9
December	3,077.2	1,920.7
Based on average daily natural gas consuption		

MEMC

TECHNOLOGY IS BUILT ON US

MEMC Pasadena, Inc.

3000 N. South Street
Pasadena, TX 77503
Post Office Box 2012
Pasadena, TX 77501
USA

Phone: 713-740-1548
Fax: 713-740-1499
www.memc.com

December 28, 2011

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

Re: Discrete Emission Credits
MEMC Pasadena, Inc.
3000 N. South Street
Pasadena, Texas 77503
CN600619415, RN101062099

To Whom It May Concern:

Please find the corrected DEC-2 form for the time period 1/1/2011 to 12/31/201 enclosed in this envelope. This submittal was requested by Ms. Melissa Ruano on December 14, 2011, after reviewing the DEC-2 for the 1/1/2012-12/31/2012 use period.

Please feel free to contact me at 713-740-1548 if you have any questions regarding these forms.

Sincerely,

Florence Rodríguez

Florence Rodríguez
Environmental Engineer

MEMC Pasadena, Inc.
Attn: ESH Department
P.O. Box 2012
Pasadena, TX 77501

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Austin, TX 78711-3087

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 9, 2012

Ms. Florence Rodriguez
Environmental Engineer
MEMC Pasadena, Inc.
PO Box 2012
Pasadena, Texas 77501

Re: Notice of Use of Discrete Emission Credits
MEMC Pasadena
Pasadena, Harris County
Regulated Entity Reference Number: RN101062099
Customer Reference Number: CN600619415
Portfolio Number: P0442

Dear Ms. Rodriguez:

This letter is in response to a Form DEC-2 (Notice of Intent to Use Discrete Emission Credits) received from MEMC Pasadena, Inc., on January 3, 2012, and a Form DEC-3 (Notice of Use of Discrete Emission Credits) received on March 1, 2012, for compliance with 30 Texas Administrative Code (TAC) Chapter 117. We understand that you used 3.3 tons of nitrogen oxides (NO_X) Discrete Emission Reduction Credits (DERCs) to comply with the emission specifications for attainment demonstration described in §117.2010(c)(1)(A) for the use period of January 1, 2011, through December 31, 2011.

Upon review, we agree that the use of 3.3 tons of NO_X DERCs meets the requirements of §117.2010(c)(1)(A). A total amount of 3.3 tons (including the 10% environmental contribution of 0.3 ton) of NO_X DERCs have been retired from DERC certificate numbers D-2706, D-2733, D-2737, and D-2856 for this purpose.

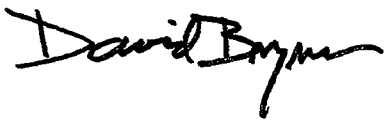
Enclosed is a copy of DERC certificate D-2878 issued to MEMC Pasadena, Inc., for the amount of 2.2 tons of NO_X DERCs retained from certificate D-2856. DERC certificate D-2878 has been deposited in the Texas Commission on Environmental Quality (TCEQ) Discrete Emission Credit Registry. This certificate may be transferred or sold to another owner for use per the requirements of §§101.370 through 101.379. There were no remaining DERCs from certificates D-2706, D-2733, and D-2737.

This review was completed using the data provided in the Forms DEC-2 and DEC-3. However, the deadlines for the new emissions testing and monitoring requirements referenced in Chapter 117 have passed. Since the emissions from Facility Identification Numbers Y-C-201 and Y-C-301 were not determined using the applicable Chapter 117 monitoring and testing procedures, we are required to inform your regional TCEQ office of a potential deviation. In the future, please use emissions and activity data derived from the required testing and monitoring procedures specified in Chapter 117 when submitting your Forms DEC-2 and DEC-3.

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, Chief Engineer's Office, 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,



David Brymer, Director
Air Quality Division

DB/MR/ig

cc: Air Section Manager, Region 12 – Houston
Mr. Michael Schaffer, Director, Environmental Public Health Division, Harris County Public Health and Environmental Services, Pasadena
Ms. Kathy Perez-Ashton, Chief Health Inspector, Health Department, City of Pasadena, Pasadena

Project Numbers: 406247, 406724

Banking and Trading Route Slip

AIR QUALITY DIVISION Emissions Banking and Trading Program (EBTP)				
Company Name: MEMC Pasadena, Inc.				
Project Number: 406247, 406724				
Type of Letter Correspondence: DCTR, DCUA/DCUS				
Letter Document Number(s): 18188, 18189				
Certificate Number(s): D-2878				
Review and Approval	**Initial and Date**	**Comments/Special Instructions**		
Chance Goodin, Team Lead Stationary Source Programs	BG for CL 4/9/2012	See comments/edits ✓ Done MR 4/9/12		
Brandon Greulich, Work Lead EBTP	BG 4/9/2012			
Author/Creator Review	MR 3/15/12			
Peer Review Completed	IMR 3/15/12			
Author/Creator	MR 3/13/12	- Intent project #406247 needs to be closed so that use project #406724 can be completed in IMS	**Copies Made**: MR **Date**: 4/9/12 **Mailed**: MR **Date**: 4/9/12	
Please return **Routing Slip** and **Project Paperwork** to Brandon Greulich, MC-206, Ext. 4904				