PROJECT#: 405137 STATUS: P DISP CODE: C
RECEIVED: 12/06/2010 PROJTYPE: BUSE ISSUED DT:
SUP-DISP DATE: 12/29/20

AIR DERC_101062099-405137_USE_20101229_Use_D2713

STAFF ASSIGNED TO PROJECT:
RUANO, MELISSA

91 7108 2133 3935 2002 9006

PROJECT NOTES:

DERC USE PERIOD 4/1/2006 - 3/31/2007

MEMC IS IN VIOLATION OF SUBMITTING LATE FORM DEC-3. FORM DEC-3 SHOULD HAVE BEEN SUBMITTED WITHIN 90 DAYS AFTER THE END OF THE USE PERIOD PER TAC 101.376(E)(3)(A)

DERC CERTIFICATES USED: D-1248 (INTENT PROJECT 400423 1.8 TONS) AND D-2709 (INTENT PROJECT 405142 0.1 TON)

GROUPWISE DOCS: DCTR 16008, DCUS 16026 (SAME AS PROJECT 405138), MEMO 16025

PROJECT TRANSACTIONS

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

NAME: EDGARDO COLON TITLE: ESH MANAGER

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

FAX: 713-740-1774 ext 0

PHONE: 713-740-1589 ext 0

Email: EColon@memc.com

TRANSACTION DATA

TRANSACTION TYPE: DERC_USE

DATE ENTERED: 2010-12-07 00:00:00.0 DELETED DATE: EFFECTIVE YEAR:

CONTAMINATE: **NOX** TONS: **1.80** DOLLARS: **0**

ALLOWANCE**0** CERTIFICATE NO.: **D2711** COUNTY : **HARRIS**

COMPANY DATA

COMPANY NAME: MEMC PASADENA INC

CUSTOMER REGISTRY ID: CN600619415

D2713

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: EDGARDO COLON TITLE: ESH MANAGER

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

FAX: 713-740-1774 ext 0

PHONE: 713-740-1589 ext 0

Email: EColon@memc.com

TRANSACTION DATA

TRANSACTION TYPE: DERC_USE

DATE ENTERED: 2010-12-10 00:00:00.0 DELETED DATE: EFFECTIVE YEAR:

CONTAMINATE: **NOX** TONS: **0.10** DOLLARS: **0**

ALLOWANCE**0** CERTIFICATE NO.: **D2713** COUNTY : **HARRIS**

TRACKING ACTIVITES

TR - ENGINEER RECEIVE PROJECT :	12/07/2010	TR - PROJ TECH COMPLETE :		12/13/2010	TR - SUP/MANGR APP/RVW RQSTD :
FA - PROJECT ISSUED :		TR - DATE SUP/MNGR REQ ADDL TR :			

DISCRETE EMISSION CREDITS/EMISSION CREDIT USE TECHNICAL REVIEW

Project Number:	405137, 405138	Customer Reference No.:	CN600619415
Project Type:	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 MEMC Pasadena

Project Overview

MEMC Pasadena, Inc. has submitted two Forms DEC-3 (Notice of Use of Discrete Emission Credits) that were received on December 6, 2010. MEMC Pasadena used Discrete Emission Reduction Credits (DERCs) to meet the requirements of Title 30 Texas Administrative Code (TAC) §117.2010(c)(1)(A).

The first Form DEC-3 (processed under project number 405137) indicated a use of 1.9 tons of nitrogen oxides (NO_X) DERCs (including the 10% environmental contribution) during the period of April 1, 2006, to March 31, 2007. They submitted this form for furnaces F-9180 and F-91180 (Facility Identification Numbers (FINs) Y-C-1 and Y-C-101). Both of these furnaces have an Emission Specification for Attainment Demonstration (ESAD) of 0.036 pounds per million British thermal units (lb/MMBtu) found in 117.2010(c)(1)(A). Due to a rounding error, the corresponding intent project (400423) set aside 1.8 tons of NO_X from Certificate D-1248. To correct the rounding error and satisfy the use project, 0.1 ton of NO_X DERCs will be set aside from Certificate D-2709.

The second Form DEC-3 (processed under project number 405138) indicated a use of 0.2 ton NO_X DERC (including the 10% environmental contribution) during the period of August 1, 2007 to December 31, 2007. They submitted this form for furnace F-91280 (FIN Y-C-201) with an ESAD of 0.036 per 30 TAC §117.2010(c)(1)(A). Furnace F-91380 (FIN Y-C-301) was not operational in 2007. The corresponding intent project (401902) set aside 0.8 ton NO_X DERCs in Certificate D-2092. A new certificate, D-2709, will be generated for the remaining balance of 0.6 ton of NO_X from Certificate D-2092 from which 0.2 ton NO_X will be used in project 405138.

MEMC Pasadena, Inc., is in violation of 30 TAC §101.376(e)(3)(A) for not submitting their Forms DEC-3 within 90 days after the end of the use period.

Discrete Emission Credit / Emission Reduction Credit Use

MEMC Pasadena, Inc., is using DERCs to comply with emission control requirements specified in 30 TAC §117.2010(c)(1)(A). They reported a total use of 1.9 tons NO_X, including 10% environmental contribution, for the 4/1/2006 – 3/31/2007 use period and 0.2 ton NO_x for the 8/1/2007 – 12/31/2007 use period.

Certificate(s) to be used	D-1248(D-2711 Use), D-2709 (D-2713 Use), D-2092 (D-2708 Use)
Pollutant	NO_X
Amount(s) Used	1.9, 0.2 tons
Regulation	30 TAC §117.2010(c)(1)(A)
Use period(s)/Use Date(s)	04/01/2006 - 03/31/2007, 08/01/2007- 12/31/2007

Credit Use Calculation Method

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 lb/MMBtu for all furnaces

Project # 405137

Furnace F-9180 (FIN Y-C-1)

ALA = (3.84 MMBtu/hr)(8,760 hr/yr) = 33,638 MMBtu/yr
AER = 0.071 lbs/MMBtu (stack test July 2005)

DERCs = (33,638 MMBtu/yr) x (0.035 lbs/MMBtu) (1 ton/2,000lbs) = 0.589 ton

Furnace F-91180 (FIN Y-C-101)

ALA = (6.17 MMBtu/hr)(8,760 hr/yr) = 54,049 MMBtu/yr
AER = 0.074 lbs/MMBtu (stack test February 2005)

DERCs = (54,049 MMBtu/yr) x (0.038 lbs/MMBtu) (1 ton/2,000lbs) = 1.027 tons

Total DERC Use = (0.589 + 1.027) = 1.616 tons

Rounded up to nearest tenth = 1.7
10% Environmental Contribution (rounded up to the nearest tenth) = 0.2 ton
Total DERCs required = 1.9 tons

Project # 405138

Furnace F-91280 (FIN Y-C-201)

ALA = (6.17 MMBtu/hr x 744 hr/yr) = 4,590 MMBtu/yr
AER = 0.074 lbs/MMBtu*

DERCs = (4590 MMBtu/yr) x (0.038 lbs/MMBtu)(1 ton/2,000lbs) = 0.087

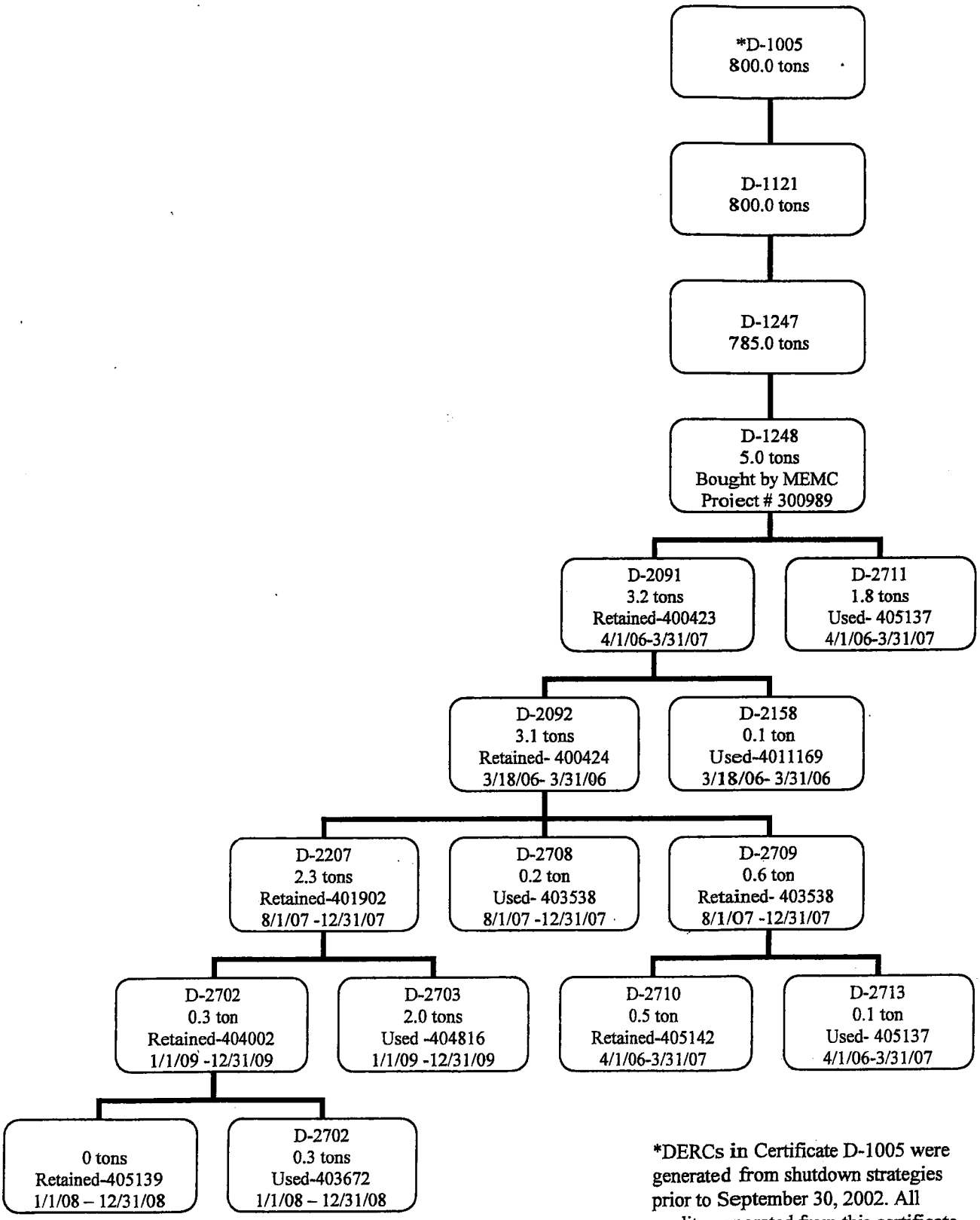
Rounded up to nearest tenth = 0.1ton
10% Environmental Contribution (rounded up to the nearest tenth) = 0.1ton
Total DERCs required = 0.2 ton

*Due to similar design, consultant used February 2005 stack test emissions rate from Furnace F-91180 (FIN Y-C-101). Vendor supplied emissions data at a later date.

Conclusion:
MEMC Pasadena, Inc., has submitted the required documentation to comply with the requirements 30 TAC §117.2010(c)(1)(A). A total of 1.9 tons NO_X will be used from MEMC Pasadena, Inc.'s DERC Certificates D-1248 and D-2709 and a total of 0.2 ton NO_X will be used from Certificate D-2092. Certificates D-1248, D-2709, and D-2092 have been cancelled. Because the DERCs in these certificates were generated from shutdown strategies prior to September 30, 2002, they are only available for use until September 8, 2010, per 30 TAC §101.378(b)(1). No retained certificates will be returned to the company.

Melissa Duncan 12/23/10
Project Reviewer Date

Brandi Li 12/29/2010
Team Leader/Section Manager/Backup Date



*DERCs in Certificate D-1005 were generated from shutdown strategies prior to September 30, 2002. All credits generated from this certificate were available for use until September 8, 2010

Interoffice Memorandum

DATE:	**December 13, 2010**
TO:	**Mr. Brandon Greulich**
FROM:	**Ms. Melissa Ruano**
SUBJECT:	**Notice of Violation – MEMC Pasadena, Inc.**

Project Number: 405137, 405138
Customer: MEMC Pasadena, Inc.
Registered Entity: RN101062099
Customer ID: CN600619415

MEMC Pasadena, Inc. (MEMC) is in violation of Title 30 Texas Administrative Code (TAC) §101.376(e)(3)(A) for submitting late Forms DEC-3 (Notice of Use of Discrete Emission Credits) for their MEMC Pasadena site. The violation summary is provided below:

Violation: Even though MEMC had sufficient Discrete Emission Reduction Credits (DERCs) in their account, MEMC is in violation of 30 TAC §101.376(e)(3)(A) for submitting two Forms DEC-3 past the required due date. A Form DEC-3 must be submitted within 90 days after the end of the use period. The use periods ended on March 31, 2007 (405137) and December 31, 2007 (405138).

Recommended Corrective Action: Submit a completed DEC-3 form and supporting documentation as detailed in 30 TAC §101.376 to the TCEQ Emissions Banking and Trading Program.

Resolution: Both DEC-3 forms were received on December 6, 2010.

Intent # 400423
D1243

E-MAIL
12/6/2016

Form DEC-3 (Page 1)
Notice of Use of Discrete Emission Credits
(Title 30 Texas Administrative Code § 101.370 - § 101.379)

405137

I.	**Company Identifying Information**		P0442
A.	Company Name: MEMC Pasadena, Inc.		
	Mailing Address: P.O. Box 2012		
	City: Pasadena	State: TX	Zip Code: 77501
	Telephone: 713-740-1402		Fax: 713-740-1499
B.	TCEQ Customer Number (CN): CN600619415		
C.	Site Name: MEMC Pasadena, Inc.		
	Street Address: (if no street address, give driving directions to site) 3000 N. South Street		
	Nearest City: Pasadena	Zip Code: 77503	County: Harris
D.	TCEQ Regulated Entity Number (RN): RN101062099		
E.	TCEQ Account Number: (if applicable) HX0029W		
F.	Primary SIC: 2819		Air Permit Number: 9597

II.	**Technical Contact Identifying Information**		
A.	Technical Contact Name: (X Mr. __Mrs. __Ms. __Dr.) Edgardo Colon		
	Technical Contact Title: ESH Manager		
	Mailing Address: P.O. Box 2012		
	City: Pasadena	State: TX	Zip Code: 77501
	Telephone: 713-740-1589	Fax: 713-740-1774	E-mail: EColon@memc.com

III. 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

IV. Use Period

Use Start Date: 4/1/2006 Use End Date: 3/31/2007

V. State and Federal Requirements

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

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

VI. Most Stringent Emission Rate

Describe basis for most stringent allowable emission rate: ☐ Permit_____ ☐ RACT_____ ☒ Other: 0.036 lb/MMBtu

Notes:

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

VII. Tons of Dercs Used

Emission Point No.	FIN	Air Contaminant	Calculation of DERCs						
			Actual Activity (units)	Actual Emission Rate (units)	Actual Total Emissions (tons)	Regulated Activity (units)	Regulated Emission Rate (units)	Regulated Total Emissions (tons)	DERCs Used (tons)
Y-C-1	Y-C-1	NOx	33638 MMBtu/yr	0.071 lb/MMBtu	1.1941	N/A	0.036 lb/MMBtu	0.6055	0.5887
Y-C-101	Y-C-101	NOx	54049 MMBtu/yr	0.074 lb/MMBtu	1.9998	N/A	0.036 lb/MMBtu	0.9729	1.0269
								Total:	1.62

1.7

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

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 attached protocol

IX. Total DERCs Used (round up to the nearest tenth of a ton)

Tons of DERCs required (from Sect. VI.)	CO:	NO_X: 1.7	PM_{10}:	SO_2:	VOC:
Offset Ratio (if required)	CO:	NO_X:	PM_{10}:	SO_2:	VOC:
Environmental Contribution (+ 10%)	CO:	NO_X: 0.2	PM_{10}:	SO_2:	VOC:
Total DERCs Used	CO:	NO_X: 1.9	PM_{10}:	SO_2:	VOC:

X. DERC Information

Name of the DERC Generator: National Offsets
DERC Generator Regulated Entity Number: RN100225945
Certificate number of the DERCs used: D-1248 + D-2702

Note: The certificate number is assigned by the TCEQ

XI. Purchase Dates and Prices

Date on which the DERCs were acquired or registered: 5/10/2005

Price of the DERCs: $ 600.00 per ton (Required)

XII. CERTIFICATION BY RESPONSIBLE OFFICIAL

I, Rich Booher, 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. I hereby also waive the Federal statute of limitations defense in regards to the generation and use of discrete emission credits

Signature _____ Signature Date 12/06/10

Title Site Manager

NOx Credits Required for Compliance with 30 TAC 117 Limit
MEMC Pasadena, Inc. – Pasadena, Texas
04/01/2006 – 03/31/2007

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.

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

$$= ALA \times (AER - RER)$$

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]
= 3.84 MMBtu/hr x 8760 hr/yr = 33,638 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

$(33,638) \times (0.071 - 0.036)(1/2000)$
0.589

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]
= 6.17 MMBtu/hr x 8760 hr/yr = 54,049 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

$(54,049) \times (0.074 - 0.036)(1/2000$
1.027

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

NOx credits = ($DECs_{F9180}$ + $DECs_{F91180}$) (0.589 + 1.027) = 1.616
= (0.5887 + 1.0269) tons
= 1.62 tons
= 1.7 tons (rounded up to nearest tenth of a ton) = 1.7

Environmental Contribution (+10%):

Contribution = (DERCs required) x (0.10)
= (1.62 tons)(0.10)
= 0.162 tons
= 0.2 tons (rounded up to nearest tenth of a ton)

Total DERCs Required for One Year:

Total DERCs = (NOx Credits) + (Env Contribution)
= (1.7 + 0.2) tons ✓
= 1.9 tons ✓

Intent to use Tech review

400423

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

Efp = 0.071 lbs/MMbtu [Measured emission rate during July 2005 stack test]
Efr = 0.036 lbs/MMbtu [30 TAC 117.475(c)(1)(A)]
A = annual activity level [Maximum heat output from stack test]
= 3.84 MMbtu/hr x 8760 hr/yr = 33,638.4 MMbtu/yr

DERCs = A x (Efp - Efr)
DERCs = 33,638.4 MMBtu x (0.071 - 0.036) lbs/MMbtu
DERCs = 0.588672 tons

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

Efp = 0.074 lbs/MMbtu [Measured emission rate during February 2005 stack test]
Efr = 0.036 lbs/MMbtu [30 TAC 117.475(c)(1)(A)]
A = annual activity level [Maximum heat output from stack test]
= 6.17 MMbtu/hr x 8760 hr/yr = 54,049.2 MMbtu/yr

D2702 0.3

DERCs = A x (Efp - Efr)
DERCs = 54,049.2 MMBtu x (0.074 - 0.036) lbs/MMbtu
DERCs = 1.0269348 tons

DERCs required for both units: 0.588672 + 1.0269348 = 1.6156068 tons
10% environmental contribution: 0.16156068 tons

1.7
1.2

Total DERCs required: 1.7716 tons, rounded up to 1.8 tons.

Conclusion:
MEMC has submitted the required documentation to increase their allowed emission rates according to 101.306 and 117.475(c)(1)(A). They will set aside 1.8 tons of certificate D-1248 for their intent to use, and the remaining 3.2 tons will be retained by them on certificate D-2091.

Project Reviewer Date Team Leader/Section Manager/Backup Date

Received (mail)
DEC 08 2010
Air Quality Division

Original

Form DEC-3 (Page 1)
Notice of Use of Discrete Emission Credits
(Title 30 Texas Administrative Code § 101.370 - § 101.379)

I.	**Company Identifying Information**		
A.	Company Name: MEMC Pasadena, Inc.		
	Mailing Address: P.O. Box 2012		
	City: Pasadena	State: TX	Zip Code: 77501
	Telephone: 713-740-1402		Fax: 713-740-1499
B.	TCEQ Customer Number (CN): CN600619415		
C.	Site Name: MEMC Pasadena, Inc.		
	Street Address: (if no street address, give driving directions to site) 3000 N. South Street		
	Nearest City: Pasadena	Zip Code: 77503	County: Harris
D.	TCEQ Regulated Entity Number (RN): RN101062099		
E.	TCEQ Account Number: (if applicable)		
F.	Primary SIC: 2819		Air Permit Number: 9597

II.	**Technical Contact Identifying Information**		
A.	Technical Contact Name: (X Mr. __ Mrs. __ Ms. __ Dr.) Edgardo Colon		
	Technical Contact Title: ESH Manager		
	Mailing Address: P.O. Box 2012		
	City: Pasadena	State: TX	Zip Code: 77501
	Telephone: 713-740-1589	Fax: 713-740-1774	E-mail: EColon@memc.com

III. 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

IV. Use Period

Use Start Date: 4/1/2006 Use End Date: 3/31/2007

V. State and Federal Requirements

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

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

VI. Most Stringent Emission Rate

Describe basis for most stringent allowable emission rate: ☐ Permit_____ ☐ RACT_____ ☒ Other: 0.036 lb/MMBtu

Notes:

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

VII. Tons of Dercs Used

Emission Point No.	FIN	Air Contaminant	Calculation of DERCs						
			Actual Activity (units)	Actual Emission Rate (units)	Actual Total Emissions (tons)	Regulated Activity (units)	Regulated Emission Rate (units)	Regulated Total Emissions (tons)	DERCs Used (tons)
Y-C-1	Y-C-1	NOx	33638 MMBtu/yr	0.071 lb/MMBtu	1.1941	N/A	0.036 lb/MMBtu	0.6055	0.5887
Y-C-101	Y-C-101	NOx	54049 MMBtu/yr	0.074 lb/MMBtu	1.9998	N/A	0.036 lb/MMBtu	0.9729	1.0269
								Total:	1.62

Received
DEC 08 2010
Air Quality Division

TCEQ

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

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 attached protocol

IX. Total DERCs Used (round up to the nearest tenth of a ton)

Tons of DERCs required (from Sect. VI.)	CO:	NO_X: 1.7	PM_{10}:	SO_2:	VOC:
Offset Ratio (if required)	CO:	NO_X:	PM_{10}:	SO_2:	VOC:
Environmental Contribution (+ 10%)	CO:	NO_X: 0.2	PM_{10}:	SO_2:	VOC:
Total DERCs Used	**CO:**	**NO_X:** 1.9	**PM_{10}:**	**SO_2:**	**VOC:**

X. DERC Information

Name of the DERC Generator: National Offsets
DERC Generator Regulated Entity Number: RN100225945
Certificate number of the DERCs used: D-1248

Note: The certificate number is assigned by the TCEQ

XI. Purchase Dates and Prices

Date on which the DERCs were acquired or registered: 5/10/2005

Price of the DERCs: $ 600.00 per ton (Required)

XII. CERTIFICATION BY RESPONSIBLE OFFICIAL

I, Rich Booher, 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. I hereby also waive the Federal statute of limitations defense in regards to the generation and use of discrete emission credits

Signature _____ Signature Date 12/06/10

Title Site Manager

NOx Credits Required for Compliance with 30 TAC 117 Limit
MEMC Pasadena, Inc. – Pasadena, Texas
04/01/2006 – 03/31/2007

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

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

NOx credits = ($DEC_{s, F9180}$ + $DEC_{s, F91180}$)
= (0.5887 + 1.0269) tons
= 1.62 tons
= 1.7 tons (rounded up to nearest tenth of a ton)

Environmental Contribution (+10%):

Contribution = (DERCs required) x (0.10)
= (1.62 tons)(0.10)
= 0.162 tons
= 0.2 tons (rounded up to nearest tenth of a ton)

Total DERCs Required for One Year:

Total DERCs = (NOx Credits) + (Env Contribution)
= (1.7 + 0.2) tons
= 1.9 tons

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 7, 2011

Certified Mail # 91 7108 2133 3935 2002 9006
Mr. Edgardo Colon
ESH Manager
MEMC Pasadena, Inc.
P.O. Box 2012
Pasadena, Texas 77501

Re: Notice of Violation for the Use of Discrete Emission Credits at:
MEMC Pasadena, Inc.
Pasadena, Harris County
Regulated Entity Number: RN101062099
Customer Reference Number: CN600619415
Portfolio Number: P0442

Dear Mr. Colon:

This letter is in response to two Forms DEC-3 (Notice of Use of Discrete Emission Credits) received from MEMC Pasadena, Inc., on December 6, 2010. We understand that you plan to use 1.9 tons of nitrogen oxides (NO_X) Discrete Emission Reduction Credits (DERCs) for the use period of April 1, 2006, through March 31, 2007, and 0.2 ton of NO_X DERCs for the use period August 1, 2007, through December 31, 2007, to comply with requirements specified in Title 30 Texas Administrative Code (TAC) §117.2010(c)(1)(A). During this review, any instances of non-compliance with applicable Emissions Banking and Trading Program regulations under 30 TAC Chapter 101, Subchapter H have been noted as violations. Enclosed is a summary that lists the findings. All violations were resolved during or subsequent to the review. No further response from you is necessary at this time.

We have reviewed your application and have found that the notice and credits to be used meet the requirements of 30 TAC §§101.370 through 101.379. A total of 1.9 tons of NO_X (including the 10% environmental contribution of 0.2 ton) will be used from MEMC Pasadena, Inc.'s Certificates D-1248 and D-2709 for the period of April 1, 2006, through March 31, 2007. A total of 0.2 ton of NO_X (including the 10% environmental contribution of 0.1 ton) will be used from MEMC Pasadena, Inc.'s Certificate D-2092 for the use period of August 1, 2007, through December 31, 2007.

Please be aware that because the DERCs on Certificates D-1248, D-2709, and D-2092 were originally generated from shutdown strategies prior to September 30, 2002, these credits were available for use until September 8, 2010, per 30 TAC §101.378(b)(1). Certificates D-1248, D-2709, and D-2092 are now cancelled and any remaining DERCs are no longer available for use.

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, Chief Engineer's Office, Air Quality Division (MC-206), P.O. 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
Texas Commission on Environmental Quality

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 Number: 405137, 405138

Violation Summary
Regulated Entity Number: RN101062099

Violation: MEMC Pasadena, Inc., is in violation for not submitting two Forms DEC-3, Notice of Use of Discrete Emission Credits, by the required due dates. The Forms DEC-3 were due within 90 days after the end of the use periods.

Citation: Title 30 Texas Administrative Code (TAC) §101.376(e)(3)(A)

Recommended Corrective Action: Submit the completed Forms DEC-3 and supporting documentation as detailed in 30 TAC §101.376 to the Texas Commission on Environmental Quality's Emissions Banking and Trading Program.

Resolution: MEMC Pasadena, Inc., submitted the required Forms DEC-3 and the supporting documentation for the respective use periods on December 6, 2010.

Project Number: 405137, 405138

1-d BG

Banking and Trading Route Slip

Company: MEMC Pasadena, Inc.

Project Number: 405137 405138 closed early

Type of Letter Correspondence: DCTR, DCUS, MEMO

Letter Doc No: 16008, 16026, 16025

Certificate No: ———

	Initials:	Date
Author/Creator	MR	12/13/10
Peer Review Completed	IKL	12/15/10
Author/Creator Review	MR	12/15
Review and Approval By:	**Initials:**	**Date**
WL Review: Brandon Greulich	DS	12/20
	BG	12/29
Management Review: Chance Goodin	BG for Chance	12/29
Donna Huff	DHF	1/4
David Brymer	DAB	1/5
Copies made	MB	1/7
Mailed		

Comments/Special Instructions

- Project 405138 closed early to complete 405137
- Intent project 405142 was created in-house to correct intent 400423 for

Please return **Routing Slip** and **Project Paperwork** to Norma Blakely, MC-206, Ext. 3618

use project 405137

2 BUSE projects