EXECUTIVE SUMMARY - ENFORCEMENT MATTER

DOCKET NO.: 2007-0557-AIR-E **TCEQ ID:** RN104150123 **CASE NO.:** 32840

RESPONDENT NAME: The Dow Chemical Company

ORDER TYPE:		
_X_1660 AGREED ORDER	__FINDINGS AGREED ORDER	__FINDINGS ORDER FOLLOWING SOAH HEARING
__FINDINGS DEFAULT ORDER	__SHUTDOWN ORDER	__IMMINENT AND SUBSTANTIAL ENDANGERMENT ORDER
__AMENDED ORDER	__EMERGENCY ORDER	
CASE TYPE:		
_X_AIR	__MULTI-MEDIA (check all that apply)	__INDUSTRIAL AND HAZARDOUS WASTE
__PUBLIC WATER SUPPLY	__PETROLEUM STORAGE TANKS	__OCCUPATIONAL CERTIFICATION
__WATER QUALITY	__SEWAGE SLUDGE	__UNDERGROUND INJECTION CONTROL
__MUNICIPAL SOLID WASTE	__RADIOACTIVE WASTE	__DRY CLEANER REGISTRATION

SITE WHERE VIOLATION(S) OCCURRED: Clear Lake Operations, 9502B Bayport Boulevard #B, Pasadena, Harris County

TYPE OF OPERATION: Chemical manufacturing plant

SMALL BUSINESS: ___ **Yes** _X_ **No**

OTHER SIGNIFICANT MATTERS: There are no complaints. There is no record of additional pending enforcement actions regarding this facility location.

INTERESTED PARTIES: No one other than the ED and the Respondent has expressed an interest in this matter.

COMMENTS RECEIVED: The *Texas Register* comment period expired on September 3, 2007. No comments were received.

CONTACTS AND MAILING LIST:

TCEQ Attorney/SEP Coordinator: Ms. Melissa Keller, SEP Coordinator, Enforcement Division, MC 219, (512) 239-1768
TCEQ Enforcement Coordinator: Ms. Kimberly Morales, Enforcement Division, Enforcement Team 5, R-12, (713) 422-8938; Mr. David Van Soest, Enforcement Division, MC 219, (512) 239-0468
Respondent: Ms. Marilyn Doescher, Responsible Care Leader, Texas City Operations/Clear Lake Operations, The Dow Chemical Company, 3301 5th Avenue South, B.88/14, Texas City, Texas 77590; Ms. Jean Algate, Site Leader, The Dow Chemical Company, 9502B Bayport Blvd., Pasadena, Texas 77507
Respondent's Attorney: Not represented by counsel on this enforcement matter

VIOLATION SUMMARY CHART:

VIOLATION INFORMATION	PENALTY CONSIDERATIONS	CORRECTIVE ACTIONS TAKEN/REQUIRED
Type of Investigation: __ Complaint _X_ Routine __ Enforcement Follow-up __ Records Review **Date(s) of Complaints Relating to this Case:** None **Date of Investigation Relating to this Case:** June 17, 2005 **Date of NOE Relating to this Case:** February 13, 2007 (NOE) **Background Facts:** This was a routine investigation. One violation was documented. **AIR** Failure to prevent unauthorized emissions. Specifically, 4,074.5 pounds ("lbs") of Hydrogen Flouride and 3,723 lbs of Hydrogen Chloride were released from the Acrylic Acid 1 Unit flare (EPN 26UTLFLR) when a third-party contractor inadvertently charged Freon 22 into the process side of refrigeration machine MR46 due to a lack of equipment-specific procedures and the Respondent's failure to properly identify the refrigeration system's valves. This resulted in an emissions event that began on June 7, 2005 and lasted for 421 hours and 30 minutes (Incident No. 59353). Since this emissions event was avoidable and accounted for a high percentage of the Plant's total annual operating hours, the Respondent failed to meet the demonstrations for an affirmative defense in 30 TEX. ADMIN. CODE § 101.222 [30 TEX. ADMIN. CODE § 116.115(c), Air Permit No. 260, Special Condition No. 1, and TEX. HEALTH & SAFETY CODE § 382.085(b)].	**Total Assessed:** $14,000 **Total Deferred:** $2,800 _X_Expedited Settlement __Financial Inability to Pay **SEP Conditional Offset:** $5,600 **Total Paid to General Revenue:** $5,600 **Site Compliance History Classification** __ **High** _X_ **Average** __ **Poor** **Person Compliance History Classification** __ **High** _X_ **Average** __ **Poor** **Major Source:** _X_ Yes ___ No **Applicable Penalty Policy:** September 2002	**Corrective Actions Taken:** 1) The Executive Director recognizes that the Respondent has implemented the following corrective measures at the Plant: a. On July 14, 2005, the valves on the process side of refrigeration machine MR46 were replaced with valves equipped with fittings of a different type than the previous fittings so they will not connect to the industry standard Freon 22 addition hoses, making a duplicate introduction of Freon 22 into the process side of MR46 physically impossible; b. On September 30, 2005, all process valves on MR46 were labeled according to contents to provide a clear demarcation of the process system from the refrigeration system. These metal tags indicate the process contained and include the warning that Dow's operations personnel are the only ones authorized to operate those valves; c. A Refrigeration Subject Matter Expert was immediately leveraged from Dow's Freeport facility to provide expertise and to oversee the refrigerant contractor through 2006 until written procedures and training for both contractor and Dow operations staff are improved; d. On August 24, 2006, operating procedures for the refrigeration machines were upgraded to include more detailed information, and a process was defined and implemented to ensure proper training, clear reference information, required actions, and appropriate responses; and e. In August 2006, qualification of the refrigeration contractor, with particular focus on the contractor's written procedures and training, were evaluated for improvement immediately. Contractor expectations were then integrated into the defined process. **Ordering Provisions:** 2) The Order will require the Respondent to implement and complete a

		Supplemental Environmental Project (SEP) (See Attachment A).

Attachment A
Docket Number: 2007-0557-AIR-E

SUPPLEMENTAL ENVIRONMENTAL PROJECT

Respondent:	**The Dow Chemical Company**
Payable Penalty Amount:	**Eleven Thousand Two Hundred Dollars ($11,200)**
SEP Amount:	**Five Thousand Six Hundred Dollars ($5,600)**
Type of SEP:	**Pre-approved**
Third-Party Recipient:	**Harris County Public Health and Environmental Services-Pollution Control Division's Fourier Transform Infra Red (FTIR) Project**
Location of SEP:	**Harris County**

The Texas Commission on Environmental Quality ("TCEQ") agrees to offset a portion of the administrative Penalty Amount assessed in this Agreed Order for the Respondent to contribute to a Supplemental Environmental Project ("SEP"). The offset is equal to the SEP Amount set forth above and is conditioned upon completion of the project in accordance with the terms of this Attachment A.

1. Project Description

A. Project

The Respondent will contribute to Harris County Public Health and Environmental Services-Pollution Control Division's FTIR Project. This project includes the lease/contracting for services of air monitoring equipment, FTIR and other associated monitoring equipment, site preparation (including power and a shelter for the monitoring equipment), installation, operation and maintenance for a minimum of a two year period. Data validation management and reporting, and site closure and restoration will also be performed as a part of this project using methods approved by the TCEQ. The FTIR will analyze volatile organic compounds in ambient air. Harris County, in cooperation with the TCEQ, will establish Internet connectivity and automated data ingestion into the TCEQ LEADS system. SEP monies will fund the lease/contract for services of the FTIR and related equipment, site creation, preparation and installation of the FTIR, and the operation and maintenance of the FTIR site for a minimum of two years. SEP monies will also be used to pay for any equipment, software, and programming associated with establishing Internet connectivity and automated data ingestion.

The Respondent certifies that there is no prior commitment to do this project and that it is being performed solely in an effort to settle this enforcement action.

B. Environmental Benefit

This SEP will provide significant and discernible environmental benefits to the Harris County area by

providing measurements of concentrations of certain air pollutants. The information obtained from this monitoring site will provide the community with more knowledge of the types and quantities of pollutants present in this industrialized area. Data obtained from the monitoring site, and made available to the public, may be used by the TCEQ, Environmental Protection Agency (EPA), scientists, local government and industry to reduce emissions, as appropriate. Because air quality is an important priority in the Harris County area, this project is focused on providing air quality data that may be used by the TCEQ, local programs, and other stakeholders to investigate and improve knowledge of any identified air quality concerns. Data from the project may be used to detect and track air emissions in near real-time to determine air pollution source locations for enforcement actions, permitting and regulatory decisions, potential future health effects studies and/or as part of a pollution program such as the Environmental Monitoring and Response System. The data also can be used by the TCEQ and the EPA to help determine if additional air quality problems that have not yet been detected exist in the Harris County area.

C. Minimum Expenditure

The Respondent shall contribute at least the SEP Amount to the Third-Party Recipient and comply with all other provisions of this SEP.

2. Performance Schedule

Within 30 days after the effective date of this Agreed Order, the Respondent must contribute the SEP Amount to the Third-Party Recipient. The Respondent shall mail the contribution, with a copy of the Agreed Order, to:

Mr. Chris Barry
Harris County Pollution Control Division
P.O. Box 6031
Pasadena, Texas 77506

3. Records and Reporting

Concurrent with the payment of the SEP Amount, the Respondent shall provide the TCEQ SEP Coordinator with a copy of the check and transmittal letter indicating full payment of the SEP Amount to the Third-Party Recipient. The Respondent shall mail a copy of the check and transmittal letter to:

Enforcement Division
Attention: SEP Coordinator, MC 219
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

4. Failure to Fully Perform

If the Respondent does not perform its obligations under this SEP in any way, including full payment of the SEP Amount and submittal of the required reporting described in Section 3 above, the Executive Director may require immediate payment of all or part of the SEP Amount.

The check for any amount due shall be made out to "Texas Commission on Environmental Quality" and mailed to:

Texas Commission on Environmental Quality
Financial Administration Division, Revenues
Attention: Cashier, MC 214
P.O. Box 13088
Austin, Texas 78711-3088

The Respondent shall also mail a copy of the check to the TCEQ SEP Coordinator at the address in Section 3 above.

5. Publicity

Any public statements concerning this SEP made by or on behalf of the Respondent must include a clear statement that the project was performed as part of the settlement of an enforcement action brought by the TCEQ. Such statements include advertising, public relations, and press releases.

6. Clean Texas Program

The Respondent shall not include this SEP in any application made to TCEQ under the "Clean Texas" (or any successor) program(s). Similarly, the Respondent may not seek recognition for this contribution in any other state or federal regulatory program.

7. Other SEPs by TCEQ or Other Agencies

The SEP identified in this Agreed Order has not been, and shall not be, included as an SEP for the Respondent under any other Agreed Order negotiated with the TCEQ or any other agency of the state or federal government.

Penalty Calculation Worksheet (PCW)

TCEQ

Policy Revision 2 (September 2002) — *PCW Revision March 19, 2007*

DATES					
Assigned	26-Feb-2007				
PCW	9-Apr-2007	Screening	1-Mar-2007	EPA Due	

RESPONDENT/FACILITY INFORMATION

Respondent	The Dow Chemical Company		
Reg. Ent. Ref. No.	RN104150123		
Facility/Site Region	12-Houston	Major/Minor Source	Major

CASE INFORMATION

Enf./Case ID No.	32840	No. of Violations	1
Docket No.	2007-0557-AIR-E	Order Type	1660
Media Program(s)	Air	Enf. Coordinator	Kimberly Morales
Multi-Media		EC's Team	EnforcementTeam 6
Admin. Penalty $ Limit Minimum	$0	Maximum	$10,000

Penalty Calculation Section

TOTAL BASE PENALTY (Sum of violation base penalties) — *Subtotal 1* **$5,000**

ADJUSTMENTS (+/-) TO SUBTOTAL 1

Subtotals 2-7 are obtained by multiplying the Total Base Penalty (Subtotal 1) by the indicated percentage.

Compliance History — **37%** Enhancement — *Subtotals 2, 3, & 7* **$1,850**

Notes: Penalty enhancement for two agreed orders containing a denial of liability. Penalty reduction for three Notice of Audit letters.

Culpability — No — **0%** Enhancement — *Subtotal 4* **$0**

Notes: The Respondent does not meet the culpability criteria.

Good Faith Effort to Comply — **25%** Reduction — *Subtotal 5* **$1,250**

	Before NOV	NOV to EDPRP/Settlement Offer
Extraordinary		
Ordinary	x	
N/A		(mark with x)

Notes: The Respondent completed corrective actions on December 6, 2006.

0% Enhancement* — *Subtotal 6* **$0**

**Capped at the Total EB $ Amount*

Total EB Amounts	$150
Approx. Cost of Compliance	$2,000

SUM OF SUBTOTALS 1-7 — *Final Subtotal* **$5,600**

OTHER FACTORS AS JUSTICE MAY REQUIRE — **150%** — *Adjustment* **$8,400**

Reduces or enhances the Final Subtotal by the indicated percentage. *(Enter number only; e.g. -30 for -30%.)*

Notes: Recommend an upward adjustment due to the significant amount of contaminants released to the atmosphere as described in Violation No. 1.

Final Penalty Amount **$14,000**

STATUTORY LIMIT ADJUSTMENT — *Final Assessed Penalty* **$14,000**

DEFERRAL — **20%** Reduction — *Adjustment* **-$2,800**

Reduces the Final Assessed Penalty by the indicted percentage. *(Enter number only; e.g. 20 for 20% reduction.)*

Notes: Deferral offered for expedited settlement.

PAYABLE PENALTY **$11,200**

Screening Date 1-Mar-2007 **Docket No.** 2007-0557-AIR-E **PCW**

Respondent The Dow Chemical Company

Case ID No. 32840

Reg. Ent. Reference No. RN104150123

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Policy Revision 2 (September 2002)

PCW Revision March 19, 2007

Compliance History Worksheet

>> Compliance History *Site* Enhancement (Subtotal 2)

Component	Number of...	Enter Number Here	Adjust.
NOVs	Written NOVs with same or similar violations as those in the current enforcement action (*number of NOVs meeting criteria*)	0	0%
	Other written NOVs	0	0%
Orders	Any agreed final enforcement orders containing a denial of liability (*number of orders meeting criteria*)	2	40%
	Any adjudicated final enforcement orders, agreed final enforcement orders without a denial of liability, or default orders of this state or the federal government, or any final prohibitory emergency orders issued by the commission	0	0%
Judgments and Consent Decrees	Any non-adjudicated final court judgments or consent decrees containing a denial of liability of this state or the federal government (*number of judgements or consent decrees meeting criteria*)	0	0%
	Any adjudicated final court judgments and default judgments, or non-adjudicated final court judgments or consent decrees without a denial of liability, of this state or the federal government	0	0%
Convictions	Any criminal convictions of this state or the federal government (*number of counts*)	0	0%
Emissions	Chronic excessive emissions events (*number of events*)	0	0%
Audits	Letters notifying the executive director of an intended audit conducted under the Texas Environmental, Health, and Safety Audit Privilege Act, 74th Legislature, 1995 (*number of audits for which notices were submitted*)	3	-3%
	Disclosures of violations under the Texas Environmental, Health, and Safety Audit Privilege Act, 74th Legislature, 1995 (*number of audits for which violations were disclosed*)	0	0%

		Please Enter Yes or No	
Other	Environmental management systems in place for one year or more	No	0%
	Voluntary on-site compliance assessments conducted by the executive director under a special assistance program	No	0%
	Participation in a voluntary pollution reduction program	No	0%
	Early compliance with, or offer of a product that meets future state or federal government environmental requirements	No	0%

Adjustment Percentage (Subtotal 2) 37%

>> Repeat Violator (Subtotal 3)

No

Adjustment Percentage (Subtotal 3) 0%

>> Compliance History Person Classification (Subtotal 7)

Average Performer

Adjustment Percentage (Subtotal 7) 0%

>> Compliance History Summary

Compliance History Notes

Penalty enhancement for two agreed orders containing a denial of liability. Penalty reduction for three Notice of Audit letters.

Total Adjustment Percentage (Subtotals 2, 3, & 7) 37%

Screening Date 1-Mar-2007 **Docket No.** 2007-0557-AIR-E **PCW**

Respondent The Dow Chemical Company *Policy Revision 2 (September 2002)*

Case ID No. 32840 *PCW Revision March 19, 2007*

Reg. Ent. Reference No. RN104150123

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 1

Rule Cite(s) 30 Tex. Admin. Code § 116.115(c), Air Permit No. 260, Special Condition No. 1, and Tex. Health & Safety Code § 382.085(b)

Violation Description Failed to prevent unauthorized emissions. Specifically, 4,074.5 pounds ("lbs") of Hydrogen Flouride and 3,723 lbs of Hydrogen Chloride were released from the Acrylic Acid 1 Unit flare (EPN 26UTLFLR) when a third-party contractor inadvertently charged Freon 22 into the process side of refrigeration machine MR46 due to a lack of equipment-specific procedures and the Respondent's failure to properly identify the refrigeration system's valves. This resulted in an emissions event that began on June 7, 2005 and lasted for 421 hours and 30 minutes (Incident No. 59353). Since this emissions event was avoidable and accounted for a high percentage of the Plant's total annual operating hours, the Respondent failed to meet the demonstrations for an affirmative defense in 30 Tex. Admin. Code § 101.222.

Base Penalty $10,000

>> Environmental, Property and Human Health Matrix

OR

Release	Harm: Major	Moderate	Minor
Actual		x	
Potential			

Percent 50%

>>Programmatic Matrix

Falsification	Major	Moderate	Minor

Percent 0%

Matrix Notes: Human health or the environment will or could be exposed to significant amounts of pollutants which would not exceed levels that are protective of human health or environmental receptors as a result of the violation.

Adjustment $5,000

$5,000

Violation Events

Number of Violation Events 1 | 18 Number of violation days

mark only one with an x

daily	
monthly	
quarterly	
semiannual	
annual	
single event	x

Violation Base Penalty $5,000

One single event is recommended.

Economic Benefit (EB) for this violation

Estimated EB Amount $150

Statutory Limit Test

Violation Final Penalty Total $14,000

This violation Final Assessed Penalty (adjusted for limits) $14,000

Economic Benefit Worksheet

Respondent The Dow Chemical Company
Case ID No. 32840
Reg. Ent. Reference No. RN104150123
Media Air
Violation No. 1

Percent Interest	Years of Depreciation
5.0	15

Item Description (No commas or $)	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
Delayed Costs							
Equipment				0.0	$0	$0	$0
Buildings				0.0	$0	$0	$0
Other (as needed)				0.0	$0	$0	$0
Engineering/construction				0.0	$0	$0	$0
Land				0.0	$0	n/a	$0
Record Keeping System				0.0	$0	n/a	$0
Training/Sampling				0.0	$0	n/a	$0
Remediation/Disposal				0.0	$0	n/a	$0
Permit Costs				0.0	$0	n/a	$0
Other (as needed)	$2,000	7-Jun-2005	6-Dec-2006	1.5	$150	n/a	$150

Notes for DELAYED costs: Estimated cost to prepare and implement corrective actions necessary to prevent the emissions event. Date required is the date of the emissions event. Final date is the date corrective actions were completed.

Avoided Costs	ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)						
Disposal				0.0	$0	$0	$0
Personnel				0.0	$0	$0	$0
Inspection/Reporting/Sampling				0.0	$0	$0	$0
Supplies/equipment				0.0	$0	$0	$0
Financial Assurance [2]				0.0	$0	$0	$0
ONE-TIME avoided costs [3]				0.0	$0	$0	$0
Other (as needed)				0.0	$0	$0	$0

Notes for AVOIDED costs:

Approx. Cost of Compliance: $2,000

TOTAL: $150

Compliance History

Customer/Respondent/Owner-Operator:	CN600356976	The Dow Chemical Company	Classification: AVERAGE	Rating: 3.01
Regulated Entity:	RN104150123	THE DOW CHEMICAL COMPANY CLEAR LAKE OPERATIONS	Classification: AVERAGE	Site Rating: 5.35

ID Number(s):

AIR NEW SOURCE PERMITS	PERMIT	260
AIR NEW SOURCE PERMITS	PERMIT	262
AIR NEW SOURCE PERMITS	REGISTRATION	72942
AIR NEW SOURCE PERMITS	REGISTRATION	73256
AIR NEW SOURCE PERMITS	PERMIT	50392
AIR NEW SOURCE PERMITS	REGISTRATION	73765
AIR NEW SOURCE PERMITS	REGISTRATION	74328
AIR NEW SOURCE PERMITS	REGISTRATION	74540
AIR NEW SOURCE PERMITS	REGISTRATION	75088
AIR NEW SOURCE PERMITS	REGISTRATION	76610
AIR NEW SOURCE PERMITS	REGISTRATION	76856
AIR NEW SOURCE PERMITS	AFS NUM	4820101588
AIR NEW SOURCE PERMITS	REGISTRATION	77872
AIR NEW SOURCE PERMITS	REGISTRATION	78518
AIR NEW SOURCE PERMITS	REGISTRATION	78961
AIR NEW SOURCE PERMITS	ACCOUNT NUMBER	HGA005E
AIR NEW SOURCE PERMITS	REGISTRATION	80502
AIR NEW SOURCE PERMITS	REGISTRATION	80842
INDUSTRIAL AND HAZARDOUS WASTE GENERATION	EPA ID	TXR000057414
INDUSTRIAL AND HAZARDOUS WASTE GENERATION	SOLID WASTE REGISTRATION # (SWR)	87413
AIR OPERATING PERMITS	PERMIT	1987
AIR OPERATING PERMITS	ACCOUNT NUMBER	1988
INDUSTRIAL AND HAZARDOUS WASTE STORAGE	PERMIT	50392

Location: 9502B BAYPORT BLVD # B, PASADENA, TX, 77507 Rating Date: September 01 06 Repeat Violator: NO

TCEQ Region: REGION 12 - HOUSTON

Date Compliance History Prepared: April 11, 2007

Agency Decision Requiring Compliance History: Enforcement

Compliance Period: March 01, 2002 to March 01, 2007

TCEQ Staff Member to Contact for Additional Information Regarding this Compliance History

Name: Kimberly Morales Phone: (713) 422-8938

Site Compliance History Components

1. Has the site been in existence and/or operation for the full five year compliance period?	Yes
2. Has there been a (known) change in ownership of the site during the compliance period?	No
3. If Yes, who is the current owner?	N/A
4. if Yes, who was/were the prior owner(s)?	N/A
5. When did the change(s) in ownership occur?	N/A

Components (Multimedia) for the Site :

A. Final Enforcement Orders, court judgements, and consent decrees of the state of Texas and the federal government.

Effective Date: 11/06/2005 ADMINORDER 2005-0121-AIR-E
Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
5C THC Chapter 382, SubChapter A 382.085(b)

Rqmt Prov: Permit No. 260; Special Condition #1 PERMIT
Description: failed to comply with the emissions limits stated in the Maximum Allowable Emission Rates Table (MAERT)

Effective Date: 08/28/2006 ADMINORDER 2006-0187-AIR-E
Classification: Major

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
5C THC Chapter 382, SubChapter A 382.085(b)

Rqmt Prov: TCEQ Air Permit No. 260, SC No. 1 PERMIT

Description: Failed to prevent an unauthorized release of 7,000 pounds of Freon 22 from a purge valve on the MR0022 refrigeration machine on July 4 through 7, 2005.

B. Any criminal convictions of the state of Texas and the federal government.

N/A

C. Chronic excessive emissions events.

N/A

D. The approval dates of investigations. (CCEDS Inv. Track. No.)

1	06/17/2004	(276429)
2	06/18/2004	(276459)
3	11/19/2004	(339189)
4	11/19/2004	(339200)
5	12/28/2004	(339204)
6	01/31/2005	(348223)
7	02/01/2005	(339206)
8	02/08/2005	(346598)
9	08/18/2005	(404305)
10	08/23/2005	(404913)
11	08/24/2005	(405492)
12	08/29/2005	(399641)
13	08/29/2005	(396608)
14	08/29/2005	(399640)
15	09/30/2005	(418440)
16	11/30/2005	(346359)
17	01/17/2006	(404976)
18	02/28/2006	(457249)
19	05/30/2006	(468699)
20	05/30/2006	(468169)
21	05/30/2006	(467588)
22	05/30/2006	(467685)
23	09/01/2006	(509973)
24	09/01/2006	(510597)
25	09/07/2006	(510844)
26	09/19/2006	(512031)
27	01/24/2007	(536048)
28	02/23/2007	(405375)

E. Written notices of violations (NOV). (CCEDS Inv. Track. No.)

F. Environmental audits.

Notice of Intent Date: 02/09/2004 (263952)
No DOV Associated

Notice of Intent Date: 11/21/2005 (459069)
No DOV Associated

Notice of Intent Date: 01/23/2007 (541176)
No DOV Associated

G. Type of environmental management systems (EMSs).

N/A

H. Voluntary on-site compliance assessment dates.

N/A

I. Participation in a voluntary pollution reduction program.

N/A

J. Early compliance.

N/A

Sites Outside of Texas

N/A

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

IN THE MATTER OF AN	§	**BEFORE THE**
ENFORCEMENT ACTION	§	
CONCERNING	§	**TEXAS COMMISSION ON**
THE DOW CHEMICAL COMPANY	§	
RN104150123	§	**ENVIRONMENTAL QUALITY**

AGREED ORDER
DOCKET NO. 2007-0557-AIR-E

I. JURISDICTION AND STIPULATIONS

At its _____ agenda, the Texas Commission on Environmental Quality ("the Commission" or "TCEQ") considered this agreement of the parties, resolving an enforcement action regarding The Dow Chemical Company ("Dow") under the authority of TEX. HEALTH & SAFETY CODE ch. 382 and TEX. WATER CODE ch. 7. The Executive Director of the TCEQ, through the Enforcement Division, and Dow appear before the Commission and together stipulate that:

1. Dow owns and operates a chemical manufacturing plant at 9502B Bayport Boulevard #B in Pasadena, Harris County, Texas (the "Plant").

2. The Plant consists of one or more sources as defined in TEX. HEALTH & SAFETY CODE § 382.003(12).

3. The Commission and Dow agree that the Commission has jurisdiction to enter this Agreed Order, and that Dow is subject to the Commission's jurisdiction.

4. Dow received notice of the violations alleged in Section II ("Allegations") on or about February 18, 2007.

5. The occurrence of any violation is in dispute and the entry of this Agreed Order shall not constitute an admission by Dow of any violation alleged in Section II ("Allegations"), nor of any statute or rule.

6. An administrative penalty in the amount of Fourteen Thousand Dollars ($14,000) is assessed by the Commission in settlement of the violations alleged in Section II ("Allegations"). Dow has paid Five Thousand Six Hundred Dollars ($5,600) of the administrative penalty and Two Thousand Eight Hundred Dollars ($2,800) is deferred contingent upon Dow's timely and

satisfactory compliance with all the terms of this Agreed Order. The deferred amount will be waived upon full compliance with the terms of this Agreed Order. If Dow fails to timely and satisfactorily comply with all requirements of this Agreed Order, the Executive Director may require Dow to pay all or part of the deferred penalty. Five Thousand Six Hundred Dollars ($5,600) shall be conditionally offset by Dow's completion of a Supplemental Environmental Project ("SEP").

7. Any notice and procedures, which might otherwise be authorized or required in this action, are waived in the interest of a more timely resolution of the matter.

8. The Executive Director of the TCEQ and Dow have agreed on a settlement of the matters alleged in this enforcement action, subject to the approval of the Commission.

9. The Executive Director recognizes that Dow has implemented the following corrective measures at the Plant:

   a. On July 14, 2005, the valves on the process side of refrigeration machine MR46 were replaced with valves equipped with fittings of a different type than the previous fittings so they will not connect to the industry standard Freon 22 addition hoses, making a duplicate introduction of Freon 22 into the process side of MR46 physically impossible;

   b. On September 30, 2005, all process valves on MR46 were labeled according to contents to provide a clear demarcation of the process system from the refrigeration system. These metal tags indicate the process contained and include the warning that Dow's operations personnel are the only ones authorized to operate those valves;

   c. A Refrigeration Subject Matter Expert was immediately leveraged from Dow's Freeport facility to provide expertise and to oversee the refrigerant contractor through December 2006 until written procedures and training for both contractor and Dow operations staff were improved;

   d. On August 24, 2006, operating procedures for the refrigeration machines were upgraded to include more detailed information, and a process was defined and implemented to ensure proper training, clear reference information, required actions, and appropriate responses; and

   e. In August 2006, qualification of the refrigeration contractor, with particular focus on the contractor's written procedures and training, were evaluated for improvement immediately. Contractor expectations were then integrated into the defined process.

10. The Executive Director may, without further notice or hearing, refer this matter to the Office of the Attorney General of the State of Texas ("OAG") for further enforcement proceedings if the Executive Director determines that Dow has not complied with one or more of the terms or conditions in this Agreed Order.

11. This Agreed Order shall terminate five years from its effective date or upon compliance with all the terms and conditions set forth in this Agreed Order, whichever is later.

12. The provisions of this Agreed Order are deemed severable and, if a court of competent jurisdiction or other appropriate authority deems any provision of this Agreed Order unenforceable, the remaining provisions shall be valid and enforceable.

II. ALLEGATIONS

As owner and operator of the Plant, Dow is alleged to have failed to prevent unauthorized emissions, in violation of 30 TEX. ADMIN. CODE § 116.115(c), Air Permit No. 260, Special Condition No. 1, and TEX. HEALTH & SAFETY CODE § 382.085(b), as documented during an investigation conducted on June 17, 2005. Specifically, 4,074.5 pounds ("lbs") of Hydrogen Flouride and 3,723 lbs of Hydrogen Chloride were released from the Acrylic Acid 1 Unit flare (EPN 26UTLFLR) when a third-party contractor inadvertently charged Freon 22 into the process side of refrigeration machine MR46 due to a lack of equipment-specific procedures and Dow's failure to properly identify the refrigeration system's valves. This resulted in an emissions event that began on June 7, 2005 and lasted for 421 hours and 30 minutes (Incident No. 59353). Since this emissions event was avoidable and accounted for a high percentage of the Plant's total annual operating hours, Dow failed to meet the demonstrations for an affirmative defense in 30 TEX. ADMIN. CODE § 101.222.

III. DENIALS

Dow generally denies each allegation in Section II ("Allegations").

IV. ORDERING PROVISIONS

1. It is, therefore, ordered by the TCEQ that Dow pay an administrative penalty as set forth in Section I, Paragraph 6 above. The payment of this administrative penalty and Dow's compliance with all the terms and conditions set forth in this Agreed Order resolve only the allegations in Section II. The Commission shall not be constrained in any manner from requiring corrective action or penalties for violations, which are not raised here. Administrative penalty payments shall be made payable to "TCEQ" and shall be sent with the notation "Re: The Dow Chemical Company, Docket No. 2007-0557-AIR-E" to:

   Financial Administration Division, Revenues Section
   Attention: Cashier's Office, MC 214
   Texas Commission on Environmental Quality
   P.O. Box 13088
   Austin, Texas 78711-3088

2. Dow shall implement and complete a SEP in accordance with TEX. WATER CODE § 7.067. As set forth in Section I, Paragraph 6 above, Five Thousand Six Hundred Dollars ($5,600) of the assessed administrative penalty shall be offset with the condition that Dow implement the SEP defined in Attachment A, incorporated herein by reference. Dow's obligation to pay the conditionally offset portion of the administrative penalty assessed shall be discharged upon final completion of all provisions of the SEP agreement.

3. The provisions of this Agreed Order shall apply to and be binding upon Dow. Dow is ordered to give notice of the Agreed Order to personnel who maintain day-to-day control over the Plant operations referenced in this Agreed Order.

4. If Dow fails to comply with any of the Ordering Provisions in this Agreed Order within the prescribed schedules, and that failure is caused solely by an act of God, war, strike, riot, or other catastrophe, Dow's failure to comply is not a violation of this Agreed Order. Dow shall have the burden of establishing to the Executive Director's satisfaction that such an event has occurred. Dow shall notify the Executive Director within seven days after Dow becomes aware of a delaying event and shall take all reasonable measures to mitigate and minimize any delay.

5. The Executive Director may grant an extension of any deadline in this Agreed Order or in any plan, report, or other document submitted pursuant to this Agreed Order, upon a written and substantiated showing of good cause. All requests for extensions by Dow shall be made in writing to the Executive Director. Extensions are not effective until Dow receives written approval from the Executive Director. The determination of what constitutes good cause rests solely with the Executive Director.

6. This Agreed Order, issued by the Commission, shall not be admissible against Dow in a civil proceeding, unless the proceeding is brought by the OAG to: (1) enforce the terms of this Agreed Order; or (2) pursue violations of a statute within the Commission's jurisdiction, or of a rule adopted or an order or permit issued by the Commission under such a statute.

7. This agreement may be executed in multiple counterparts, which together shall constitute a single original instrument. Any executed signature page to this Agreement may be transmitted by facsimile transmission to the other parties, which shall constitute an original signature for all purposes.

8. Under 30 TEX. ADMIN. CODE § 70.10(b), the effective date is the date of hand-delivery of the Order to Dow, or three days after the date on which the Commission mails notice of the Order to Dow, whichever is earlier. The Chief Clerk shall provide a copy of this Agreed Order to each of the parties.

SIGNATURE PAGE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

_____
For the Commission

_____ 8/27/07
For the Executive Director Date

I, the undersigned, have read and understand the attached Agreed Order. I am authorized to agree to the attached Agreed Order on behalf of the entity indicated below my signature, and I do agree to the terms and conditions specified therein. I further acknowledge that the TCEQ, in accepting payment for the penalty amount, is materially relying on such representation.

I also understand that failure to comply with the Ordering Provisions, if any, in this order and/or failure to timely pay the penalty amount, may result in:

- A negative impact on compliance history;
- Greater scrutiny of any permit applications submitted;
- Referral of this case to the Attorney General's Office for contempt, injunctive relief, additional penalties, and/or attorney fees, or to a collection agency;
- Increased penalties in any future enforcement actions;
- Automatic referral to the Attorney General's Office of any future enforcement actions; and
- TCEQ seeking other relief as authorized by law.

In addition, any falsification of any compliance documents may result in criminal prosecution.

_____ 6-21-07
Signature Date

Jean Algate Site Leader
Name (Printed or typed) Title
Authorized Representative of
The Dow Chemical Company

Instructions: Send the original, signed Agreed Order with penalty payment to the Financial Administration Division, Revenues Section at the address in Section IV, Paragraph 1 of this Agreed Order.

Attachment A
Docket Number: 2007-0557-AIR-E

SUPPLEMENTAL ENVIRONMENTAL PROJECT

Respondent:	**The Dow Chemical Company**
Payable Penalty Amount:	**Eleven Thousand Two Hundred Dollars ($11,200)**
SEP Amount:	**Five Thousand Six Hundred Dollars ($5,600)**
Type of SEP:	**Pre-approved**
Third-Party Recipient:	**Harris County Public Health and Environmental Services-Pollution Control Division's Fourier Transform Infra Red (FTIR) Project**
Location of SEP:	**Harris County**

The Texas Commission on Environmental Quality ("TCEQ") agrees to offset a portion of the administrative Penalty Amount assessed in this Agreed Order for the Respondent to contribute to a Supplemental Environmental Project ("SEP"). The offset is equal to the SEP Amount set forth above and is conditioned upon completion of the project in accordance with the terms of this Attachment A.

1. Project Description

A. Project

The Respondent will contribute to Harris County Public Health and Environmental Services-Pollution Control Division's FTIR Project. This project includes the lease/contracting for services of air monitoring equipment, FTIR and other associated monitoring equipment, site preparation (including power and a shelter for the monitoring equipment), installation, operation and maintenance for a minimum of a two year period. Data validation management and reporting, and site closure and restoration will also be performed as a part of this project using methods approved by the TCEQ. The FTIR will analyze volatile organic compounds in ambient air. Harris County, in cooperation with the TCEQ, will establish Internet connectivity and automated data ingestion into the TCEQ LEADS system. SEP monies will fund the lease/contract for services of the FTIR and related equipment, site creation, preparation and installation of the FTIR, and the operation and maintenance of the FTIR site for a minimum of two years. SEP monies will also be used to pay for any equipment, software, and programming associated with establishing Internet connectivity and automated data ingestion.

The Respondent certifies that there is no prior commitment to do this project and that it is being performed solely in an effort to settle this enforcement action.

B. Environmental Benefit

This SEP will provide significant and discernible environmental benefits to the Harris County area by

providing measurements of concentrations of certain air pollutants. The information obtained from this monitoring site will provide the community with more knowledge of the types and quantities of pollutants present in this industrialized area. Data obtained from the monitoring site, and made available to the public, may be used by the TCEQ, Environmental Protection Agency (EPA), scientists, local government and industry to reduce emissions, as appropriate. Because air quality is an important priority in the Harris County area, this project is focused on providing air quality data that may be used by the TCEQ, local programs, and other stakeholders to investigate and improve knowledge of any identified air quality concerns. Data from the project may be used to detect and track air emissions in near real-time to determine air pollution source locations for enforcement actions, permitting and regulatory decisions, potential future health effects studies and/or as part of a pollution program such as the Environmental Monitoring and Response System. The data also can be used by the TCEQ and the EPA to help determine if additional air quality problems that have not yet been detected exist in the Harris County area.

C. Minimum Expenditure

The Respondent shall contribute at least the SEP Amount to the Third-Party Recipient and comply with all other provisions of this SEP.

2. Performance Schedule

Within 30 days after the effective date of this Agreed Order, the Respondent must contribute the SEP Amount to the Third-Party Recipient. The Respondent shall mail the contribution, with a copy of the Agreed Order, to:

Mr. Chris Barry
Harris County Pollution Control Division
P.O. Box 6031
Pasadena, Texas 77506

3. Records and Reporting

Concurrent with the payment of the SEP Amount, the Respondent shall provide the TCEQ SEP Coordinator with a copy of the check and transmittal letter indicating full payment of the SEP Amount to the Third-Party Recipient. The Respondent shall mail a copy of the check and transmittal letter to:

Enforcement Division
Attention: SEP Coordinator, MC 219
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

4. Failure to Fully Perform

If the Respondent does not perform its obligations under this SEP in any way, including full payment of the SEP Amount and submittal of the required reporting described in Section 3 above, the Executive Director may require immediate payment of all or part of the SEP Amount.

The check for any amount due shall be made out to "Texas Commission on Environmental Quality" and mailed to:

Texas Commission on Environmental Quality
Financial Administration Division, Revenues
Attention: Cashier, MC 214
P.O. Box 13088
Austin, Texas 78711-3088

The Respondent shall also mail a copy of the check to the TCEQ SEP Coordinator at the address in Section 3 above.

5. Publicity

Any public statements concerning this SEP made by or on behalf of the Respondent must include a clear statement that the project was performed as part of the settlement of an enforcement action brought by the TCEQ. Such statements include advertising, public relations, and press releases.

6. Clean Texas Program

The Respondent shall not include this SEP in any application made to TCEQ under the "Clean Texas" (or any successor) program(s). Similarly, the Respondent may not seek recognition for this contribution in any other state or federal regulatory program.

7. Other SEPs by TCEQ or Other Agencies

The SEP identified in this Agreed Order has not been, and shall not be, included as an SEP for the Respondent under any other Agreed Order negotiated with the TCEQ or any other agency of the state or federal government.