

**EXECUTIVE SUMMARY - ENFORCEMENT MATTER**  
**DOCKET NO.:** 2006-1841-AIR-E    **TCEQ ID:** RN101211498    **CASE NO.:** 31477  
**RESPONDENT NAME:** Haldor Topsoe, Inc.

**ORDER TYPE:**

<input checked="" type="checkbox"/> 1660 AGREED ORDER	<input type="checkbox"/> FINDINGS AGREED ORDER	<input type="checkbox"/> AMENDED ORDER	<input type="checkbox"/> IMMINENT AND SUBSTANTIAL ENDANGERMENT ORDER
<input type="checkbox"/> SHUTDOWN ORDER	<input type="checkbox"/> FINDINGS DEFAULT ORDER	<input type="checkbox"/> EMERGENCY ORDER	

**CASE TYPE:**

<input type="checkbox"/> AGRICULTURE	<input checked="" type="checkbox"/> AIR	<input type="checkbox"/> INDUSTRIAL AND HAZARDOUS WASTE	<input type="checkbox"/> MUNICIPAL SOLID WASTE
<input type="checkbox"/> OCCUPATIONAL CERTIFICATION	<input type="checkbox"/> PETROLEUM STORAGE TANKS	<input type="checkbox"/> PUBLIC WATER SUPPLY	<input type="checkbox"/> RADIOACTIVE WASTE
<input type="checkbox"/> MULTI-MEDIA (check all that apply)	<input type="checkbox"/> SEWAGE SLUDGE	<input type="checkbox"/> UNDERGROUND INJECTION CONTROL	<input type="checkbox"/> USED OIL
<input type="checkbox"/> USED OIL FILTER	<input type="checkbox"/> WATER QUALITY		

**SITE WHERE VIOLATION(S) OCCURRED:** Haldor Topsoe Bayport, 10010 Bayport Boulevard, Pasadena, Harris County

**TYPE OF OPERATION:** Catalyst manufacturing

**SMALL BUSINESS:**     Yes     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 March 26, 2007. No comments were received.

**CONTACTS AND MAILING LIST:**

**TCEQ Attorney/SEP Coordinator:** Ms. Melissa Keller, Enforcement Division, MC 219, (512) 239-1768

**TCEQ Enforcement Coordinator:** Ms. Miriam Hall, Enforcement Division, Enforcement Section III, MC 149, (512) 239-1044; Mr. Steven Lopez, Enforcement Division, MC 219, (512) 239-1896

**TCEQ Field Investigator:** Ms. Alethea Seals, Houston Regional Office, MC R-12, (713) 767-3744

**Respondent:** Mr. Raymond Yellig, Vice President of Manufacturing, Haldor Topsoe, Inc., 10010 Bayport Boulevard, 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
<p><b>Type of Investigation:</b> <input type="checkbox"/> Complaint <input type="checkbox"/> Routine <input type="checkbox"/> Enforcement Follow-up <input checked="" type="checkbox"/> Records Review</p> <p><b>Date of Complaint Relating to this Case:</b> None</p> <p><b>Date of Investigation Relating to this Case:</b> May 24, 2006</p> <p><b>Date of NOE Relating to this Case:</b> August 29, 2006 (NOE)</p> <p><b>Background Facts:</b> This was a routine record review. Three violations were documented.</p> <p><b>AIR</b></p> <p>1) Failed to seal two open-ended lines in volatile organic compound service during the time period of June 15, 2005 through September 2, 2005. Specifically, in the Permit by Rule (PBR) Registration number 70832, HTI represented to implement the 28MID fugitive monitoring program: As per 28 MID Condition E, each open-ended valve or line shall be equipped with a cap, blind flange, plug or second valve [30 TEX. ADMIN. CODE § 106.6(b) and TEX. HEALTH &amp; SAFETY CODE § 382.085(b)].</p> <p>2) Failed to consistently maintain the pH level for the scrubbing solution of the Thermal Oxidizer Caustic Scrubber at or above 10 from May 25, 2005 through November 13, 2005. This resulted in excess Nitrogen Oxides (NO<sub>x</sub>) emissions. The scrubber's maximum allowable emission rate for NO<sub>x</sub> is 0.25 pounds per hour ("lbs/hr"). During periods of low pH readings, the estimated emission rate for NO<sub>x</sub> was 0.7 lbs/hr. Because the event was avoidable, the Respondent failed to meet the demonstrations for an affirmative defense in 30 TEX. ADMIN. CODE § 101.222 [30 TEX. ADMIN. CODE §§ 116.115(b)(2)(F), 116.115(c), 122.143(4), Federal Operating Permit ("FOP") O-01217, Special Condition ("SC") 12, New Source Review ("NSR") Permit No. 43752, SC 8, and TEX. HEALTH &amp; SAFETY CODE § 382.085(b)].</p> <p>3) Failed to include an emissions event which occurred at the A301 baghouse on July 12, 2005 in the semiannual deviation report dated December 16, 2005 [30 TEX. ADMIN. CODE §§ 122.143(4), 122.145(2)(A), FOP O-01217, General Terms and Conditions, and TEX. HEALTH &amp; SAFETY CODE § 382.085(b)].</p>	<p><b>Total Assessed:</b> \$8,816</p> <p><b>Total Deferred:</b> \$1,763 <input checked="" type="checkbox"/> Expedited Settlement <input type="checkbox"/> Financial Inability to Pay</p> <p><b>SEP Conditional Offset:</b> \$3,526</p> <p><b>Total Paid to General Revenue:</b> \$3,527</p> <p><b>Site Compliance History Classification:</b> <input type="checkbox"/> High <input checked="" type="checkbox"/> Avg. <input type="checkbox"/> Poor</p> <p><b>Person Compliance History Classification:</b> <input type="checkbox"/> High <input checked="" type="checkbox"/> Avg. <input type="checkbox"/> Poor</p> <p><b>Major Source:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><b>Applicable Penalty Policy:</b> September 2002</p>	<p><b>Corrective Actions Taken:</b></p> <p>1) The Executive Director recognizes that the Respondent has implemented the following corrective measures at the Plant:</p> <p>a. On September 2, 2005, plugged two open ended lines, one on the K-6215 blower and one on X-6402; and</p> <p>b. On October 10, 2006, submitted application to amend NSR Permit No. 43752 to increase the emission limits for NO<sub>x</sub>.</p> <p><b>Ordering Provisions:</b></p> <p>2) The Order will require the Respondent to implement and complete a Supplemental Environmental Project (SEP). (See SEP Attachment A)</p> <p>3) The Order will also require the Respondent to:</p> <p>a. Respond completely and adequately, as determined by the Air Permits Division, to all letters requesting information concerning NSR Permit No. 43752 amendment application within 30 days of the date of such letters, or by any other deadline specified in writing;</p> <p>b. Within 30 days after the effective date of this Agreed Order, submit an amended deviation report for FOP No. O-01217 for the semiannual period which ended on November 16, 2005 to include the July 12, 2005 emissions event;</p> <p>c. Within 30 days after the effective date of this Agreed Order, install a larger capacity storage tank for caustic; and</p> <p>d. Within 180 days after the effective date of this Agreed Order, submit written certification that the Respondent is operating the Thermal Oxidizer Caustic Scrubber within permitted pH and emission limits or that operation has ceased until such time that appropriate authorization is obtained. The certification shall include detailed supporting documentation including receipts, and/or other records to demonstrate compliance.</p>

**Attachment A**  
**Docket Number: 2006-1841-AIR-E**

**SUPPLEMENTAL ENVIRONMENTAL PROJECT**

<b>Respondent:</b>	<b>Haldor Topsoe, Inc.</b>
<b>Payable Penalty Amount:</b>	<b>Seven Thousand Fifty-Three Dollars (\$7,053)</b>
<b>SEP Amount:</b>	<b>Three Thousand Five Hundred Twenty-Six Dollars (\$3,526)</b>
<b>Type of SEP:</b>	<b>Pre-approved</b>
<b>Third-Party Recipient:</b>	<b>Harris County Public Health and Environmental Services-Pollution Control Division's Fourier Transform Infra Red (FTIR) Project</b>
<b>Location of SEP:</b>	<b>Harris County</b>

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 first part of the document discusses the importance of maintaining accurate records and the role of the auditor in this process. It highlights the need for transparency and accountability in financial reporting, particularly in the context of public sector organizations. The text emphasizes that the auditor's primary responsibility is to provide an independent and objective assessment of the financial statements, ensuring that they are free from material misstatements. This involves a thorough examination of the underlying transactions and supporting documentation, as well as a critical evaluation of the internal controls and accounting policies adopted by the entity. The document also touches upon the challenges faced by auditors, such as the complexity of the financial data and the potential for collusion or manipulation, and stresses the importance of maintaining professional skepticism and integrity throughout the audit process.

### Concluding Remarks

In conclusion, the document underscores the vital role of the auditor in ensuring the reliability and integrity of financial information. It calls for a strong commitment to ethical standards and professional competence, as well as a continuous effort to stay abreast of the latest developments in auditing practice and technology. The final paragraph reiterates the auditor's duty to the public and the importance of their work in maintaining confidence in the financial system.

Yours faithfully,  
[Signature]

The above information is provided for your information and is subject to the terms and conditions of the relevant contract. It is intended to provide a general overview of the audit process and should not be relied upon for specific advice or legal opinions. For further details, please refer to the full audit report and the relevant contractual documents.

Yours faithfully,  
[Signature]  
[Name]  
[Title]

Yours faithfully,  
[Signature]

The above information is provided for your information and is subject to the terms and conditions of the relevant contract. It is intended to provide a general overview of the audit process and should not be relied upon for specific advice or legal opinions. For further details, please refer to the full audit report and the relevant contractual documents.

Yours faithfully,  
[Signature]  
[Name]  
[Title]

Yours faithfully,  
[Signature]

The above information is provided for your information and is subject to the terms and conditions of the relevant contract. It is intended to provide a general overview of the audit process and should not be relied upon for specific advice or legal opinions. For further details, please refer to the full audit report and the relevant contractual documents.

Haldor Topsoe, Inc.  
Agreed Order - Attachment A

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.

Subject: [Illegible]

[Illegible text]



**Penalty Calculation Worksheet (PCW)**

Policy Revision 2 (September 2002)

PCW Revision April 25, 2006

<b>DATES</b>	Assigned	05-Sep-2006	Screening	17-Oct-2006	EPA Due	
	PCW	19-Oct-2006				

<b>RESPONDENT/FACILITY INFORMATION</b>	
Respondent	Haldor Topsoe, Inc.
Reg. Ent. Ref. No.	RN101211498
Facility/Site Region	12-Houston
Major/Minor Source	Major Source

<b>CASE INFORMATION</b>			
Enf./Case ID No.	31477	No. of Violations	3
Docket No.	2006-1841-AIR-E	Order Type	1660
Media Program(s)	Air Quality	Enf. Coordinator	Miriam Hall
Multi-Media		EC's Team	Enforcement Team 5
Admin. Penalty \$ Limit Minimum	\$0	Maximum	\$10,000

**Penalty Calculation Section**

**TOTAL BASE PENALTY (Sum of violation base penalties)** Subtotal 1

**ADJUSTMENTS (+/-) TO SUBTOTAL 1**

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

**Compliance History** 16% Enhancement Subtotals 2, 3, & 7

Notes

**Culpability** 0% Enhancement Subtotal 4

Notes

**Good Faith Effort to Comply** 0% Reduction Subtotal 5

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

Notes

**Economic Benefit** 0% Enhancement\* Subtotal 6

Total EB Amounts	<input type="text" value="\$1,348"/>	*Capped at the Total EB \$ Amount
Approx. Cost of Compliance	<input type="text" value="\$11,100"/>	

**SUM OF SUBTOTALS 1-7** Final Subtotal

**OTHER FACTORS AS JUSTICE MAY REQUIRE** Adjustment

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

Notes

**Final Penalty Amount**

**STATUTORY LIMIT ADJUSTMENT** Final Assessed Penalty

**DEFERRAL** 20% Reduction Adjustment

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

Notes

**PAYABLE PENALTY**

Screening Date 17-Oct-2006

Docket No. 2006-1841-AIR-E

PCW

Respondent Haldor Topsoe, Inc.

Policy Revision 2 (September 2002)

Case ID No. 31477

PCW Revision April 25, 2006

Reg. Ent. Reference No. RN101211498

Media [Statute] Air Quality

Enf. Coordinator Miriam Hall

**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 ( <i>number of NOVs meeting criteria</i> )	3	15%
	Other written NOVs	1	2%
Orders	Any agreed final enforcement orders containing a denial of liability ( <i>number of orders meeting criteria</i> )	0	0%
	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 ( <i>number of judgements or consent decrees meeting criteria</i> )	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 ( <i>number of counts</i> )	0	0%
Emissions	Chronic excessive emissions events ( <i>number of events</i> )	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 ( <i>number of audits for which notices were</i>	1	-1%
	Disclosures of violations under the Texas Environmental, Health, and Safety Audit Privilege Act, 74th Legislature, 1995 ( <i>number of audits for which violations were disclosed</i> )	0	0%
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%

Please Enter Yes or No

**Adjustment Percentage (Subtotal 2) 16%**

>> 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 enhanced for three same or similar NOVs and one unrelated NOV. Penalty reduced for one letter of audit.

**Total Adjustment Percentage (Subtotals 2, 3, & 7) 16%**

**Screening Date** 17-Oct-2006 **Docket No.** 2006-1841-AIR-E **PCW**

**Respondent** Haldor Topsoe, Inc. *Policy Revision 2 (September 2002)*

**Case ID No.** 31477 *PCW Revision April 25, 2006*

**Reg. Ent. Reference No.** RN101211498

**Media [Statute]** Air Quality

**Enf. Coordinator** Miriam Hall

**Violation Number** 1

**Primary Rule Cite(s)** 30 Tex. Admin. Code § 106.6(b)

**Secondary Rule Cite(s)** Tex. Health & Safety Code § 382.085(b)

**Violation Description**  
 Failed to seal two open-ended lines in volatile organic compound (VOC) service during the time period of June 15, 2005 through September 2, 2005. In the Permit by Rule (PBR) Registration number 70832, the respondent represented to implement the 28MID fugitive monitoring program. As per 28 MID Condition E, each open-ended valve or line shall be equipped with a cap, blind flange, plug or second valve.

**Base Penalty** \$10,000

>> **Environmental, Property and Human Health Matrix**

		Harm			
Release		Major	Moderate	Minor	
OR	Actual			X	Percent 25%
	Potential				

>> **Programmatic Matrix**

	Falsification	Major	Moderate	Minor	Percent

**Matrix Notes**  
 Human health or the environment was exposed to insignificant amounts of pollutants which did not exceed levels that are protective of human health or the environment.

**Adjustment** -\$7,500

**Base Penalty Subtotal** \$2,500

**Violation Events**

Number of Violation Events 1 79 Number of violation days

<i>mark only one use a small x</i>	daily	
	monthly	
	quarterly	X
	semiannual	
	annual	
	single event	

**Violation Base Penalty** \$2,500

One quarterly event was documented during the record review conducted on May 24, 2006.

**Economic Benefit (EB) for this violation**

**Statutory Limit Test**

**Estimated EB Amount** \$1

**Violation Final Penalty Total** \$2,900

**This violation Final Assessed Penalty (adjusted for limits)** \$2,900

### Economic Benefit Worksheet

Respondent Haldor Topsoe, Inc.  
 Case ID No. 31477  
 Reg. Ent. Reference No. RN101211498  
 Media [Statute] Air Quality  
 Violation No. 1

Percent Interest	Years of Depreciation
5.0	15

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
<b>Delayed Costs</b>							
Equipment	\$50	15-Jun-2005	02-Sep-2005	0.2	\$0	\$1	\$1
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)				0.0	\$0	n/a	\$0

Notes for DELAYED costs: The estimated cost of capping the lines. The missing caps were discovered during quarterly valve monitoring. Exact Date Required is the previous monitoring date. Final date is the compliance date.

Item Description	ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)	Interest Saved	Onetime Costs	EB Amount
<b>Avoided Costs</b>				
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 **\$50** TOTAL **\$1**

<b>Screening Date</b>	17-Oct-2006	<b>Docket No.</b>	2006-1841-AIR-E	<b>PCW</b>
<b>Respondent</b>	Haldor Topsoe, Inc.	Policy Revision 2 (September 2002)		
<b>Case ID No.</b>	31477	PCW Revision April 25, 2006		
<b>Reg. Ent. Reference No.</b>	RN101211498			
<b>Media [Statute]</b>	Air Quality			
<b>Enf. Coordinator</b>	Miriam Hall			
<b>Violation Number</b>	2			
<b>Primary Rule Cite(s)</b>	30 Tex. Admin. Code §§ 116.115(b)(2)(F), 116.115(c), 122.143(4), Federal Operating Permit (FOP) O-01217, Special Condition (SC) 12, New Source Review Permit No. 43752, SC 8			
<b>Secondary Rule Cite(s)</b>	Tex. Health & Safety Code § 382.085(b)			
<b>Violation Description</b>	Failed to consistently maintain the pH level for the scrubbing solution of the Thermal Oxidizer Caustic Scrubber at or above 10 from May 25, 2005 through November 13, 2005. This resulted in excess nitrogen oxides (NO <sub>x</sub> ) emissions. The scrubber's maximum allowable emission rate for NO <sub>x</sub> is 0.25 pounds per hour (lbs/hr). During periods of low pH readings, the estimated emission rate for NO <sub>x</sub> was 0.7 lbs/hr. Because the event was avoidable, the respondent failed to meet the demonstrations for an affirmative defense in 30 Tex. Admin. Code § 101.222.			
<b>Base Penalty</b>			\$10,000	

>> **Environmental, Property and Human Health Matrix**

		Harm			
		Major	Moderate	Minor	
OR	Release			X	Percent <span style="border: 1px solid black; padding: 0 20px;">25%</span>
	Actual			X	
	Potential				

>> **Programmatic Matrix**

		Major	Moderate	Minor	
	Falsification				Percent <span style="border: 1px solid black; padding: 0 20px;"></span>

Matrix Notes Human health or the environment was exposed to insignificant amounts of pollutants which did not exceed levels that are protective of human health or the environment. According to scrubber simulation modeling, the required sulfur dioxide emissions were maintained during periods of low pH readings. However, the total excess NO<sub>x</sub> emissions were 50.29 lbs for events totaling 111 hours and 45 minutes.

**Adjustment** -\$7,500

**Base Penalty Subtotal** \$2,500

**Violation Events**

Number of Violation Events 2 24 Number of violation days

mark only one use a small x	daily	
	monthly	
	quarterly	X
	semiannual	
	annual	
	single event	

**Violation Base Penalty** \$5,000

Two quarterly events were documented during the record review conducted on May 24, 2006.

**Economic Benefit (EB) for this violation**

**Statutory Limit Test**

**Estimated EB Amount** \$1,346

**Violation Final Penalty Total** \$5,800

**This violation Final Assessed Penalty (adjusted for limits)** \$5,800

### Economic Benefit Worksheet

Respondent Haldor Topsoe, Inc.  
 Case ID No. 31477  
 Reg. Ent. Reference No. RN101211498  
 Media [Statute] Air Quality  
 Violation No. 2

Percent Interest	Years of Depreciation
5.0	15

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
<b>Delayed Costs</b>							
Equipment	\$3,000	25-May-2005	30-Apr-2007	1.9	\$19	\$386	\$406
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	\$8,000	25-May-2005	30-Sep-2007	2.4	\$940	n/a	\$940
Other (as needed)				0.0	\$0	n/a	\$0

Notes for DELAYED costs: The estimated cost of a larger capacity caustic storage tank is \$3,000. The estimated cost for a permit amendment is \$8,000. The Date Required is the date of the first documented violation and Final Dates are the projected completion dates.

Item Description	ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)	Yrs	Interest Saved	Onetime Costs	EB Amount
<b>Avoided Costs</b>					
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 **\$11,000** TOTAL **\$1,346**

**Screening Date** 17-Oct-2006

**Docket No.** 2006-1841-AIR-E

**PCW**

**Respondent** Haldor Topsoe, Inc.

*Policy Revision 2 (September 2002)*

**Case ID No.** 31477

*PCW Revision April 25, 2006*

**Reg. Ent. Reference No.** RN101211498

**Media [Statute]** Air Quality

**Enf. Coordinator** Miriam Hall

**Violation Number**

**Primary Rule Cite(s)**

30 Tex. Admin. Code §§ 122.143(4), 122.145(2)(A), FOP O-01217,  
General Terms and Conditions

**Secondary Rule Cite(s)**

Tex. Health & Safety Code § 382.085(b)

**Violation Description**

Failed to include an emissions event (STEERS #61076) which occurred at A301 baghouse on July 12, 2005 in the semiannual deviation report for the period ending November 16, 2005.

**Base Penalty**

>> **Environmental, Property and Human Health Matrix**

**Harm**

**Release** Major Moderate Minor

OR

Actual	<input type="text"/>	<input type="text"/>	<input type="text"/>
Potential	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Percent**

>> **Programmatic Matrix**

Falsification Major Moderate Minor

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>
----------------------	----------------------	----------------------	-------------------------------------

**Percent**

**Matrix Notes**

The respondent met more than 70% of the rule requirement.

**Adjustment**

**Base Penalty Subtotal**

**Violation Events**

**Number of Violation Events**

**Number of violation days**

*mark only one use a small x*

daily	<input type="text"/>
monthly	<input type="text"/>
quarterly	<input type="text"/>
semiannual	<input type="text"/>
annual	<input type="text"/>
single event	<input checked="" type="checkbox"/>

**Violation Base Penalty**

One single event was documented during the record review conducted on May 24, 2006.

**Economic Benefit (EB) for this violation**

**Statutory Limit Test**

**Estimated EB Amount**

**Violation Final Penalty Total**

**This violation Final Assessed Penalty (adjusted for limits)**

### Economic Benefit Worksheet

**Respondent** Haldor Topsoe, Inc.  
**Case ID No.** 31477  
**Reg. Ent. Reference No.** RN101211498  
**Media [Statute]** Air Quality  
**Violation No.** 3

<b>Percent Interest</b>	<b>Years of Depreciation</b>
5.0	15

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
<b>Delayed Costs</b>							
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)	\$50	16-Dec-2006	30-Apr-2007	0.4	\$1	n/a	\$1

Notes for DELAYED costs: The estimated cost of submitting a corrected report calculated from due date to projected compliance date.

<b>Avoided Costs</b>		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 **\$50** TOTAL **\$1**



3 03/19/2003 (27776)  
 4 09/15/2003 (248430)  
 5 09/30/2003 (249720)  
 6 09/28/2004 (335352)  
 7 10/20/2003 (252094)  
 8 08/27/2002 (9138)  
 9 02/02/2004 (257723)  
 10 09/01/2004 (291929)  
 11 01/06/2004 (254169)  
 12 01/07/2005 (340039)  
 13 01/21/2005 (340041)  
 14 12/30/2005 (434737)  
 15 08/29/2006 (457260)  
 16 08/12/2003 (145896)  
 17 08/27/2002 (9021)  
 18 12/12/2001 (80269)  
 19 02/14/2002 (80270)  
 20 04/11/2002 (80271)  
 21 03/01/2005 (347523)  
 22 04/16/2002 (80272)  
 23 03/29/2005 (375241)

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

Date: 03/20/2003 (27776)  
 Self Report? NO Classification: Moderate  
 Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)  
 Rqmt Prov: PA IA  
 Description: Failure to submit test notification 45 days before testing as required by Special Condition 10 and 7A.  
 Self Report? NO Classification: Minor  
 Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)  
 Rqmt Prov: PA IA  
 Description: Failure to submit test report within 30 days of testing.  
 Date: 03/01/2005 (347523)  
 Self Report? NO Classification: Moderate  
 Citation: 40 CFR Chapter 60, SubChapter C, PT 60, SubPT UUU 60.735(c)(2)  
 40 CFR Chapter 60, SubChapter C, PT 60, SubPT UUU 60.735(c)(3)  
 Description: Failure to submit a semiannual report as required in 40 CFR 60.735(c)(2) and 60.735(c)(3).  
 Self Report? NO Classification: Moderate  
 Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)  
 Rqmt Prov: PERMIT IA  
 Description: Failure to maintain required pH level of the scrubber solution for the Thermal Oxidizer caustic scrubber as required by NSR Permit No.: 43752, Special Condition 8.  
 Self Report? NO Classification: Moderate  
 Citation: 30 TAC Chapter 101, SubChapter H 101.354(f)  
 Description: Failure to limit the NOx emissions from a facility to the allowables in the compliance account for the control period.  
 Date: 09/16/2003 (248430)  
 Self Report? NO Classification: Moderate  
 Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)  
 Rqmt Prov: PA IA  
 Description: RE failed to perform stack testing within the required 90 day time frame.  
 Date: 12/30/2004 (340041)  
 Self Report? NO Classification: Moderate  
 Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)  
 Rqmt Prov: PA IA  
 Description: RE exceeded permitted emission limits for PM.  
 Self Report? NO Classification: Moderate  
 Citation: 30 TAC Chapter 101, SubChapter A 101.20(1)  
 40 CFR Chapter 60, SubChapter C, PT 60, SubPT UUU 60.736(a)

Description: RE failed to test ST-14 stack as required by 40 CFR 60, Subpart UUU within 180 days as required by 40 CFR 60.736(a).

- F. Environmental audits.  
Notice of Intent Date: 04/24/2002 (32955)  
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  
ENFORCEMENT ACTION  
CONCERNING  
HALDOR TOPSOE, INC.  
RN101211498**

§  
§  
§  
§  
§

**BEFORE THE  
TEXAS COMMISSION ON  
ENVIRONMENTAL QUALITY**

## **AGREED ORDER DOCKET NO. 2006-1841-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 Haldor Topsoe, Inc. ("HTI") 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 HTI appear before the Commission and together stipulate that:

1. HTI owns and operates a catalyst manufacturing plant at 10010 Bayport Boulevard 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 HTI agree that the Commission has jurisdiction to enter this Agreed Order, and that HTI is subject to the Commission's jurisdiction.
4. HTI received notice of the violations alleged in Section II ("Allegations") on or about September 3, 2006.
5. The occurrence of any violation is in dispute and the entry of this Agreed Order shall not constitute an admission by HTI of any violation alleged in Section II ("Allegations"), nor of any statute or rule.
6. An administrative penalty in the amount of Eight Thousand Eight Hundred Sixteen Dollars (\$8,816) is assessed by the Commission in settlement of the violations alleged in Section II ("Allegations"). HTI has paid Three Thousand Five Hundred Twenty-Seven Dollars (\$3,527) of the administrative penalty and One Thousand Seven Hundred Sixty-Three Dollars (\$1,763) is deferred contingent upon HTI'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 HTI fails to timely and satisfactorily comply with all requirements of this Agreed Order, the Executive Director may require HTI to pay all or part of the deferred penalty. Three Thousand Five Hundred Twenty-



Six Dollars (\$3,526) shall be conditionally offset by HTI's completion of a Supplemental Environmental Project.

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 HTI 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 HTI has implemented the following corrective measures at the Plant:
  - a. On September 2, 2005, plugged two open ended lines, one on the K-6215 blower and one on X-6402; and
  - b. On October 10, 2006, submitted application to amend New Source Review ("NSR") Permit No. 43752 to increase the emission limits for Nitrogen Oxides ("NO<sub>x</sub>").
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 HTI 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, HTI is alleged to have:

1. Failed to seal two open-ended lines in volatile organic compound service during the time period of June 15, 2005 through September 2, 2005, in violation of 30 TEX. ADMIN. CODE § 106.6(b) and TEX. HEALTH & SAFETY CODE § 382.085(b), as documented during a record review conducted on May 24, 2006. Specifically, in the Permit by Rule (PBR) Registration number 70832, HTI represented to implement the 28MID fugitive monitoring program. As per 28 MID Condition E, each open-ended valve or line shall be equipped with a cap, blind flange, plug or second valve.
2. Failed to consistently maintain the pH level for the scrubbing solution of the Thermal Oxidizer Caustic Scrubber at or above 10 from May 25, 2005 through November 13, 2005, in violation of 30 TEX. ADMIN. CODE §§ 116.115(b)(2)(F), 116.115(c), 122.143(4), Federal Operating Permit ("FOP") O-01217, Special Condition ("SC") 12, NSR Permit No. 43752, SC 8, and TEX. HEALTH & SAFETY

...the ... of ...

CODE § 382.085(b), as documented during a record review conducted on May 24, 2006. This resulted in excess NO<sub>x</sub> emissions. The scrubber's maximum allowable emission rate for NO<sub>x</sub> is 0.25 pounds per hour ("lbs/hr"). During periods of low pH readings, the estimated emission rate for NO<sub>x</sub> was 0.7 lbs/hr. Because the event was avoidable, HTI failed to meet the demonstrations for an affirmative defense in 30 TEX. ADMIN. CODE § 101.222.

3. Failed to include an emissions event which occurred at the A301 baghouse on July 12, 2005 in the semiannual deviation report dated December 16, 2005, in violation of 30 TEX. ADMIN. CODE §§ 122.143(4), 122.145(2)(A), FOP O-01217, General Terms and Conditions, and TEX. HEALTH & SAFETY CODE § 382.085(b), as documented during a record review conducted on May 24, 2006.

### III. DENIALS

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

### IV. ORDERING PROVISIONS

1. It is, therefore, ordered by the TCEQ that HTI pay an administrative penalty as set forth in Section I, Paragraph 6 above. The payment of this administrative penalty and HTI'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: Haldor Topsoe, Inc., Docket No. 2006-1841-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. HTI shall implement and complete a Supplemental Environmental Project ("SEP") in accordance with TEX. WATER CODE § 7.067. As set forth in Section I, Paragraph 6 above, Three Thousand Five Hundred Twenty-Six Dollars (\$3,526) of the assessed administrative penalty shall be offset with the condition that HTI implement the SEP defined in Attachment A, incorporated herein by reference. HTI'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. It is further ordered that HTI shall undertake the following technical requirements:
  - a. Respond completely and adequately, as determined by the Air Permits Division, to all letters requesting information concerning NSR Permit No. 43752 amendment application within 30 days of the date of such letters, or by any other deadline specified in writing to:

The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in financial reporting.

The second part of the document outlines the various methods used to collect and analyze data. It includes a detailed description of the sampling process and the statistical techniques employed to interpret the results.

### Conclusion

In conclusion, the findings of this study indicate that there is a significant correlation between the variables studied.

The data suggests that further research is needed to explore the underlying causes of these trends.

The study also highlights the need for improved data collection methods and more rigorous statistical analysis. It is recommended that future studies should consider a larger sample size and more diverse data sources to enhance the reliability of the findings.

Thank you for your attention and interest in this research. We hope the information provided here is helpful and informative.

The authors would like to express their gratitude to the funding agencies and the participants who made this study possible. Their support and cooperation were invaluable.

For more information, please contact the corresponding author at the address provided below.

The authors have no conflicts of interest to declare. This work was supported by the National Science Foundation under grant number XXX-XXXX-XXXX.

Air Permits Division, MC 162  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087

- b. Within 30 days after the effective date of this Agreed Order, submit an amended deviation report for FOP No. O-01217 for the semiannual period which ended on November 16, 2005 to include the July 12, 2005 emissions event;
- c. Within 30 days after the effective date of this Agreed Order, install a larger capacity storage tank for caustic;
- d. Within 180 days after the effective date of this Agreed Order, submit written certification that HTI is operating the Thermal Oxidizer Caustic Scrubber within permitted pH and emission limits or that operation has ceased until such time that appropriate authorization is obtained. The certification shall, include detailed supporting documentation including receipts, and/or other records to demonstrate compliance, be notarized by a State of Texas Notary Public and include the following certification language:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- e. Submit all correspondence, reports, and documentation required by Ordering Provisions 3.b. through 3.d. to:

Order Compliance Team  
Enforcement Division, MC 149A  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087

with a copy to:

Manager  
Air Section  
Houston Regional Office  
Texas Commission on Environmental Quality  
5425 Polk Avenue, Suite H  
Houston, Texas 77023-1486



4. The provisions of this Agreed Order shall apply to and be binding upon HTI. HTI 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.
5. If HTI 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, HTI's failure to comply is not a violation of this Agreed Order. HTI shall have the burden of establishing to the Executive Director's satisfaction that such an event has occurred. HTI shall notify the Executive Director within seven days after HTI becomes aware of a delaying event and shall take all reasonable measures to mitigate and minimize any delay.
6. 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 HTI shall be made in writing to the Executive Director. Extensions are not effective until HTI receives written approval from the Executive Director. The determination of what constitutes good cause rests solely with the Executive Director.
7. This Agreed Order, issued by the Commission, shall not be admissible against HTI 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.
8. 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.
9. Under 30 TEX. ADMIN. CODE § 70.10(b), the effective date is the date of hand-delivery of the Order to HTI, or three days after the date on which the Commission mails notice of the Order to HTI, whichever is earlier. The Chief Clerk shall provide a copy of this Agreed Order to each of the parties.

The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in financial reporting.

It is essential to ensure that all data is properly documented and stored in a secure and accessible manner. This includes regular backups and the use of secure communication channels for sensitive information.

The second part of the document outlines the specific procedures for handling confidential information. It details the steps for identifying, classifying, and protecting sensitive data throughout its lifecycle.

Procedures should be in place to ensure that only authorized personnel have access to confidential information. This includes strict access controls and regular security audits.

Finally, the document stresses the importance of ongoing training and awareness for all employees. Regular security training helps to reduce the risk of human error and ensures that everyone is up-to-date on the latest threats and best practices.

In conclusion, a comprehensive security strategy is vital for the success and integrity of any organization. By following the guidelines outlined in this document, you can significantly reduce your risk and protect your most valuable assets.

Haldor Topsoe, Inc.  
 DOCKET NO. 2006-1841-AIR-E  
 Page 6

**SIGNATURE PAGE**

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

\_\_\_\_\_  
 For the Commission

  
 \_\_\_\_\_  
 For the Executive Director

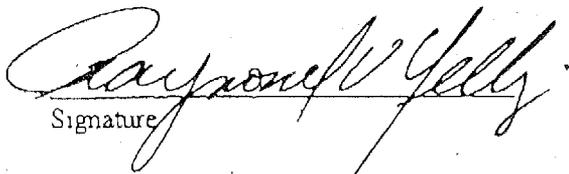
4/12/07  
 \_\_\_\_\_  
 Date

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

- A negative impact on my compliance history;
- Greater scrutiny of any permit applications submitted by me;
- 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 against me;
- Automatic referral to the Attorney General's Office of any future enforcement actions against me, and
- TCEQ seeking other relief as authorized by law.

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

  
 \_\_\_\_\_  
 Signature

JANUARY 29, 2007  
 \_\_\_\_\_  
 Date

RAYMOND V. YELIG  
 \_\_\_\_\_  
 Name (Printed or typed)  
 Authorized Representative of  
 Haldor Topsoe, Inc.

VICE PRESIDENT OF MANUFACTURING  
 \_\_\_\_\_  
 Title

**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

4/10/10

1 (Signature)

Faint, illegible text at the top of the page, possibly a header or introductory paragraph.

Main body of faint, illegible text, appearing to be several paragraphs of a document.

Section of faint, illegible text, possibly a list or a specific part of the document.

Bottom section of faint, illegible text, possibly a conclusion or footer.

**Attachment A**  
**Docket Number: 2006-1841-AIR-E**

**SUPPLEMENTAL ENVIRONMENTAL PROJECT**

<b>Respondent:</b>	<b>Haldor Topsoe, Inc.</b>
<b>Payable Penalty Amount:</b>	<b>Seven Thousand Fifty-Three Dollars (\$7,053)</b>
<b>SEP Amount:</b>	<b>Three Thousand Five Hundred Twenty-Six Dollars (\$3,526)</b>
<b>Type of SEP:</b>	<b>Pre-approved</b>
<b>Third-Party Recipient:</b>	<b>Harris County Public Health and Environmental Services-Pollution Control Division's Fourier Transform Infra Red (FTIR) Project</b>
<b>Location of SEP:</b>	<b>Harris County</b>

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

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO  
DIVISION OF THE PHYSICAL SCIENCES  
DEPARTMENT OF CHEMISTRY  
5708 SOUTH CAMPUS DRIVE  
CHICAGO, ILLINOIS 60637  
TEL: 773-936-3700  
FAX: 773-936-3701  
WWW: WWW.CHEM.UCHICAGO.EDU

THE UNIVERSITY OF CHICAGO  
DIVISION OF THE PHYSICAL SCIENCES  
DEPARTMENT OF CHEMISTRY  
5708 SOUTH CAMPUS DRIVE  
CHICAGO, ILLINOIS 60637  
TEL: 773-936-3700  
FAX: 773-936-3701  
WWW: WWW.CHEM.UCHICAGO.EDU

THE UNIVERSITY OF CHICAGO  
DIVISION OF THE PHYSICAL SCIENCES  
DEPARTMENT OF CHEMISTRY  
5708 SOUTH CAMPUS DRIVE  
CHICAGO, ILLINOIS 60637  
TEL: 773-936-3700  
FAX: 773-936-3701  
WWW: WWW.CHEM.UCHICAGO.EDU

THE UNIVERSITY OF CHICAGO  
DIVISION OF THE PHYSICAL SCIENCES  
DEPARTMENT OF CHEMISTRY  
5708 SOUTH CAMPUS DRIVE  
CHICAGO, ILLINOIS 60637  
TEL: 773-936-3700  
FAX: 773-936-3701  
WWW: WWW.CHEM.UCHICAGO.EDU

THE UNIVERSITY OF CHICAGO  
DIVISION OF THE PHYSICAL SCIENCES  
DEPARTMENT OF CHEMISTRY  
5708 SOUTH CAMPUS DRIVE  
CHICAGO, ILLINOIS 60637  
TEL: 773-936-3700  
FAX: 773-936-3701  
WWW: WWW.CHEM.UCHICAGO.EDU

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.

1. The first part of the document is a letter from the author to the editor of the journal. The letter discusses the author's interest in the topic and the reasons for writing the paper.

2. The second part of the document is the main body of the paper. It begins with an introduction that outlines the research question and the objectives of the study. The introduction also provides a brief overview of the literature on the topic. The main body of the paper is divided into several sections, each of which discusses a different aspect of the research. The sections are: (a) Methodology, (b) Results, (c) Discussion, and (d) Conclusion. The methodology section describes the data sources and the statistical methods used in the analysis. The results section presents the findings of the study, and the discussion section interprets these findings in the context of the existing literature. The conclusion section summarizes the main findings and offers some suggestions for future research.

3. The third part of the document is the references section. It lists the sources of information used in the paper, including books, journal articles, and other documents. The references are arranged in alphabetical order of the author's name.

4. The fourth part of the document is the appendix. It contains supplementary material that is related to the main body of the paper but is too large to include in the main text. The appendix includes a table of data, a list of abbreviations, and a glossary of terms.

5. The fifth part of the document is the index. It provides a list of the key words and phrases used in the paper, along with the page numbers where they appear. The index is useful for readers who want to find specific information in the paper.

6. The sixth part of the document is the bibliography. It lists the sources of information used in the paper, including books, journal articles, and other documents. The bibliography is arranged in alphabetical order of the author's name.

7. The seventh part of the document is the list of figures. It provides a list of the figures included in the paper, along with a brief description of each figure. The list of figures is arranged in the order in which the figures appear in the paper.

8. The eighth part of the document is the list of tables. It provides a list of the tables included in the paper, along with a brief description of each table. The list of tables is arranged in the order in which the tables appear in the paper.

9. The ninth part of the document is the list of abbreviations. It provides a list of the abbreviations used in the paper, along with the full names of the abbreviations. The list of abbreviations is arranged in alphabetical order of the abbreviation.

10. The tenth part of the document is the list of terms. It provides a list of the terms used in the paper, along with the definitions of the terms. The list of terms is arranged in alphabetical order of the term.

Haldor Topsoe, Inc.  
Agreed Order – Attachment A

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.

