

Banking Cap and Trade
Project ReportAIR DERC_102212925-409770_
USE_20150605_Use_D2940**06/05/2015 ----- EBTP IMS- PROJECT RECORD -----**PROJECT#: 409770
RECEIVED: 02/15/2015STATUS: P
PROJTYPE: BDIUDISP CODE: C
ISSUED DT:
SUP-DISP DATE: 6/5/2015 ✓**STAFF ASSIGNED TO PROJECT:**

MERCADO, PE, MARIE

PROJECT TRANSACTIONS**COMPANY DATA**COMPANY NAME: EXXON MOBIL CORPORATION
CUSTOMER REGISTRY ID: CN600123939**PORTFOLIO DATA**

NUMBER: P0275 NAME: EXXON MOBIL BAYTOWN OLEFINS PLANT - RN102212925

SITE DATA

ACCOUNT: HG0228H

REG ENTITY ID: RN102212925

SITE NAME: EXXON MOBIL CHEMICAL BAYTOWN OLEFINS PLANT

COUNTY: HARRIS

NEAREST CITY: BAYTOWN

LOCATION: 3525 DECKER DRIVE, BAYTOWN 77520

D-2940

CONTACT DATA

NAME: KAISER AHMED

TITLE: ENVIRONMENTAL ADVISOR

STREET: P.O. BOX 4004 CITY/STATE, ZIP: BAYTOWN, TX, 77522-4004

PHONE: 281-834-5297 ext 0

Email: kaiser.u.ahmed@exxonmobil.com

TRANSACTION DATA

TRANSACTION TYPE: DERC_INTEN

DATE ENTERED: 2015-02-17 00:00:00.0

DELETED DATE:

EFFECTIVE YEAR:

CONTAMINATE: CO

TONS: 4.40

DOLLARS: 0

ALLOWANCE0

CERTIFICATE NO.: D2940 COUNTY: HARRIS

TRACKING ACTIVITIES

PM RECEIVED DATE:

03/16/2015

PROJECT COMPLETED:

6/15/15

DISCRETE EMISSION CREDIT INTENT TO USE TECHNICAL REVIEW

Project No.:	409770	Customer Reference No.:	CN600123939
Project Type:	BDIU	Regulated Entity No.:	RN102212925
Company:	Exxon Mobil Corporation	Site Name:	Exxon Mobil Chemical Baytown Olefins Plant
City:	Baytown	County:	Harris
Project Reviewer:	Marie Mercado, P.E.	Portfolio Number:	P0275

PROJECT OVERVIEW

Exxon Mobil Corporation (Exxon) submitted a Notice of Intent to Use Discrete Emission Credits (Form DEC-2) received on February 17, 2015 (postmarked February 13, 2015). Exxon is intending to use carbon monoxide (CO) Discrete Emission Reduction Credits (DERC) to help meet the requirements of 30 Texas Administrative Code (TAC) §117.310(c)(1)(A) and (B) at the Exxon Mobil Chemical Baytown Olefins Plant (Baytown Olefins Plant). The use period is March 31, 2015 through June 28, 2015. Exxon has requested that 4.4 tons (including the required 10% environmental contribution of 0.4 ton) of CO credits be set-aside for this intent.

An amount of 4.4 tons of CO DERCs will be set aside from DERC certificate D-2940 (parent D-2929, original D-1019) for Exxon's request. The credits in D-2940 meet the geographic requirement specified in §101.372(f)(6), since the current definition of Greater Houston MSA includes both Conroe city in Montgomery County (credit generation location) and Baytown city in Harris County (credit use location).

DISCRETE EMISSION CREDIT INTENT TO USE

Exxon is requesting the use of CO DERCs to comply with the CO emission limits of 400 parts per million by volume dry (ppmvd) of CO @ 3% Oxygen (O₂) in §117.310(c)(1)(A) and 3.0 grams per horsepower (g/hp-hr) in §117.310(c)(1)(B). Per Exxon's Form DEC-2, Attachment B, four boilers, five turbines with heat recovery steam generators (HRSG), and 19 process heaters are expected to exceed §117.310(c)(1)(A), while eight engines (six air compressors and two water pumps) are expected to exceed §117.310(c)(1)(B). Refer to Attachment B in the supporting documentation submitted with the Form DEC-2

The table below provides details on the total DERCs set aside for each regulatory requirement and the FINs expected to use DERCs to meet each regulatory requirement.

Reference in Attachment B and Type of FINs	Chapter 117 Regulation	Amount Set-Aside for the use period, 3/31/2015 – 6/28/2015
List 1: Boilers, Turbines with HRSG, and Process Heaters	§117.310(c)(1)(A) on a 24-hour rolling average	3.9 tons
List 2: Engines	§117.310(c)(1)(B) on a 1-hour average	0.1 ton

Certificate(s) to be used: D-2940

Pollutant: CO

Amount: 4.4 tons (including the required 10% environmental contribution)

Regulations: §117.310(c)(1)(A) and (B)

Use period: 03/31/2015 through 6/28/2015

CREDIT INTENT TO USE CALCULATION METHODS

Exxon used the equation in 30 TAC §101.376(d)(2)(B) to determine the DERCs needed. Exxon provided generic calculation for expected DERC use by each group of FINs. Refer to Attachment A of the supporting documentation submitted with the DEC-2 form for this project and the technical review for Project 406666 for more details regarding the calculations of DERCs needed for a similar intent.

Total amount of DERCs needed (rounded up to a tenth of a ton) = 4.0 tons

+10% Environmental Contribution (rounded up to a tenth of a ton) = 0.4 ton

Total DERCs set aside = 4.0 tons + 0.4 ton = 4.4 tons

CONCLUSION

Exxon has submitted the required documentation in order to use CO DERCs to comply with emission limit requirements specified in §117.310(c)(1)(A) and (B) at their Baytown Olefins Plant for the use period of March 31, 2015 through June 28, 2015. An amount of 4.4 tons (including the required 10% environmental contribution of 0.4 ton) will be set aside from DERC certificate D-2940 for this intent.

Moni Mercado 6/15/15
Project Manger Date

[Signature] 6/10/2015
Peer Reviewer Date

N/A —
Work Leader Date



BDIU

Form DEC-2 (Page 1)

Received

Notice of Intent to Use Discrete Emission Credits
(Title 30 Texas Administrative Code § 101.370 - § 101.375)

FEB 17 2015

MM

409770

Air Quality District

I. Company Identifying Information

A. Company Name: Exxon Mobil Corporation

Mailing Address: P.O. Box 100

City: Baytown

State: TX

Zip Code: 77522-0100

Telephone: 281-834-5297

Fax: 281-834-5788

B. TCEQ Customer Number (CN): CN600123939

C. Site Name: Baytown Olefins Plant

Street Address (If no street address, give driving directions to site): 3525 Decker Dr.

Nearest City: Baytown

Zip Code: 77520-1646

County: Harris

D. TCEQ Regulated Entity Number (RN): RN102212925

E. TCEQ Air Account Number: (if applicable) HG-0228-H

P0275

F. Primary SIC: 2869

Air Permit Number: 3452

II. Technical Contact Identifying InformationA. Technical Contact Name: (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.) : Kaiser Ahmed

Technical Contact Title: Environmental Advisor

Mailing Address: P.O. Box 4004

City: Baytown

State: TX

Zip Code: 77522-4004

Telephone: 281-834-5297

Fax: 281-834-5788

E-mail: kaiser.u.ahmed@exxonmobil.com

III. Company Contact Identifying Information (If different from Technical Contact)A. Company Contact Name: (☐ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.) :

Company Contact Title:

Mailing Address:

City:

State:

Zip Code:

Telephone:

Fax:

E-mail:

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 PeriodIntended Use Start Date: 03/31/2015Intended Use End Date: 06/28/2015



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 TAC 117.310(c)(1)

VII. Most Stringent Emission Rate

Describe basis for most stringent allowable emission rate:

☐ Permit _____ ☐ RACT _____ ☒ Other: 30 TAC 117.310(c)(1)

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)

IX. Tons of DERCS Required									
Emission Point No.	FIN	Air Contaminant	Calculation of DERCS						
			Expected Activity (Rolling 24-hr Average, MMBtu)	Expected Emission Rate (Rolling 24-hr Average, ppmv CO @ 3% O ₂)	Expected Total Emissions (tons)	Regulated Activity (units)	Regulated Emission Rate (Rolling 24-hr Average, ppmv CO @ 3% O ₂)	Regulated Total Emissions (tons)	DERCs (tons)
See Attachment B, List 1		CO	218,987	458	-	-	400	-	3.9
Emission Point No.	FIN	Air Contaminant	Calculation of DERCS						
			Expected Activity (1-hr Average, hp-hr)	Expected Emission Rate (1-hr Average, g CO/hp-hr)	Expected Total Emissions (tons)	Regulated Activity (units)	Regulated Emission Rate (1-hr Average, g CO/hp-hr)	Regulated Total Emissions (tons)	DERCs (tons)
See Attachment B, List 2		CO	8,920	13.2	-	-	3.0	-	0.1
								Total:	4.0



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>4.0</u>	NO _x : _____	PM ₁₀ : _____	SO ₂ : _____	VOC: _____
Offset Ratio (if required)	CO: _____	NO _x : _____	PM ₁₀ : _____	SO ₂ : _____	VOC: _____
Environmental Contribution (+ 10%)	CO: <u>0.4</u>	NO _x : _____	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: <u>4.4</u>	NO _x : _____	PM ₁₀ : _____	SO ₂ : _____	VOC: _____

XI. DERC Information

Name of the DERC Generator: Exxon Mobil Corporation

DERC Generator Regulated Entity Number: RN100211622

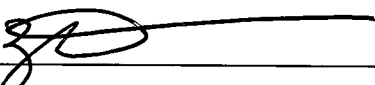
Certificate number of the DERCs acquired or to be acquired: D-2435

Date on which the DERCs were acquired or will be acquired: 10/26/2009

Note: The certificate number is assigned by the TCEQ

XII. Certification by Responsible Official

I, Ty Hastriter, 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 2/12/2015

Title Environmental Section Supervisor

ATTACHMENT A
CO DERC CALCULATION FOR BAYTOWN OLEFINS PLANT

Equation to Calculate DERCs Needed (30 TAC 101.376(d)(2)(B))

$$(ELA) * (EER - RER) = \text{DERCs Needed}$$

For process heaters subject to 30 TAC 117.310(c)(1)(A):

ELA = expected level of activity (Rolling 24-hr average, MMBtu)
EER = expected emission rate (Rolling 24-hr average, ppmv CO @ 3% O₂)
RER = regulatory emission rate (Rolling 24-hr average, ppmv CO @ 3% O₂)

$$218,987 \text{ MMBtu} * (458 - 400) \text{ ppmv} * 7.27 * 10^{-8} \frac{\text{lb}}{\text{scf-ppmv}} * 8,466 \frac{\text{dscf}}{\text{MMBtu}} * \frac{\text{ton}}{2000 \text{ lb}} = 3.9 \text{ tons CO}$$

For stationary internal combustion engines subject to 30 TAC 117.310(c)(1)(B):

ELA = expected level of activity (1-hr average, hp-hr)
EER = expected emission rate (1-hr average, g CO/hp-hr)
RER = regulatory emission rate (1-hr average, g CO/hp-hr)

$$8,920 \text{ hp-hr} * (13.2 - 3.0) \frac{\text{g}}{\text{hp-hr}} * \frac{\text{lb}}{453.6 \text{ g}} * \frac{\text{ton}}{2000 \text{ lb}} = 0.1 \text{ tons CO}$$

Total DERCs Needed = 4.0 tons + 10% Environmental Contribution
= 4.0 tons + 0.4 tons = 4.4 tons

Attachment B

List 1

*Subject to 30 TAC 117.310(c)(1)(A): CEMS
Limit = 400 ppmvd CO @ 3% O₂, 24-hr rolling average*

FIN	FIN Name
BOILER A	A Boiler
BOILER B	B Boiler
BOILER C	C Boiler
BOILER D	D Boiler
SGT01/HRSG1	Stationary Gas Turbine 1/Heat Recovery Steam Generator 1
SGT02/HRSG2	Stationary Gas Turbine 2/Heat Recovery Steam Generator 2
SGT03/HRSG3	Stationary Gas Turbine 3/Heat Recovery Steam Generator 3
SGT04/HRSG4	Stationary Gas Turbine 4/Heat Recovery Steam Generator 4
SGT05/HRSG5	Stationary Gas Turbine 5/Heat Recovery Steam Generator 5
XAF01	Pyrolysis Reactor XAF-01
XBF01	Pyrolysis Reactor XBF-01
XCF01	Pyrolysis Reactor XCF-01
XDF01	Pyrolysis Reactor XDF-01
XE01	Pyrolysis Reactor XE-01
XFF01	Pyrolysis Reactor XFF-01
XGF01	Pyrolysis Reactor XGF-01
CAF01	Pyrolysis Reactor AF-01
CBF01	Pyrolysis Reactor BF-01
CCF01	Pyrolysis Reactor CAF-01
CDF01	Pyrolysis Reactor DF-01
CEF01	Pyrolysis Reactor EF-01
CFF01	Pyrolysis Reactor FF-01
CGF01	Pyrolysis Reactor GF-01
CHF01	Pyrolysis Reactor HF-01
CIF01	Pyrolysis Reactor IF-01
CJF01	Pyrolysis Reactor JF-01
COF01	Pyrolysis Reactor OF-01
CQF01	Pyrolysis Reactor QF-01

List 2

*Subject to 30 TAC 117.310(c)(1)(B): non-CEMS
Limit = 3.0 g CO/hp-hr, 1-hr average*

FIN	FIN Name
BOPXPAC1	Diesel BOPX Portable Air Compressor 1
BOPXWWP1	Diesel BOPX Waste Water Pump 1
DIESELGCRK	Diesel Goose Creek Pump
HEPAC1	Diesel Hot Ends Portable Air Compressor 1
HEPAC2	Diesel Hot Ends Portable Air Compressor 2
UTPAC1	Diesel Utilities Portable Air Compressor 1
UTPAC2	Diesel Utilities Portable Air Compressor 2
UTPAC3	Diesel Utilities Portable Air Compressor 3

ExxonMobil Chemical Company

3525 Decker Drive
Baytown, TX 77520-1699

ExxonMobil
Chemical

CERTIFIED MAIL

February 12, 2015

Application for Notice of Intent to Use
Discrete Emission Reduction Credits
Form DEC-2
Exxon Mobil Corporation
Baytown Olefins Plant
Baytown, Harris County
Account No.: HG-0228-H
RN102212925

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

Exxon Mobil Corporation is respectfully submitting an Application for Notice of Intent to Use Discrete Emission Reduction Credits (DERCs), DEC-2, to use 4.4 tons of CO DERCs for §117.310(c)(1) at the Baytown Olefins Plant (HG-0228-H), RN102212925. Per Section VIII of the DEC-2 and §101.376, we are also providing the calculation protocol used to determine the amount of DERCs needed for the use period of March 31, 2015 through June 28, 2016 (Attachment A). Attachment B is a list of all sources we are including in the DERC use application. As requested, DERC estimations have been separated out for FINs subject to differing emission limits.

If you have any questions concerning this application, please contact me at (281) 834-5297.

Sincerely,



Kaiser Ahmed
Environmental Advisor

Attachments

Waco, Texas 76792-4004

UnMobil
Refining & Supply



First Class Mail

TCEQ
Emissions Banking & Trading MC 206
P.O. Box 13087
Austin, TX 78711-3087

RECEIVED
FEB 17 2015
TCEQ MAIL CENTER
CS

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



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 15, 2015

Mr. Kaiser Ahmed
Environmental Advisor
Exxon Mobil Corporation
PO Box 4004
Baytown, Texas 77522-4004

Re: Notice of Intent to Use Discrete Emission Reduction Credits
Exxon Mobil Chemical Baytown Olefins Plant
Baytown, Harris County
Regulated Entity Reference Number: RN102212925
Customer Reference Number: CN600123939
Portfolio Number: P0275

Dear Mr. Ahmed:

This letter is in response to Exxon Mobil Corporation's Notice of Intent to Use Discrete Emission Credits (Form DEC-2) received on February 17, 2015 (postmarked February 13, 2015) regarding the use of carbon monoxide (CO) Discrete Emission Reduction Credits (DERCs) for the purpose of compliance with 30 Texas Administrative Code (TAC) §117.310(c)(1)(A) and (B) for the period of March 31, 2015 through June 28, 2015.

Upon review, we find the notice and the credits to be used meet the requirements of 30 TAC §§101.370 through 101.379 for compliance with §117.310(c)(1)(A) and (B). A total of 4.4 tons (including the required 10% environmental contribution of 0.4 ton) of CO DERCs have been set aside from certificate D-2940 for this intent.

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 or need further assistance regarding the banking program, please contact Ms. Marie Mercado, P.E., at (512) 239-2054 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".

David Brymer, Director
Air Quality Division

Mr. Kaiser Ahmed
Page 2
June 15, 2015

DB/MM/jt

cc: Air Section Manager, Region 12 – Houston
Mr. Bob Allen, Director, Harris County Pollution Control Services Department, Pasadena

Project Number: 409770

Banking and Trading Route Slip

AIR QUALITY DIVISION Emissions Banking and Trading Program (EBTP)			
Company Name: Exxon Mobil Corporation CN600123439 Exxon Mobil Chemical Baytown Olefins Plant (RN102212925)			
Project Number: 409770			
Type of Letter Correspondence: DCTR ; DUA			
Letter Document Number(s): 24957 ; 24958			
Certificate Number(s): D-2940			
Review and Approval	Initial and Date	Comments/Special Instructions	
Lindley Anderson, Team Lead Stationary Source Programs	N/A	N/A	
Brandon Greulich, Work Lead EBTP	N/A	N/A	
Author/Creator Review	MM 6/12/15		
Peer Review Completed	JHF 6/10/2015		
Author/Creator	MM 6/5/15	Copies Made	Date
		MM	6/15
		Mailed	Date
		MM	6/15
Please return Routing Slip and Project Paperwork to Brandon Greulich, MC-206, Ext. 4904			

C
6/15/15
MM