

**Executive Summary – Enforcement Matter – Case No. 47491**

**Arkema Inc.**

**RN100216373**

**Docket No. 2013-1600-AIR-E**

**Order Type:**

1660 Agreed Order

**Findings Order Justification:**

N/A

**Media:**

AIR

**Small Business:**

No

**Location(s) Where Violation(s) Occurred:**

Arkema Beaumont Plant, 2810 Gulf States Road, Beaumont, Jefferson County

**Type of Operation:**

Chemical manufacturing plant

**Other Significant Matters:**

Additional Pending Enforcement Actions: Yes, Docket No. 2014-0411-AIR-E

Past-Due Penalties: No

Other: N/A

Interested Third-Parties: None

**Texas Register Publication Date:** May 9, 2014

**Comments Received:** No

***Penalty Information***

**Total Penalty Assessed:** \$104,962

**Amount Deferred for Expedited Settlement:** \$20,991

**Amount Deferred for Financial Inability to Pay:** \$0

**Total Paid to General Revenue:** \$41,986

**Total Due to General Revenue:** \$0

Payment Plan: N/A

**SEP Conditional Offset:** \$41,985

Name of SEP: Southeast Texas Regional Planning Commission

**Compliance History Classifications:**

Person/CN - Satisfactory

Site/RN - Satisfactory

**Major Source:** Yes

**Statutory Limit Adjustment:** N/A

**Applicable Penalty Policy:** September 2002 and September 2011

***Investigation Information***

**Complaint Date(s):** N/A

**Complaint Information:** N/A

**Date(s) of Investigation:** May 20 through 30, 2013

**Date(s) of NOE(s):** July 23, 2013

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***Violation Information***

1. Failed to maintain the minimum net heating value of 200 British thermal units (“Btu”) per standard cubic feet (“scf”) for the flare. Specifically, the gas being combusted at the flare was below the minimum net heating value for one hour on March 26, 2011, five hours on June 22, 2011, and two hours on May 2, 2012 [30 TEX. ADMIN. CODE §§ 101.20(1) and (3), 116.115(c), and 122.143(4), 40 CODE OF FEDERAL REGULATIONS (“CFR”) § 60.18(c)(3)(ii), TEX. HEALTH & SAFETY CODE § 382.085(b), Permit Nos. 865A and PSDTX1016M1, Special Conditions (“SC”) No. 10A, and Federal Operating Permit (“FOP”) No. O1636, Special Terms and Conditions (“STC”) Nos. 1A and 15A].
2. Failed to record the time, date, and duration of any loss of pilot flame on the flare. Specifically, three thermocouples that were replaced during a turnaround were not connected to the data historian when the Plant resumed operations on April 2, 2012 [30 TEX. ADMIN. CODE §§ 101.20(3), 116.115(c), and 122.143(4), TEX. HEALTH & SAFETY CODE § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 10B, and FOP No. 01636, STC No. 15A)].
3. Failed to conduct annual calibrations on the continuous flow monitor and pressure monitor on the vent stream flow to the flare. Specifically, annual calibrations were not conducted on the continuous flow monitor in 2012 and the pressure monitor in 2011 and 2012 [30 TEX. ADMIN. CODE §§ 101.20(3), 116.115(c), and 122.143(4), TEX. HEALTH & SAFETY CODE § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 10D, and FOP No. O1636, STC No. 15A].
4. Failed to perform quarterly visible emissions observations. Specifically, the Respondent did not conduct visible emissions observations for three diesel fire water pumps during all four quarters of 2011 and 2012 [30 TEX. ADMIN. CODE §§ 101.20(3) and 122.143(4), TEX. HEALTH & SAFETY CODE § 382.085(b), Permit Nos. 865A and PSDTX1016M1, General Conditions (“GC”) No. H, and FOP No. O1636, STC No. 3A].
5. Failed to notify the TCEQ at least 30 days before conducting external floating roof (“EFR”) storage tank seal gap measurements. Specifically, the Respondent conducted EFR seal gap measurements on Storage Tanks D307 and D2307 on June 10, 2011 and December 27, 2012 without prior notification [30 TEX. ADMIN. CODE §§ 101.20(3), 116.115(c), and 122.143(4), 40 CFR § 60.113b(b)(5), TEX. HEALTH & SAFETY CODE § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 3A, and FOP No. O1636, STC No. 1A].
6. Failed to comply with the maximum allowable annual emissions rates for Emission Point Numbers (“EPNs”) Flare and INCIN. Specifically, at EPN Flare, the Respondent exceeded the sulfur dioxide (“SO<sub>2</sub>”) steady state operation emissions rate of 3,576.03 pounds/hour (“lbs/hr”) on 15 occasions from February 24, 2011 to April 21, 2012, and at EPN INCIN, the Respondent exceeded the carbon monoxide (“CO”) emissions rate of

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2.03 lbs/hr on 32 occasions from February 16, 2011 to March 26, 2013, and the SO<sub>2</sub> emissions rate of 139.00 lbs/hr on three occasions from April 20 to July 26, 2012, resulting in the unauthorized release of 27,584.54 lbs of SO<sub>2</sub> and 88.31 lbs of CO [30 TEX. ADMIN. CODE §§ 101.20(3), 116.115(c), and 122.143(4), TEX. HEALTH & SAFETY CODE § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 2, and FOP No. O1636, STC No. 15A].

7. Failed to report all instances of deviations. Specifically, the semi-annual deviation reports for the reporting periods from October 26, 2011 through April 25, 2012 and April 26, 2012 through October 25, 2012 did not include deviations for failing to: submit accurate 40 CFR Part 60, Subparts III and VV semiannual reports; submit appropriate 40 CFR § 60.7(c) and (d) and Permit Nos. 865A and PSDTX1016M1, SC Nos. 25 and 26 semiannual reports within 30 days from the end of the reporting period; maintain the minimum net heating value of 200 Btu/scf for the flare; record the time, date, and duration of any loss of pilot flame on the flare; conduct annual calibrations on the continuous flow monitor and pressure monitor on the vent stream flow to the flare; conduct annual calibrations on the continuous flow monitor and pressure monitor on the vent stream flow to the flare; perform quarterly visible emissions observations; notify the TCEQ at least 30 days before conducting EFR storage tank seal gap measurements; and comply with the maximum allowable annual emissions rates for EPNs Flare and INCIN [30 TEX. ADMIN. CODE §§ 101.20(3), 122.143(4), 122.145(2)(A), and 122.146(5)(D), TEX. HEALTH & SAFETY CODE § 382.085(b), Permit Nos. 865A and PSDTX1016M1, GC No. H, and FOP No. O1636, GTC].

***Corrective Actions/Technical Requirements***

**Corrective Action(s) Completed:**

The Respondent has implemented the following corrective measures:

a. On May 20, 2013, connected the thermocouples to the data historian, resumed monitoring the thermocouple status in the control room on a continuous basis, and implemented a procedure to supply the plant leadership team with an environmental status scorecard that includes the status of the thermocouples; and

b. On September 3, 2013:

i. Increased the natural gas flow to the flare so the minimum Btu content of the flare vent gas is maintained and implemented a procedure to supply the plant leadership team with an environmental status scorecard that includes the net heating value for the flare vent;

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**Arkema Inc.**  
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- ii. Added a recurring work order into the workflow database to confirm that the continuous flow monitor and pressure monitor are calibrated at least annually, and that the associated documentation is maintained;
- iii. Added additional layers of review to confirm data accuracy and that all permit deviations are identified and reported;
- iv. Modified the procedure for testing of the onsite fire water pumps to include quarterly visible emissions observations;
- v. Added a step to the inspection sequence in the task management system that alerts the Environmental Department to submit written notification to the TCEQ at least 30 days before conducting seal gap measurements; and
- vi. Included the hourly emissions data in the environmental status scorecard that is reviewed by the Environmental Department and implemented a procedure to increase awareness of the Plant's environmental performance by having each department in the Plant review the semiannual deviation report each six-month period.

**Technical Requirements:**

The Order will require the Respondent to implement and complete a Supplemental Environmental Project ("SEP"). (See SEP Attachment A)

***Litigation Information***

**Date Petition(s) Filed:** N/A  
**Date Answer(s) Filed:** N/A  
**SOAH Referral Date:** N/A  
**Hearing Date(s):** N/A  
**Settlement Date:** N/A

***Contact Information***

**TCEQ Attorney:** N/A  
**TCEQ Enforcement Coordinator:** Amancio Gutierrez, Enforcement Division, Enforcement Team 5, MC 128, (512) 239-3921; Candy Garrett, Enforcement Division, MC 219, (512) 239-1456  
**TCEQ SEP Coordinator:** Stuart Beckley, SEP Coordinator, Enforcement Division, MC 219, (512) 239-3565  
**Respondent:** Raj Jonnalagadda, Plant Manager, Arkema Inc., P.O. Box 1427, Beaumont, Texas 77704  
**Respondent's Attorney:** N/A

**Attachment A**  
**Docket Number: 2013-1600-AIR-E**  
**SUPPLEMENTAL ENVIRONMENTAL PROJECT**

<b>Respondent:</b>	<b>Arkema Inc.</b>
<b>Penalty Amount:</b>	<b>Eighty-Three Thousand Nine Hundred Seventy-One Dollars (\$83,971)</b>
<b>SEP Offset Amount:</b>	<b>Forty-One Thousand Nine Hundred Eighty-Five Dollars (\$41,985)</b>
<b>Type of SEP:</b>	<b>Contribution to a Third-Party Administrator SEP</b>
<b>Third-Party Administrator:</b>	<b>Southeast Texas Regional Planning Commission</b>
<b>Project Name:</b>	<b>Meteorological and Air Monitoring Network</b>
<b>Location of SEP:</b>	<b>Jefferson 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 Offset 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 shall contribute the SEP Offset Amount to the Third-Party Administrator named above. The contribution will be to the **Southeast Texas Regional Planning Commission** for the *Meteorological and Air Monitoring Network* project. The contribution will be used in accordance with the SEP between the Third-Party Administrator and the TCEQ (the “Project”). Specifically, the SEP Offset Amount will be used to operate, maintain, and potentially expand the existing Southeast Texas Regional Air Monitoring Network which includes nine monitoring stations currently at the following locations:

- Beaumont CAM#2
- Cove School CAM #C695
- Mauriceville CAM#642
- Port Arthur (Motiva) Industrial Site CAM #C628
- Port Arthur Memorial High School campus CAM #C689
- Port Neches CAM #136

Arkema Inc.  
Agreed Order - Attachment A

- Sabine Pass CAM #C640
- Southeast Texas Regional Airport CAM #C643
- West Orange CAM #C9

Operation and maintenance of the ambient air monitoring stations includes canister sampling and gas chromatographs. Ancillary equipment includes sample conditioning systems, meteorological towers, climate controlled equipment shelters, a remote communications system, and electronic data logging capability. Ambient monitoring protocols have been and will continue to conform to applicable TCEQ or U.S. Environmental Protection Agency guidelines. The SEP will be done in accordance with all federal, state, and local environmental laws and regulations.

All dollars contributed will be used solely for the direct cost of implementing the Project, including, but not limited to supplies, materials, and equipment. Any portion of this contribution that is not spent on the specifically identified SEP may, at the discretion of the Executive Director ("ED"), be applied to another pre-approved SEP.

The Respondent's signature affixed to this Agreed Order certifies that the Respondent has no prior commitment to make this contribution and that it is being contributed solely in an effort to settle this enforcement action. The Respondent shall not profit in any manner from this SEP.

b. Environmental Benefit

Particulate matter ("PM"), sulfides ("SO, SO<sub>2</sub>"), oxides of nitrogen ("NO<sub>x</sub>"), volatile organic carbon ("VOC") compounds, and ambient air conditions are measured at the stations and the data are made accessible to TCEQ and the public. Sites may also provide continuous assessment of benzene, 1, 3-butadiene and styrene. This monitoring was not previously covered by existing ambient air monitoring systems.

Continued monitoring in this area of the community will help better understand air quality pollutants and will enable better identification of emission sources. The data will focus on specific chemicals that may raise air quality concerns.

c. Minimum Expenditure

The Respondent shall contribute at least the SEP Offset Amount to the Third-Party Administrator 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 Offset Amount to the Third-Party Administrator. The Respondent shall make the check payable to **Southeast Texas Regional Planning Commission SEP** and shall mail the contribution with a copy of the Agreed Order to:

Southeast Texas Regional Planning Commission  
Attention: Bob Dickinson, Director  
2210 Eastex Freeway  
Beaumont, Texas 77703-4929

## **3. Records and Reporting**

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

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

## **4. Failure to Fully Perform**

If the Respondent does not perform its obligations under this Attachment A, including full expenditure of the SEP Offset Amount and submittal of the required reporting described in Sections 2 and 3 above, the ED may require immediate payment of all or part of the SEP Offset Amount.

In the event the ED determines that the Respondent failed to fully implement and complete the Project, the Respondent shall remit payment for all or a portion of the SEP Offset Amount, as determined by the ED, and as set forth in the attached Agreed Order. After receiving notice of failure to complete the SEP, the Respondent shall include the docket number of the attached Agreed Order and a note that the enclosed payment is for the reimbursement of a SEP; shall make the check payable to "Texas Commission on Environmental Quality;" and shall mail it to:

Arkema Inc.  
Agreed Order - Attachment A

Texas Commission on Environmental Quality  
Litigation Division  
Attention: SEP Coordinator, MC 175  
P.O. Box 13087  
Austin, Texas 78711-3087

**5. Publicity**

Any public statements concerning this SEP and/or project, 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 Offset Amount identified in this Attachment A and in the attached Agreed Order has not been, and shall not be, included as a 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)

Policy Revision 2 (September 2002)

PCW Revision October 30, 2008

<b>DATES</b>	<b>Assigned</b>	29-Jul-2013	<b>Screening</b>	26-Aug-2013	<b>EPA Due</b>	19-Apr-2014
	<b>PCW</b>	13-Dec-2013				

<b>RESPONDENT/FACILITY INFORMATION</b>			
<b>Respondent</b>	Arkema Inc.		
<b>Reg. Ent. Ref. No.</b>	RN100216373		
<b>Facility/Site Region</b>	10-Beaumont	<b>Major/Minor Source</b>	Major

<b>CASE INFORMATION</b>				
<b>Enf./Case ID No.</b>	47491	<b>No. of Violations</b>	4	
<b>Docket No.</b>	2013-1600-AIR-E	<b>Order Type</b>	1660	
<b>Media Program(s)</b>	Air	<b>Government/Non-Profit</b>	No	
<b>Multi-Media</b>		<b>Enf. Coordinator</b>	Kimberly Morales	
		<b>EC's Team</b>	Enforcement Team 5	
<b>Admin. Penalty \$ Limit</b>	<b>Minimum</b>	\$0	<b>Maximum</b>	\$10,000

## Penalty Calculation Section

**TOTAL BASE PENALTY (Sum of violation base penalties)** **Subtotal 1** **\$12,000**

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

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

**Compliance History** **75.0%** Enhancement **Subtotals 2, 3, & 7** **\$9,000**

Notes: Enhancement for two NOVs with same/similar violations, two NOVs with dissimilar violations, two orders with denial of liability, and one order without denial of liability. Reduction for two notices of intent to conduct an audit and one disclosure of violations.

**Culpability** **No** **0.0%** Enhancement **Subtotal 4** **\$0**

Notes: The Respondent does not meet the culpability criteria.

**Good Faith Effort to Comply Total Adjustments** **Subtotal 5** **-\$1,200**

**Economic Benefit** **0.0%** Enhancement\* **Subtotal 6** **\$0**

Total EB Amounts	\$1,992
Approx. Cost of Compliance	\$11,600

\*Capped at the Total EB \$ Amount

**SUM OF SUBTOTALS 1-7** **Final Subtotal** **\$19,800**

**OTHER FACTORS AS JUSTICE MAY REQUIRE** **3.2%** **Adjustment** **\$634**

Reduces or enhances the Final Subtotal by the indicated percentage.

Notes: Enhancement to capture the avoided costs of compliance associated with Violation Nos. 2 and 3.

**Final Penalty Amount** **\$20,434**

**STATUTORY LIMIT ADJUSTMENT** **Final Assessed Penalty** **\$20,434**

**DEFERRAL** **20.0%** Reduction **Adjustment** **-\$4,086**

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

Notes: Deferral offered for expedited settlement.

**PAYABLE PENALTY** **\$16,348**

Screening Date 26-Aug-2013

Docket No. 2013-1600-AIR-E

PCW

Respondent Arkema Inc.

Policy Revision 2 (September 2002)

Case ID No. 47491

PCW Revision October 30, 2008

Reg. Ent. Reference No. RN100216373

Media [Statute] Air

Enf. Coordinator Kimberly Morales

### Compliance History Worksheet

>> Compliance History Site Enhancement (Subtotal 2)

Component	Number of...	Enter Number Here	Adjust.
NOVs	Written notices of violation ("NOVs") with same or similar violations as those in the current enforcement action ( <i>number of NOVs meeting criteria</i> )	2	10%
	Other written NOVs	2	4%
Orders	Any agreed final enforcement orders containing a denial of liability ( <i>number of orders meeting criteria</i> )	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	1	25%
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 submitted</i> )	2	-2%
	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> )	1	-2%

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) 75%

>> Repeat Violator (Subtotal 3)

No

Adjustment Percentage (Subtotal 3) 0%

>> Compliance History Person Classification (Subtotal 7)

Satisfactory Performer

Adjustment Percentage (Subtotal 7) 0%

>> Compliance History Summary

Compliance History Notes

Enhancement for two NOVs with same/similar violations, two NOVs with dissimilar violations, two orders with denial of liability, and one order without denial of liability. Reduction for two notices of intent to conduct an audit and one disclosure of violations.

Total Adjustment Percentage (Subtotals 2, 3, & 7) 75%

Screening Date 26-Aug-2013

Docket No. 2013-1600-AIR-E

PCW

Respondent Arkema Inc.

Policy Revision 2 (September 2002)

Case ID No. 47491

PCW Revision October 30, 2008

Reg. Ent. Reference No. RN100216373

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 1

Rule Cite(s)

30 Tex. Admin. Code §§ 101.20(1) and (3), 116.115(c), and 122.143(4), 40 Code of Federal Regulations ("CFR") § 60.18(c)(3)(ii), Tex. Health & Safety Code § 382.085(b), Permit Nos. 865A and PSDTX1016M1, Special Conditions ("SC") No. 10A, and Federal Operating Permit ("FOP") No. O1636, Special Terms and Conditions ("STC") Nos. 1A and 15A

Violation Description

Failed to maintain the minimum net heating value of 200 British thermal units per standard cubic feet ("Btu/scf") for the flare. Specifically, the gas being combusted at the flare was below the minimum net heating value for one hour on March 26, 2011 and for five hours on June 22, 2011.

Base Penalty \$10,000

>> Environmental, Property and Human Health Matrix

OR

Release	Harm		
	Major	Moderate	Minor
Actual			X
Potential			

Percent 25%

>> Programmatic Matrix

Falsification	Harm		
	Major	Moderate	Minor

Percent 0%

Matrix Notes

Human health or the environment has been exposed to insignificant amounts of pollutants which do not exceed levels that are protective of human health or environmental receptors as a result of the violation.

Adjustment \$7,500

\$2,500

Violation Events

Number of Violation Events 1

2 Number of violation days

daily	
weekly	
monthly	
quarterly	X
semiannual	
annual	
single event	

mark only one with an x

Violation Base Penalty \$2,500

One quarterly event is recommended for the noncompliance that occurred on March 26, 2011 and June 22, 2011.

Good Faith Efforts to Comply

10.0% Reduction

\$250

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

Notes

The Respondent completed corrective actions by September 3, 2013, after the July 23, 2013 NOE.

Violation Subtotal \$2,250

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$611

Violation Final Penalty Total \$4,257

This violation Final Assessed Penalty (adjusted for limits) \$4,257

# Economic Benefit Worksheet

**Respondent** Arkema Inc.  
**Case ID No.** 47491  
**Reg. Ent. Reference No.** RN100216373  
**Media** Air  
**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
No commas or \$							

### Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)	\$5,000	26-Mar-2011	3-Sep-2013	2.44	\$611	n/a	\$611

**Notes for DELAYED costs**

Estimated cost to increase the natural gas flow to the flare so the minimum Btu content of the flare vent gas is maintained and to implement a procedure to supply the plant leadership team with an environmental status scorecard that includes the net heating value for the flare vent. The date required is the initial date of noncompliance. The final date is the date that corrective actions were completed.

### Avoided Costs

**ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)**

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0

**Notes for AVOIDED costs**

Approx. Cost of Compliance

\$5,000

**TOTAL**

\$611

Screening Date 26-Aug-2013

Docket No. 2013-1600-AIR-E

PCW

Respondent Arkema Inc.

Policy Revision 2 (September 2002)

Case ID No. 47491

PCW Revision October 30, 2008

Reg. Ent. Reference No. RN100216373

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 2

Rule Cite(s)

30 Tex. Admin. Code §§ 101.20(3) and 122.143(4), Tex. Health & Safety Code § 382.085(b), Permit Nos. 865A and PSDTX1016M1, General Conditions No. H, and FOP No. O1636, STC No. 3A

Violation Description

Failed to perform quarterly visible emissions observations. Specifically, the Respondent did not conduct visible emissions observations for three diesel fire water pumps during the first two quarters of 2011.

Base Penalty \$10,000

>> Environmental, Property and Human Health Matrix

OR

Release	Harm		
	Major	Moderate	Minor
Actual			
Potential			x

Percent 10%

>> Programmatic Matrix

Falsification	Major	Moderate	Minor

Percent 0%

Matrix Notes

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

Adjustment \$9,000

\$1,000

Violation Events

Number of Violation Events 2

180 Number of violation days

daily	
weekly	
monthly	
quarterly	
semiannual	
annual	
single event	x

mark only one with an x

Violation Base Penalty \$2,000

Two single events are recommended for the two quarterly observations that were not conducted.

Good Faith Efforts to Comply

10.0% Reduction

\$200

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

Notes

The Respondent completed corrective actions by September 3, 2013, after the July 23, 2013 NOE.

Violation Subtotal \$1,800

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$651

Violation Final Penalty Total \$3,406

This violation Final Assessed Penalty (adjusted for limits) \$3,406

## Economic Benefit Worksheet

**Respondent** Arkema Inc.  
**Case ID No.** 47491  
**Reg. Ent. Reference No.** RN100216373  
**Media** Air  
**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
No commas or \$							

### Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)	\$1,000	31-Mar-2011	3-Sep-2013	2.43	\$122	n/a	\$122

**Notes for DELAYED costs**

Estimated cost to modify the procedure for testing of the onsite fire water pumps to include quarterly visible emissions observations. The date required is the date the first observation was due to be conducted. The final date is the date that corrective actions were completed.

### Avoided Costs

**ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)**

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)	\$500	31-Mar-2011	30-Jun-2011	1.17	\$29	\$500	\$529

**Notes for AVOIDED costs**

Estimated avoided cost to conduct quarterly visible emissions observations (\$250 x 2). The date required is the date the first observation was due to be conducted. The final date is the date the last observation was due to be conducted.

Approx. Cost of Compliance

\$1,500

**TOTAL**

\$651

Screening Date 26-Aug-2013

Docket No. 2013-1600-AIR-E

PCW

Respondent Arkema Inc.

Policy Revision 2 (September 2002)

Case ID No. 47491

PCW Revision October 30, 2008

Reg. Ent. Reference No. RN100216373

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 3

Rule Cite(s)

30 Tex. Admin. Code §§ 101.20(3), 116.115(c), and 122.143(4), 40 CFR § 60.113b(b)(5), Tex. Health & Safety Code § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 3A, and FOP No. O1636, STC No. 1A

Violation Description

Failed to notify the TCEQ at least 30 days before conducting external floating roof ("EFR") storage tank seal gap measurements. Specifically, the Respondent conducted EFR seal gap measurements on Storage Tanks D307 and D2307 on June 10, 2011 without prior notification.

Base Penalty \$10,000

>> Environmental, Property and Human Health Matrix

OR

Release	Harm		
	Major	Moderate	Minor
Actual			
Potential			

Percent 0%

>> Programmatic Matrix

Falsification	Major	Moderate	Minor
	x		

Percent 25%

Matrix Notes

The Respondent failed to comply with 100% of the rule requirement.

Adjustment \$7,500

\$2,500

Violation Events

Number of Violation Events 1

1 Number of violation days

daily	
weekly	
monthly	
quarterly	
semiannual	
annual	
single event	x

mark only one with an x

Violation Base Penalty \$2,500

One single event is recommended for the notification that was not submitted.

Good Faith Efforts to Comply

10.0% Reduction

\$250

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

Notes

The Respondent completed corrective actions by September 3, 2013, after the July 23, 2013 NOE.

Violation Subtotal \$2,250

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$221

Violation Final Penalty Total \$4,257

This violation Final Assessed Penalty (adjusted for limits) \$4,257

## Economic Benefit Worksheet

**Respondent** Arkema Inc.  
**Case ID No.** 47491  
**Reg. Ent. Reference No.** RN100216373  
**Media** Air  
**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
No commas or \$							

### Delayed Costs

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)	\$1,000	11-May-2011	3-Sep-2013	2.32	\$116	n/a	\$116

**Notes for DELAYED costs**

Estimated cost to add a step to the inspection sequence in the task management system that alerts the Environmental Department to submit written notification to the TCEQ at least 30 days before conducting seal gap measurements. The date required is the date that notification was due. The final date is the date that corrective actions were completed.

### Avoided Costs

**ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)**

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)	\$100	11-May-2011	10-Jun-2011	1.00	\$5	\$100	\$105

**Notes for AVOIDED costs**

Estimated avoided cost to notify the TCEQ before conducting EFR seal gap measurements. The date required is the date that notification was due. The final date is the date the measurements were conducted.

Approx. Cost of Compliance

\$1,100

**TOTAL**

\$221

Screening Date 26-Aug-2013

Docket No. 2013-1600-AIR-E

PCW

Respondent Arkema Inc.

Policy Revision 2 (September 2002)

Case ID No. 47491

PCW Revision October 30, 2008

Reg. Ent. Reference No. RN100216373

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 4

Rule Cite(s)

30 Tex. Admin. Code §§ 101.20(3), 116.115(c), and 122.143(4), Tex. Health & Safety Code § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 2, and FOP No. O1636, STC No. 15A

Violation Description

Failed to comply with the maximum allowable annual emissions rates for Emissions Point Numbers ("EPNs") Flare and INCIN. Specifically, at EPN Flare, the Respondent exceeded the sulfur dioxide ("SO2") steady state operation emissions rate of 3,576.03 pounds/hour ("lbs/hr") on six occasions from February 24 to July 28, 2011, and at EPN INCIN, the Respondent exceeded the carbon monoxide ("CO") emissions rate of 2.03 lbs/hr on eight occasions from February 16 to August 7, 2011, resulting in the unauthorized release of 2,564.08 lbs of SO2 and 29.81 lbs of CO.

Base Penalty \$10,000

>> Environmental, Property and Human Health Matrix

OR

Release	Harm		
	Major	Moderate	Minor
Actual			x
Potential			

Percent 25%

>> Programmatic Matrix

Falsification	Major	Moderate	Minor

Percent 0%

Matrix Notes

Human health or the environment has been exposed to insignificant amounts of pollutants which do not exceed levels that are protective of human health or environmental receptors as a result of the violation.

Adjustment \$7,500

\$2,500

Violation Events

Number of Violation Events 2

8 Number of violation days

daily	
weekly	
monthly	
quarterly	x
semiannual	
annual	
single event	

mark only one with an x

Violation Base Penalty \$5,000

Two quarterly events are recommended for the exceedances that occurred from February 16 to August 7, 2011.

Good Faith Efforts to Comply

10.0% Reduction

\$500

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

Notes

The Respondent completed corrective actions by September 3, 2013, after the July 23, 2013 NOE.

Violation Subtotal \$4,500

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$510

Violation Final Penalty Total \$8,514

This violation Final Assessed Penalty (adjusted for limits) \$8,514

## Economic Benefit Worksheet

**Respondent** Arkema Inc.  
**Case ID No.** 47491  
**Reg. Ent. Reference No.** RN100216373  
**Media** Air  
**Violation No.** 4

<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
------------------	-----------	---------------	------------	-----	----------------	---------------	-----------

No commas or \$

### Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)	\$4,000	16-Feb-2011	3-Sep-2013	2.55	\$510	n/a	\$510

**Notes for DELAYED costs**

Estimated cost to include the hourly emissions data in the environmental status scorecard that is reviewed by the Environmental Department and to implement a procedure to increase awareness of the Plant's environmental performance by having each department in the Plant review the semiannual deviation report each six-month period. The date required is the initial date of noncompliance. The final date is the date that corrective actions were completed.

### Avoided Costs

**ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)**

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0

**Notes for AVOIDED costs**

Approx. Cost of Compliance

\$4,000

**TOTAL**

\$510



# Penalty Calculation Worksheet (PCW)

Policy Revision 3 (September 2011)

PCW Revision August 3, 2011

<b>DATES</b>	<b>Assigned</b>	29-Jul-2013	<b>Screening</b>	26-Aug-2013	<b>EPA Due</b>	19-Apr-2014
	<b>PCW</b>	13-Dec-2013				

<b>RESPONDENT/FACILITY INFORMATION</b>	
<b>Respondent</b>	Arkema Inc.
<b>Reg. Ent. Ref. No.</b>	RN100216373
<b>Facility/Site Region</b>	10-Beaumont
<b>Major/Minor Source</b>	Major

<b>CASE INFORMATION</b>			
<b>Enf./Case ID No.</b>	47491	<b>No. of Violations</b>	8
<b>Docket No.</b>	2013-1600-AIR-E	<b>Order Type</b>	1660
<b>Media Program(s)</b>	Air	<b>Government/Non-Profit</b>	No
<b>Multi-Media</b>		<b>Enf. Coordinator</b>	Kimberly Morales
		<b>EC's Team</b>	Enforcement Team 5
<b>Admin. Penalty \$ Limit Minimum</b>	\$0	<b>Maximum</b>	\$25,000

## Penalty Calculation Section

**TOTAL BASE PENALTY (Sum of violation base penalties)** **Subtotal 1** **\$50,000**

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

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

**Compliance History** **75.0%** Enhancement **Subtotals 2, 3, & 7** **\$37,500**

Notes: Enhancement for two NOVs with same/similar violations, two NOVs with dissimilar violations, two orders with denial of liability, and one order without denial of liability. Reduction for two notices of intent to conduct an audit and one disclosure of violations.

**Culpability** **No** **0.0%** Enhancement **Subtotal 4** **\$0**

Notes: The Respondent does not meet the culpability criteria.

**Good Faith Effort to Comply Total Adjustments** **Subtotal 5** **-\$5,562**

**Economic Benefit** **0.0%** Enhancement\* **Subtotal 6** **\$0**

Total EB Amounts **\$2,851**  
 Approx. Cost of Compliance **\$6,350**  
 \*Capped at the Total EB \$ Amount

**SUM OF SUBTOTALS 1-7** **Final Subtotal** **\$81,938**

**OTHER FACTORS AS JUSTICE MAY REQUIRE** **3.2%** **Adjustment** **\$2,590**

Reduces or enhances the Final Subtotal by the indicated percentage.

Notes: Enhancement to capture the avoided costs of compliance associated with Violation Nos. 3, 4, and 5.

**Final Penalty Amount** **\$84,528**

**STATUTORY LIMIT ADJUSTMENT** **Final Assessed Penalty** **\$84,528**

**DEFERRAL** **20.0%** Reduction **Adjustment** **-\$16,905**

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

Notes: Deferral offered for expedited settlement.

**PAYABLE PENALTY** **\$67,623**

**Screening Date** 26-Aug-2013

**Docket No.** 2013-1600-AIR-E

**PCW**

**Respondent** Arkema Inc.

Policy Revision 3 (September 2011)

**Case ID No.** 47491

PCW Revision August 3, 2011

**Reg. Ent. Reference No.** RN100216373

**Media [Statute]** Air

**Enf. Coordinator** Kimberly Morales

### Compliance History Worksheet

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

Component	Number of...	Enter Number Here	Adjust.
NOVs	Written notices of violation ("NOVs") with same or similar violations as those in the current enforcement action ( <i>number of NOVs meeting criteria</i> )	2	10%
	Other written NOVs	2	4%
Orders	Any agreed final enforcement orders containing a denial of liability ( <i>number of orders meeting criteria</i> )	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	1	25%
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 submitted</i> )	2	-2%
	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> )	1	-2%

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)** 75%

>> **Repeat Violator (Subtotal 3)**

No

**Adjustment Percentage (Subtotal 3)** 0%

>> **Compliance History Person Classification (Subtotal 7)**

Satisfactory Performer

**Adjustment Percentage (Subtotal 7)** 0%

>> **Compliance History Summary**

**Compliance History Notes**

Enhancement for two NOVs with same/similar violations, two NOVs with dissimilar violations, two orders with denial of liability, and one order without denial of liability. Reduction for two notices of intent to conduct an audit and one disclosure of violations.

**Total Compliance History Adjustment Percentage (Subtotals 2, 3, & 7)** 75%

>> **Final Compliance History Adjustment**

**Final Adjustment Percentage \*capped at 100%** 75%

Screening Date 26-Aug-2013

Docket No. 2013-1600-AIR-E

PCW

Respondent Arkema Inc.

Policy Revision 3 (September 2011)

Case ID No. 47491

PCW Revision August 3, 2011

Reg. Ent. Reference No. RN100216373

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 1

Rule Cite(s) 30 Tex. Admin. Code §§ 101.20(1) and (3), 116.115(c), and 122.143(4), 40 Code of Federal Regulations ("CFR") § 60.18(c)(3)(ii), Tex. Health & Safety Code § 382.085(b), Permit Nos. 865A and PSDTX1016M1, Special Conditions ("SC") No. 10A, and Federal Operating Permit ("FOP") No. O1636, Special Terms and Conditions ("STC") Nos. 1A and 15A

Violation Description Failed to maintain the minimum net heating value of 200 British thermal units per standard cubic feet ("Btu/scf") for the flare. Specifically, the gas being combusted at the flare was below the minimum net heating value for two hours on May 2, 2012.

Base Penalty \$25,000

>> Environmental, Property and Human Health Matrix

Table with columns: Release (Actual, Potential), Harm (Major, Moderate, Minor), and Percent (15.0%). Includes an 'OR' label.

>> Programmatic Matrix

Table with columns: Falsification, Major, Moderate, Minor, and Percent (0.0%).

Matrix Notes

Human health or the environment has been exposed to insignificant amounts of pollutants which do not exceed levels that are protective of human health or environmental receptors as a result of the violation.

Adjustment \$21,250

\$3,750

Violation Events

Number of Violation Events 1 Number of violation days 1

Table for frequency selection: daily, weekly, monthly, quarterly (marked with x), semiannual, annual, single event.

Violation Base Penalty \$3,750

One quarterly event is recommended.

Good Faith Efforts to Comply

10.0% Reduction

\$375

Table for Good Faith Efforts: Extraordinary, Ordinary (marked with x), N/A.

Notes

The Respondent completed corrective actions by September 3, 2013, after the July 23, 2013 NOE.

Violation Subtotal \$3,375

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$0

Violation Final Penalty Total \$6,383

This violation Final Assessed Penalty (adjusted for limits) \$6,383

# Economic Benefit Worksheet

**Respondent** Arkema Inc.  
**Case ID No.** 47491  
**Reg. Ent. Reference No.** RN100216373  
**Media** Air  
**Violation No.** 1

<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
------------------	-----------	---------------	------------	-----	----------------	---------------	-----------

No commas or \$

### Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)				0.00	\$0	n/a	\$0

Notes for DELAYED costs

The economic benefit for this violation is included in Violation No. 1 of the accompanying Penalty Calculation Worksheet.

### Avoided Costs

**ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)**

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0

Notes for AVOIDED costs

Approx. Cost of Compliance

\$0

**TOTAL**

\$0

Screening Date 26-Aug-2013

Docket No. 2013-1600-AIR-E

PCW

Respondent Arkema Inc.

Policy Revision 3 (September 2011)

Case ID No. 47491

PCW Revision August 3, 2011

Reg. Ent. Reference No. RN100216373

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 2

Rule Cite(s) 30 Tex. Admin. Code §§ 101.20(3), 116.115(c), and 122.143(4), Tex. Health & Safety Code § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 10B, and FOP No. O1636, STC No. 15A

Violation Description Failed to record the time, date, and duration of any loss of pilot flame on the flare. Specifically, three thermocouples that were replaced during a turnaround were not connected to the data historian when the Plant resumed operations on April 2, 2012.

Base Penalty \$25,000

>> Environmental, Property and Human Health Matrix

OR

Release	Harm		
	Major	Moderate	Minor
Actual			
Potential			

Percent 0.0%

>> Programmatic Matrix

Falsification	Major	Moderate	Minor
	x		

Percent 15.0%

Matrix Notes

The Respondent failed to comply with 100% of the rule requirement.

Adjustment \$21,250

\$3,750

Violation Events

Number of Violation Events 1

413 Number of violation days

daily	
weekly	
monthly	
quarterly	
semiannual	
annual	
single event	x

mark only one with an x

Violation Base Penalty \$3,750

One single event is recommended.

Good Faith Efforts to Comply

25.0% Reduction

\$937

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

Notes The Respondent completed corrective actions on May 20, 2013, prior to the July 23, 2013 NOE.

Violation Subtotal \$2,813

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$113

Violation Final Penalty Total \$5,803

This violation Final Assessed Penalty (adjusted for limits) \$5,803

## Economic Benefit Worksheet

**Respondent** Arkema Inc.  
**Case ID No.** 47491  
**Reg. Ent. Reference No.** RN100216373  
**Media** Air  
**Violation No.** 2

<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
------------------	-----------	---------------	------------	-----	----------------	---------------	-----------

No commas or \$

### Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)	\$2,000	2-Apr-2012	20-May-2013	1.13	\$113	n/a	\$113

**Notes for DELAYED costs**

Estimated cost to connect the thermocouples to the data historian, resume monitoring the thermocouple status in the control room on a continuous basis, and to implement a procedure to supply the Plant leadership team with an environmental status scorecard that includes the status of the thermocouples. The date required is the initial date of noncompliance. The final date is the date that corrective actions were completed.

### Avoided Costs

**ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)**

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0

**Notes for AVOIDED costs**

Approx. Cost of Compliance

\$2,000

**TOTAL**

\$113

Screening Date 26-Aug-2013

Docket No. 2013-1600-AIR-E

PCW

Respondent Arkema Inc.

Policy Revision 3 (September 2011)

Case ID No. 47491

PCW Revision August 3, 2011

Reg. Ent. Reference No. RN100216373

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 3

Rule Cite(s)

30 Tex. Admin. Code §§ 101.20(3), 116.115(c), and 122.143(4), Tex. Health & Safety Code § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 10D, and FOP No. O1636, STC No. 15A

Violation Description

Failed to conduct annual calibrations on the continuous flow monitor and pressure monitor on the vent stream flow to the flare. Specifically, annual calibrations were not conducted on the continuous flow monitor in 2012 and the pressure monitor in 2011 and 2012.

Base Penalty \$25,000

>> Environmental, Property and Human Health Matrix

OR

Release	Harm		
	Major	Moderate	Minor
Actual			
Potential			X

Percent 7.0%

>> Programmatic Matrix

Falsification	Major	Moderate	Minor

Percent 0.0%

Matrix Notes

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

Adjustment \$23,250

\$1,750

Violation Events

Number of Violation Events 3

730 Number of violation days

daily	
weekly	
monthly	
quarterly	
semiannual	
annual	
single event	X

mark only one with an x

Violation Base Penalty \$5,250

Three single events are recommended for the three annual calibrations that were not conducted.

Good Faith Efforts to Comply

10.0% Reduction

\$525

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

Notes The Respondent completed corrective actions by September 3, 2013, after the July 23, 2013 NOE.

Violation Subtotal \$4,725

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$906

Violation Final Penalty Total \$8,936

This violation Final Assessed Penalty (adjusted for limits) \$8,936

## Economic Benefit Worksheet

**Respondent** Arkema Inc.  
**Case ID No.** 47491  
**Reg. Ent. Reference No.** RN100216373  
**Media** Air  
**Violation No.** 3

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

**Item Cost**   **Date Required**   **Final Date**   **Yrs**   **Interest Saved**   **Onetime Costs**   **EB Amount**  
**Item Description**   No commas or \$

### Delayed Costs

Equipment			0.00	\$0	\$0	\$0	\$0
Buildings			0.00	\$0	\$0	\$0	\$0
Other (as needed)			0.00	\$0	\$0	\$0	\$0
Engineering/construction			0.00	\$0	\$0	\$0	\$0
Land			0.00	\$0	n/a	\$0	\$0
Record Keeping System			0.00	\$0	n/a	\$0	\$0
Training/Sampling			0.00	\$0	n/a	\$0	\$0
Remediation/Disposal			0.00	\$0	n/a	\$0	\$0
Permit Costs			0.00	\$0	n/a	\$0	\$0
Other (as needed)	\$1,000	31-Dec-2011	3-Sep-2013	1.68	\$84	n/a	\$84

**Notes for DELAYED costs**

Estimated cost to add a recurring work order into the workflow database to confirm that the continuous flow monitor and pressure monitor are calibrated at least annually, and that the associated documentation is maintained. The date required is the date the first calibration was due to be conducted. The final date is the date that corrective actions were completed.

### Avoided Costs

**ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)**

Disposal			0.00	\$0	\$0	\$0	\$0
Personnel			0.00	\$0	\$0	\$0	\$0
Inspection/Reporting/Sampling			0.00	\$0	\$0	\$0	\$0
Supplies/equipment			0.00	\$0	\$0	\$0	\$0
Financial Assurance [2]			0.00	\$0	\$0	\$0	\$0
ONE-TIME avoided costs [3]			0.00	\$0	\$0	\$0	\$0
Other (as needed)	\$750	31-Dec-2011	31-Dec-2012	1.92	\$72	\$750	\$822

**Notes for AVOIDED costs**

Estimated avoided cost to conduct annual calibrations (\$250 x 3). The date required is the date the first calibrator was due to be conducted. The final date is the date the last calibration was due to be conducted.

Approx. Cost of Compliance

\$1,750

**TOTAL**

\$906

Screening Date 26-Aug-2013

Docket No. 2013-1600-AIR-E

PCW

Respondent Arkema Inc.

Policy Revision 3 (September 2011)

Case ID No. 47491

PCW Revision August 3, 2011

Reg. Ent. Reference No. RN100216373

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 4

Rule Cite(s)

30 Tex. Admin. Code §§ 101.20(3) and 122.143(4), Tex. Health & Safety Code § 382.085(b), Permit Nos. 865A and PSDTX1016M1, General Conditions ("GC") No. H, and FOP No. O1636, STC No. 3A

Violation Description

Failed to perform quarterly visible emissions observations. Specifically, the Respondent did not conduct visible emissions observations for three diesel fire water pumps during the last two quarters of 2011 and all four quarters of 2012.

Base Penalty \$25,000

>> Environmental, Property and Human Health Matrix

OR

Release	Harm		
	Major	Moderate	Minor
Actual			
Potential			x

Percent 7.0%

>> Programmatic Matrix

Falsification	Major	Moderate	Minor

Percent 0.0%

Matrix Notes

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

Adjustment \$23,250

\$1,750

Violation Events

Number of Violation Events 6

549 Number of violation days

daily	
weekly	
monthly	
quarterly	
semiannual	
annual	
single event	x

mark only one with an x

Violation Base Penalty \$10,500

Six single events are recommended for the six quarterly observations that were not conducted.

Good Faith Efforts to Comply

10.0% Reduction

\$1,050

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

Notes

The Respondent completed corrective actions by September 3, 2013, after the July 23, 2013 NOE.

Violation Subtotal \$9,450

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$1,663

Violation Final Penalty Total \$17,873

This violation Final Assessed Penalty (adjusted for limits) \$17,873

# Economic Benefit Worksheet

**Respondent** Arkema Inc.  
**Case ID No.** 47491  
**Reg. Ent. Reference No.** RN100216373  
**Media** Air  
**Violation No.** 4

Percent Interest	Years of Depreciation
5.0	15

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Overtime Costs	EB Amount
No commas or \$							

### Delayed Costs

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Overtime Costs	EB Amount
Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)				0.00	\$0	n/a	\$0

**Notes for DELAYED costs**

The delayed cost for this violation is included in Violation No. 2 of the accompanying Penalty Calculation Worksheet.

### Avoided Costs

**ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)**

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Overtime Costs	EB Amount
Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)	\$1,500	30-Sep-2011	31-Dec-2012	2.17	\$163	\$1,500	\$1,663

**Notes for AVOIDED costs**

Estimated avoided cost to conduct quarterly visible emissions observations (\$250 x 6). The date required is the date the first observation was due to be conducted. The final date is the date the last observation was due to be conducted.

Approx. Cost of Compliance

\$1,500

**TOTAL**

\$1,663

Screening Date 26-Aug-2013

Docket No. 2013-1600-AIR-E

PCW

Respondent Arkema Inc.

Policy Revision 3 (September 2011)

Case ID No. 47491

PCW Revision August 3, 2011

Reg. Ent. Reference No. RN100216373

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 5

Rule Cite(s)

30 Tex. Admin. Code §§ 101.20(3), 116.115(c), and 122.143(4), 40 CFR § 60.113b(b)(5), Tex. Health & Safety Code § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 3A, and FOP No. O1636, STC No. 1A

Violation Description

Failed to notify the TCEQ at least 30 days before conducting external floating roof ("EFR") storage tank seal gap measurements. Specifically, the Respondent conducted EFR seal gap measurements on Storage Tanks D307 and D2307 on December 27, 2012 without prior notification.

Base Penalty \$25,000

>> Environmental, Property and Human Health Matrix

OR

Release	Harm		
	Major	Moderate	Minor
Actual			
Potential			

Percent 0.0%

>> Programmatic Matrix

Falsification	Major	Moderate	Minor
	x		

Percent 15.0%

Matrix Notes

The Respondent failed to comply with 100% of the rule requirement.

Adjustment \$21,250

\$3,750

Violation Events

Number of Violation Events 1 Number of violation days 1

daily	
weekly	
monthly	
quarterly	
semiannual	
annual	
single event	x

mark only one with an x

Violation Base Penalty \$3,750

One single event is recommended for the notification that was not submitted.

Good Faith Efforts to Comply

10.0% Reduction

\$375

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

Notes

The Respondent completed corrective actions by September 3, 2013, after the July 23, 2013 NOE.

Violation Subtotal \$3,375

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$105

Violation Final Penalty Total \$6,383

This violation Final Assessed Penalty (adjusted for limits) \$6,383

# Economic Benefit Worksheet

**Respondent** Arkema Inc.  
**Case ID No.** 47491  
**Reg. Ent. Reference No.** RN100216373  
**Media** Air  
**Violation No.** 5

Percent Interest	Years of Depreciation
5.0	15

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
No commas or \$							

### Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)				0.00	\$0	n/a	\$0

**Notes for DELAYED costs**

The delayed cost for this violation is included in Violation No. 3 of the accompanying Penalty Calculation Worksheet.

### Avoided Costs

**ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)**

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)	\$100	27-Nov-2012	27-Dec-2012	1.00	\$5	\$100	\$105

**Notes for AVOIDED costs**

Estimated avoided cost to notify the TCEQ before conducting EFR seal gap measurements. The date required is the date that notification was due. The final date is the date the measurements were conducted.

Approx. Cost of Compliance

\$100

**TOTAL**

\$105

Screening Date 26-Aug-2013

Docket No. 2013-1600-AIR-E

PCW

Respondent Arkema Inc.

Policy Revision 3 (September 2011)

Case ID No. 47491

PCW Revision August 3, 2011

Reg. Ent. Reference No. RN100216373

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 6

Rule Cite(s)

30 Tex. Admin. Code §§ 101.20(3), 116.115(c), and 122.143(4), Tex. Health & Safety Code § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 2, and FOP No. O1636, STC No. 15A

Violation Description

Failed to comply with the maximum allowable annual emissions rates for Emission Point Number ("EPN") Flare. Specifically, the Respondent exceeded the sulfur dioxide ("SO2") steady state operation emissions rate of 3,576.03 pounds/hour ("lbs/hr") on nine occasions from April 17 to 21, 2012, resulting in the unauthorized release of 24,994.94 lbs of SO2.

Base Penalty \$25,000

>> Environmental, Property and Human Health Matrix

OR

Release	Harm		
	Major	Moderate	Minor
Actual		X	
Potential			

Percent 30.0%

>> Programmatic Matrix

Falsification	Major	Moderate	Minor

Percent 0.0%

Matrix Notes

Human health or the environment has been exposed to significant amounts of pollutants which do not exceed levels that are protective of human health or environmental receptors as a result of the violation.

Adjustment \$17,500

\$7,500

Violation Events

Number of Violation Events 1

5 Number of violation days

daily	
weekly	
monthly	X
quarterly	
semiannual	
annual	
single event	

mark only one with an x

Violation Base Penalty \$7,500

One monthly event is recommended from April 17 to 21, 2012.

Good Faith Efforts to Comply

10.0% Reduction

\$750

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

Notes

The Respondent completed corrective actions by September 3, 2013, after the July 23, 2013 NOE.

Violation Subtotal \$6,750

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$0

Violation Final Penalty Total \$12,766

This violation Final Assessed Penalty (adjusted for limits) \$12,766

## Economic Benefit Worksheet

**Respondent** Arkema Inc.  
**Case ID No.** 47491  
**Reg. Ent. Reference No.** RN100216373  
**Media** Air  
**Violation No.** 6

<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
No commas or \$							

### Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)				0.00	\$0	n/a	\$0

Notes for DELAYED costs

The economic benefit for this violation is included in Violation No. 4 of the accompanying Penalty Calculation Worksheet.

### Avoided Costs

**ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)**

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0

Notes for AVOIDED costs

Approx. Cost of Compliance

\$0

**TOTAL**

\$0

Screening Date 26-Aug-2013

Docket No. 2013-1600-AIR-E

PCW

Respondent Arkema Inc.

Policy Revision 3 (September 2011)

Case ID No. 47491

PCW Revision August 3, 2011

Reg. Ent. Reference No. RN100216373

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 7

Rule Cite(s)

30 Tex. Admin. Code §§ 101.20(3), 116.115(c), and 122.143(4), Tex. Health & Safety Code § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 2, and FOP No. O1636, STC No. 15A

Violation Description

Failed to comply with the maximum allowable annual emissions rates for EPN INCIN. Specifically, the Respondent exceeded the carbon monoxide ("CO") emissions rate of 2.03 lbs/hr on 24 occasions from April 14, 2012 to March 26, 2013 and the SO2 emissions rate of 139.00 lbs/hr on three occasions from April 20 to July 26, 2012, resulting in the unauthorized release of 58.5 lbs of CO and 25.52 lbs of SO2.

Base Penalty \$25,000

>> Environmental, Property and Human Health Matrix

OR

Release	Harm		
	Major	Moderate	Minor
Actual			X
Potential			

Percent 15.0%

>> Programmatic Matrix

Falsification	Major	Moderate	Minor

Percent 0.0%

Matrix Notes

Human health or the environment has been exposed to insignificant amounts of pollutants which do not exceed levels that are protective of human health or environmental receptors as a result of the violation.

Adjustment \$21,250

\$3,750

Violation Events

Number of Violation Events 4

14 Number of violation days

mark only one with an x

daily	
weekly	
monthly	
quarterly	X
semiannual	
annual	
single event	

Violation Base Penalty \$15,000

Four quarterly events are recommended for the exceedances that occurred from April 14, 2012 to March 26, 2013.

Good Faith Efforts to Comply

10.0% Reduction

\$1,500

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

Notes

The Respondent completed corrective actions by September 3, 2013, after the July 23, 2013 NOE.

Violation Subtotal \$13,500

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$0

Violation Final Penalty Total \$25,532

This violation Final Assessed Penalty (adjusted for limits) \$25,532

## Economic Benefit Worksheet

**Respondent** Arkema Inc.  
**Case ID No.** 47491  
**Reg. Ent. Reference No.** RN100216373  
**Media** Air  
**Violation No.** 7

<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
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No commas or \$

### Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)				0.00	\$0	n/a	\$0

Notes for DELAYED costs

The economic benefit for this violation is included in Violation No. 4 of the accompanying Penalty Calculation Worksheet.

### Avoided Costs

**ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)**

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0

Notes for AVOIDED costs

Approx. Cost of Compliance

\$0

**TOTAL**

\$0

Screening Date 26-Aug-2013

Docket No. 2013-1600-AIR-E

PCW

Respondent Arkema Inc.

Policy Revision 3 (September 2011)

Case ID No. 47491

PCW Revision August 3, 2011

Reg. Ent. Reference No. RN100216373

Media [Statute] Air

Enf. Coordinator Kimberly Morales

Violation Number 8

Rule Cite(s) 30 Tex. Admin. Code §§ 101.20(3), 122.143(4), 122.145(2)(A), and 122.146(5)(D), Tex. Health & Safety Code § 382.085(b), Permit Nos. 865A and PSDTX1016M1, GC No. H, and FOP No. O1636, GTC

Violation Description

Failed to report all instances of deviations. Specifically, the semi-annual deviation reports for the reporting periods from October 26, 2011 through April 25, 2012 and April 26, 2012 through October 25, 2012 did not include deviations for failing to: submit accurate 40 CFR Part 60, Subparts III and VV semiannual reports; submit appropriate 40 CFR § 60.7(c) and (d) and Permit Nos. 865A and PSDTX1016M1, SC Nos. 25 and 26 semiannual reports within 30 days from the end of the reporting period; maintain the minimum net heating value of 200 Btu/scf for the flare; record the time, date, and duration of any loss of pilot flame on the flare; conduct annual calibrations on the continuous flow monitor and pressure monitor on the vent stream flow to the flare; conduct annual calibrations on the continuous flow monitor and pressure monitor on the vent stream flow to the flare; perform quarterly visible emissions observations; notify the TCEQ at least 30 days before conducting EFR storage tank seal gap measurements; and comply with the maximum allowable annual emissions rates for EPNs Flare and INCIN.

Base Penalty \$25,000

>> Environmental, Property and Human Health Matrix

OR

Release	Harm		
	Major	Moderate	Minor
Actual			
Potential			

Percent 0.0%

>> Programmatic Matrix

Falsification	Major	Moderate	Minor
			X

Percent 1.0%

Matrix Notes

The Respondent failed to comply with less than 30% of the rule requirement.

Adjustment \$24,750

\$250

Violation Events

Number of Violation Events 2 Number of violation days 365

daily	
weekly	
monthly	
quarterly	
semiannual	
annual	
single event	X

mark only one with an x

Violation Base Penalty \$500

Two single events are recommended for the two incomplete reports.

Good Faith Efforts to Comply

10.0% Reduction

\$50

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

Notes The Respondent completed corrective actions by September 3, 2013, after the July 23, 2013 NOE.

Violation Subtotal \$450

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$64

Violation Final Penalty Total \$851

This violation Final Assessed Penalty (adjusted for limits) \$851

## Economic Benefit Worksheet

**Respondent** Arkema Inc.  
**Case ID No.** 47491  
**Reg. Ent. Reference No.** RN100216373  
**Media** Air  
**Violation No.** 8

<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
No commas or \$							

### Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)	\$1,000	25-May-2012	3-Sep-2013	1.28	\$64	n/a	\$64

#### Notes for DELAYED costs

Estimated cost to add additional layers of review to confirm data accuracy and ensure that all deviations are identified and reported. The date required was the due date for the first semi-annual deviation report. The final date is the date that corrective actions were completed.

### Avoided Costs

#### ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0

#### Notes for AVOIDED costs

Approx. Cost of Compliance

\$1,000

**TOTAL**

\$64



# Compliance History Report

**PUBLISHED** Compliance History Report for CN600124044, RN100216373, Rating Year 2013 which includes Compliance History (CH) components from September 1, 2008, through August 31, 2013.

<b>Customer, Respondent, or Owner/Operator:</b>	CN600124044, Arkema Inc	<b>Classification:</b>	SATISFACTORY	<b>Rating:</b>	2.91
<b>Regulated Entity:</b>	RN100216373, ARKEMA BEAUMONT PLANT	<b>Classification:</b>	SATISFACTORY	<b>Rating:</b>	5.81
<b>Complexity Points:</b>	22	<b>Repeat Violator:</b>	NO		
<b>CH Group:</b>	05 - Chemical Manufacturing				
<b>Location:</b>	2810 GULF STATES RD BEAUMONT, TX 77704, JEFFERSON COUNTY				
<b>TCEQ Region:</b>	REGION 10 - BEAUMONT				

**ID Number(s):**

**AIR OPERATING PERMITS** ACCOUNT NUMBER JE0074L  
**POLLUTION PREVENTION PLANNING** ID NUMBER P00210

**INDUSTRIAL AND HAZARDOUS WASTE** SOLID WASTE  
 REGISTRATION # (SWR) 30663  
**WASTEWATER** EPA ID TX0052825

**AIR NEW SOURCE PERMITS** REGISTRATION 28512  
**AIR NEW SOURCE PERMITS** REGISTRATION 34412  
**AIR NEW SOURCE PERMITS** REGISTRATION 43853  
**AIR NEW SOURCE PERMITS** REGISTRATION 22740  
**AIR NEW SOURCE PERMITS** AFS NUM 4824500053  
**AIR NEW SOURCE PERMITS** EPA PERMIT PSDTX1016M1  
**AIR NEW SOURCE PERMITS** REGISTRATION 94721  
**AIR NEW SOURCE PERMITS** REGISTRATION 111122  
**AIR NEW SOURCE PERMITS** REGISTRATION 111121

**IHW CORRECTIVE ACTION** SOLID WASTE REGISTRATION #  
 (SWR) 30663  
**AIR EMISSIONS INVENTORY** ACCOUNT NUMBER JE0074L

**AIR OPERATING PERMITS** PERMIT 1636  
**INDUSTRIAL AND HAZARDOUS WASTE** EPA ID  
 TXD074180019  
**WASTEWATER** PERMIT WQ0001872000

**AIR NEW SOURCE PERMITS** REGISTRATION 23999  
**AIR NEW SOURCE PERMITS** REGISTRATION 33720  
**AIR NEW SOURCE PERMITS** REGISTRATION 39717  
**AIR NEW SOURCE PERMITS** ACCOUNT NUMBER JE0074L  
**AIR NEW SOURCE PERMITS** PERMIT 865A  
**AIR NEW SOURCE PERMITS** EPA PERMIT PSDTX1016  
**AIR NEW SOURCE PERMITS** REGISTRATION 93367  
**AIR NEW SOURCE PERMITS** REGISTRATION 111125  
**AIR NEW SOURCE PERMITS** REGISTRATION 111120

**IHW CORRECTIVE ACTION** SOLID WASTE REGISTRATION #  
 (SWR) 50222  
**IHW CORRECTIVE ACTION** PERMIT 50222

<b>Compliance History Period:</b>	September 01, 2008 to August 31, 2013	<b>Rating Year:</b>	2013	<b>Rating Date:</b>	09/01/2013
<b>Date Compliance History Report Prepared:</b>	December 13, 2013				
<b>Agency Decision Requiring Compliance History:</b>	Enforcement				
<b>Component Period Selected:</b>	December 13, 2008 to December 13, 2013				

**TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.**

**Name:** Kimberly Morales

**Phone:** (713) 422-8938

**Site and Owner/Operator History:**

- 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/operator of the site during the compliance period? NO
- 3) If YES for #2, who is the current owner/operator? N/A
- 4) If YES for #2, who was/were the prior owner(s)/operator(s)? N/A
- 5) If YES, when did the change(s) in owner or operator occur? N/A

**Components (Multimedia) for the Site Are Listed in Sections A - J**

**A. Final Orders, court judgments, and consent decrees:**

1 Effective Date: 05/08/2011 ADMINORDER 2010-1810-AIR-E (Findings Order-Agreed Order Without Denial)

Classification: Moderate

Citation: 30 TAC Chapter 101, SubChapter A 101.20(3)  
30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)  
30 TAC Chapter 116, SubChapter B 116.115(c)  
30 TAC Chapter 122, SubChapter B 122.143(4)  
5C THSC Chapter 382 382.085(b)

Rqmt Prov: General Terms and Condition OP  
Special Condition 11 OP  
Special Condition 2 PERMIT

Description: Failed to prevent unauthorized emissions. Since the emissions event could have been avoided by better operational and/or maintenance practices, the demonstrations in 30 TEX. ADMIN. CODE § 101.222 necessary to present an affirmative defense were not met.

2 Effective Date: 01/27/2012 ADMINORDER 2011-1353-AIR-E (1660 Order-Agreed Order With Denial)

Classification: Moderate

Citation: 30 TAC Chapter 101, SubChapter A 101.20(3)  
30 TAC Chapter 116, SubChapter B 116.115(c)  
30 TAC Chapter 122, SubChapter B 122.143(4)  
5C THSC Chapter 382 382.085(b)

Rqmt Prov: General Conditions PERMIT  
General Terms and Condition OP

Description: Failed to prevent unauthorized emissions. Specifically, unauthorized emissions of 77 pounds ("lbs") of hydrogen sulfide, 7,259 lbs of sulfur dioxide, 13.8 lbs of carbon monoxide, and 1.61 lbs of nitrogen oxides were released from the dryer inlet valve (106A), due to the improper re-installation of the valve's guide pin resulting in an explosion and fire (Incident No. 154043) that began on May 2, 2011, and lasted for 58 minutes. The event also resulted in 35% opacity. Since this event could ha

3 Effective Date: 03/16/2012 ADMINORDER 2010-1235-AIR-E (1660 Order-Agreed Order With Denial)

Classification: Moderate

Citation: 30 TAC Chapter 101, SubChapter A 101.20(3)  
30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)  
30 TAC Chapter 116, SubChapter B 116.115(c)  
30 TAC Chapter 122, SubChapter B 122.143(4)  
5C THSC Chapter 382 382.085(b)

Rqmt Prov: General Terms and Conditions OP  
Special Condition 13 OP  
Special Condition 2 PERMIT

Description: Failure to maintain emissions at or below the rates listed in the maximum allowable emission rate table (MAERT) for the thermal oxidizer, Emission Point Number (EPN) SULFOX-TO (Tex. Health & Safety Code § 382.085(b); 30 Tex. Admin. Code §§ 101.20(3), 116.115(b)(2)(F) and (c), and 122.143(4); Air Permit Nos. 865A and PSD-TX-1016, Special Conditions 2; and Federal Operating Permit No. O1636, Special Conditions 13, and General Terms and Conditions).

Classification: Moderate

Citation: 30 TAC Chapter 111, SubChapter A 111.111(a)(4)(A)  
30 TAC Chapter 116, SubChapter B 116.115(c)  
30 TAC Chapter 122, SubChapter B 122.143(4)  
5C THSC Chapter 382 382.085(b)

Rqmt Prov: General Terms and Conditions OP  
Special Condition 10 PERMIT  
Special Condition 13 OP

Description: Failure to operate the flare in a smokeless manner.

EIC A12.i(6)  
MOD 2D

**B. Criminal convictions:**

N/A

**C. Chronic excessive emissions events:**

N/A

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

Item 1 December 16, 2008 (752255)

*Published Compliance History Report for CN600124044, RN100216373, Rating Year 2013 which includes Compliance History (CH) components from December 13, 2008, through December 13, 2013.*

Item 2	January 12, 2009	(729094)
Item 3	February 05, 2009	(752252)
Item 4	March 09, 2009	(752253)
Item 5	April 14, 2009	(752254)
Item 6	May 07, 2009	(737564)
Item 7	May 08, 2009	(769932)
Item 8	June 08, 2009	(769933)
Item 9	July 14, 2009	(809396)
Item 10	July 16, 2009	(748508)
Item 11	August 10, 2009	(809397)
Item 12	August 31, 2009	(761781)
Item 13	September 10, 2009	(809398)
Item 14	October 02, 2009	(764650)
Item 15	October 12, 2009	(809399)
Item 16	December 08, 2009	(809401)
Item 17	January 11, 2010	(809400)
Item 18	February 15, 2010	(809395)
Item 19	March 15, 2010	(832559)
Item 20	April 09, 2010	(832560)
Item 21	May 12, 2010	(832561)
Item 22	May 28, 2010	(798116)
Item 23	June 11, 2010	(794986)
Item 24	June 14, 2010	(846794)
Item 25	June 29, 2010	(824622)
Item 26	July 13, 2010	(861314)
Item 27	August 13, 2010	(841281)
Item 28	August 17, 2010	(867477)
Item 29	September 13, 2010	(874490)
Item 30	October 11, 2010	(882072)
Item 31	November 15, 2010	(888540)
Item 32	December 09, 2010	(896885)
Item 33	December 27, 2010	(879067)
Item 34	January 10, 2011	(902835)
Item 35	February 08, 2011	(894517)
Item 36	February 10, 2011	(909680)
Item 37	March 07, 2011	(916899)
Item 38	April 01, 2011	(894678)
Item 39	April 11, 2011	(926739)
Item 40	May 10, 2011	(938615)
Item 41	June 08, 2011	(945983)
Item 42	July 18, 2011	(953245)
Item 43	August 15, 2011	(959883)
Item 44	September 13, 2011	(965924)
Item 45	October 18, 2011	(971966)
Item 46	November 03, 2011	(978131)
Item 47	December 12, 2011	(984902)
Item 48	January 13, 2012	(991190)
Item 49	February 13, 2012	(998557)
Item 50	February 19, 2012	(987281)
Item 51	March 13, 2012	(1004087)
Item 52	April 11, 2012	(1010652)
Item 53	May 16, 2012	(1017026)
Item 54	June 15, 2012	(1024789)
Item 55	July 17, 2012	(1032150)
Item 56	August 09, 2012	(1019378)
Item 57	September 11, 2012	(1047441)
Item 58	September 26, 2012	(1023166)
Item 59	October 05, 2012	(1035675)
Item 60	October 13, 2012	(1028391)
Item 61	October 15, 2012	(1063897)



Description: Failure to install a cap, blind flange, plug, or a second valve on equipment operating in volatile organic compound (VOC) service.

3 Date: 09/30/2013 (1135898) CN600124044  
 Self Report? YES Classification: Moderate  
 Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)  
 30 TAC Chapter 305, SubChapter F 305.125(1)  
 Description: Failure to meet the limit for one or more permit parameter

4 Date: 12/04/2013 (1127984) CN600124044  
 Self Report? NO Classification: Moderate  
 Citation: PC 2 PERMIT  
 Description: Failure by Arkema Beaumont Plant to comply with all conditions of the permit:  
 "Internal" Outfall 201 was discharging externally.  
 Self Report? NO Classification: Moderate  
 Citation: M&RR 1 PERMIT  
 Description: Failure by Arkema Beaumont Plant to conduct effluent sampling and reporting according  
 to the permit specifications: samples are being collected only after a rainfall of 0.5 inch  
 or more  
 Self Report? NO Classification: Minor  
 Citation: M&RR 3 PERMIT  
 Description: Failure by Arkema Beaumont Plant to include the results of Quality Assurance/Quality  
 Control in the records of monitoring activities. During the investigation, it was noted  
 that the times of pH measurements are systematically not recorded.  
 Self Report? NO Classification: Moderate  
 Citation: D&SPC 3 PERMIT  
 Description: Failure by Arkema Beaumont Plant to collect composite samples at Outfall 201. During  
 the investigation, the Arkema staff stated that the monitoring samples at Outfall 201  
 are grab samples.  
 Self Report? NO Classification: Minor  
 Citation: OR 5 PERMIT  
 Description: Failure by Arkema Beaumont Plant to provide an effluent flow measuring device or  
 other acceptable means by which effluent flow may be determined. No flow measuring  
 device was installed on the flow line to Outfall 201.  
 Self Report? NO Classification: Minor  
 Citation: D&SPC 1 PERMIT  
 Description: Failure by Arkema Beaumont Plant to comply with permit specifications. It was noted  
 during the investigation that the daily average flow was reported as daily maximum  
 flow.

**F. Environmental audits:**

Notice of Intent Date: 05/11/2009 (746989)

Disclosure Date: 06/08/2009

Viol. Classification: Moderate

Citation: 30 TAC Chapter 111, SubChapter A 111.111(a)(1)(B)

Description: Failure to maintain quarterly visible observation records for the following: EPN SULFOX-INH, EPN X426A, EPN X426B, EPN H401, EPN H501, EPN H402, EPN H502, EPN H202, EPN H2202

Notice of Intent Date: 04/30/2012 (1013369)

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:**

*Published Compliance History Report for CN600124044, RN100216373, Rating Year 2013 which includes Compliance History (CH) components from December 13, 2008, through December 13, 2013.*

N/A

**Sites Outside of Texas:**

N/A

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



**IN THE MATTER OF AN  
ENFORCEMENT ACTION  
CONCERNING  
ARKEMA INC.  
RN100216373**

§ **BEFORE THE**  
§  
§ **TEXAS COMMISSION ON**  
§  
§ **ENVIRONMENTAL QUALITY**

**AGREED ORDER  
DOCKET NO. 2013-1600-AIR-E**

**I. JURISDICTION AND STIPULATIONS**

On \_\_\_\_\_, the Texas Commission on Environmental Quality ("the Commission" or "TCEQ") considered this agreement of the parties, resolving an enforcement action regarding Arkema Inc. ("Respondent") 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 the Respondent together stipulate that:

1. The Respondent owns and operates a chemical manufacturing plant at 2810 Gulf States Road in Beaumont, Jefferson 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 Executive Director and the Respondent agree that the Commission has jurisdiction to enter this Agreed Order, and that the Respondent is subject to the Commission's jurisdiction.
4. The Respondent received notice of the violations alleged in Section II ("Allegations") on or about July 28, 2013.
5. The occurrence of any violation is in dispute and the entry of this Agreed Order shall not constitute an admission by the Respondent of any violation alleged in Section II ("Allegations"), nor of any statute or rule.
6. An administrative penalty in the amount of One Hundred Four Thousand Nine Hundred Sixty-Two Dollars (\$104,962) is assessed by the Commission in settlement of the violations alleged in Section II ("Allegations"). The Respondent has paid Forty-One Thousand Nine Hundred Eighty-Six Dollars (\$41,986) of the administrative penalty and

Twenty Thousand Nine Hundred Ninety-One Dollars (\$20,991) is deferred contingent upon the Respondent'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 the Respondent fails to timely and satisfactorily comply with all requirements of this Agreed Order, the Executive Director may require the Respondent to pay all or part of the deferred penalty. Forty-One Thousand Nine Hundred Eighty-Five Dollars (\$41,985) shall be conditionally offset by the Respondent'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 and the Respondent agree on a settlement of the matters alleged in this enforcement action, subject to final approval in accordance with 30 TEX. ADMIN. CODE § 70.10(a).
9. The Executive Director recognizes that the Respondent has implemented the following corrective measures at the Plant:
  - a. On May 20, 2013, connected the thermocouples to the data historian, resumed monitoring the thermocouple status in the control room on a continuous basis, and implemented a procedure to supply the plant leadership team with an environmental status scorecard that includes the status of the thermocouples; and
  - b. On September 3, 2013:
    - i. Increased the natural gas flow to the flare so the minimum British thermal unit ("Btu") content of the flare vent gas is maintained and implemented a procedure to supply the plant leadership team with an environmental status scorecard that includes the net heating value for the flare vent;
    - ii. Added a recurring work order into the workflow database to confirm that the continuous flow monitor and pressure monitor are calibrated at least annually, and that the associated documentation is maintained;
    - iii. Added additional layers of review to confirm data accuracy and that all permit deviations are identified and reported;
    - iv. Modified the procedure for testing of the onsite fire water pumps to include quarterly visible emissions observations;
    - v. Added a step to the inspection sequence in the task management system that alerts the Environmental Department to submit written notification to the TCEQ at least 30 days before conducting seal gap measurements; and
    - vi. Included the hourly emissions data in the environmental status scorecard that is reviewed by the Environmental Department and implemented a procedure to increase awareness of the Plant's environmental performance by having each department in the Plant review the semiannual deviation report each six-month period.

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 the Respondent 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, the Respondent is alleged to have:

1. Failed to maintain the minimum net heating value of 200 Btu per standard cubic feet ("scf") for the flare, in violation of 30 TEX. ADMIN. CODE §§ 101.20(1) and (3), 116.115(c), and 122.143(4), 40 CODE OF FEDERAL REGULATIONS ("CFR") § 60.18(c)(3)(ii), TEX. HEALTH & SAFETY CODE § 382.085(b), Permit Nos. 865A and PSDTX1016M1, Special Conditions ("SC") No. 10A, and Federal Operating Permit ("FOP") No. O1636, Special Terms and Conditions ("STC") Nos. 1A and 15A, as documented during an investigation conducted from May 20 through 30, 2013. Specifically, the gas being combusted at the flare was below the minimum net heating value for one hour on March 26, 2011, five hours on June 22, 2011, and two hours on May 2, 2012.
2. Failed to record the time, date, and duration of any loss of pilot flame on the flare, in violation of 30 TEX. ADMIN. CODE §§ 101.20(3), 116.115(c), and 122.143(4), TEX. HEALTH & SAFETY CODE § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 10B, and FOP No. O1636, STC No. 15A, as documented during an investigation conducted from May 20 through 30, 2013. Specifically, three thermocouples that were replaced during a turnaround were not connected to the data historian when the Plant resumed operations on April 2, 2012.
3. Failed to conduct annual calibrations on the continuous flow monitor and pressure monitor on the vent stream flow to the flare, in violation of 30 TEX. ADMIN. CODE §§ 101.20(3), 116.115(c), and 122.143(4), TEX. HEALTH & SAFETY CODE § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 10D, and FOP No. O1636, STC No. 15A, as documented during an investigation conducted from May 20 through 30, 2013. Specifically, annual calibrations were not conducted on the continuous flow monitor in 2012 and the pressure monitor in 2011 and 2012.
4. Failed to perform quarterly visible emissions observations, in violation of 30 TEX. ADMIN. CODE §§ 101.20(3) and 122.143(4), TEX. HEALTH & SAFETY CODE § 382.085(b), Permit Nos. 865A and PSDTX1016M1, General Conditions ("GC") No. H, and FOP No. O1636, STC No. 3A, as documented during an investigation conducted from May 20 through 30, 2013. Specifically, the Respondent did not conduct visible emissions observations for three diesel fire water pumps during all four quarters of 2011 and 2012.

5. Failed to notify the TCEQ at least 30 days before conducting external floating roof ("EFR") storage tank seal gap measurements, in violation of 30 TEX. ADMIN. CODE §§ 101.20(3), 116.115(c), and 122.143(4), 40 CFR § 60.113b(b)(5), TEX. HEALTH & SAFETY CODE § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 3A, and FOP No. O1636, STC No. 1A, as documented during an investigation conducted from May 20 through 30, 2013. Specifically, the Respondent conducted EFR seal gap measurements on Storage Tanks D307 and D2307 on June 10, 2011 and December 27, 2012 without prior notification.
6. Failed to comply with the maximum allowable annual emissions rates for Emission Point Numbers ("EPNs") Flare and INCIN, in violation of 30 TEX. ADMIN. CODE §§ 101.20(3), 116.115(c), and 122.143(4), TEX. HEALTH & SAFETY CODE § 382.085(b), Permit Nos. 865A and PSDTX1016M1, SC No. 2, and FOP No. O1636, STC No. 15A, as documented during an investigation conducted from May 20 through 30, 2013. Specifically, at EPN Flare, the Respondent exceeded the sulfur dioxide ("SO<sub>2</sub>") steady state operation emissions rate of 3,576.03 pounds/hour ("lbs/hr") on 15 occasions from February 24, 2011 to April 21, 2012, and at EPN INCIN, the Respondent exceeded the carbon monoxide ("CO") emissions rate of 2.03 lbs/hr on 32 occasions from February 16, 2011 to March 26, 2013, and the SO<sub>2</sub> emissions rate of 139.00 lbs/hr on three occasions from April 20 to July 26, 2012, resulting in the unauthorized release of 27,584.54 lbs of SO<sub>2</sub> and 88.31 lbs of CO.
7. Failed to report all instances of deviations, in violation of 30 TEX. ADMIN. CODE §§ 101.20(3), 122.143(4), 122.145(2)(A), and 122.146(5)(D), TEX. HEALTH & SAFETY CODE § 382.085(b), Permit Nos. 865A and PSDTX1016M1, GC No. H, and FOP No. O1636, GTC, as documented during an investigation conducted from May 20 through 30, 2013. Specifically, the semi-annual deviation reports for the reporting periods from October 26, 2011 through April 25, 2012 and April 26, 2012 through October 25, 2012 did not include deviations for failing to: submit accurate 40 CFR Part 60, Subparts III and VV semiannual reports; submit appropriate 40 CFR § 60.7(c) and (d) and Permit Nos. 865A and PSDTX1016M1, SC Nos. 25 and 26 semiannual reports within 30 days from the end of the reporting period; maintain the minimum net heating value of 200 Btu/scf for the flare; record the time, date, and duration of any loss of pilot flame on the flare; conduct annual calibrations on the continuous flow monitor and pressure monitor on the vent stream flow to the flare; conduct annual calibrations on the continuous flow monitor and pressure monitor on the vent stream flow to the flare; perform quarterly visible emissions observations; notify the TCEQ at least 30 days before conducting EFR storage tank seal gap measurements; and comply with the maximum allowable annual emissions rates for EPNs Flare and INCIN.

### III. DENIALS

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

### IV. ORDERING PROVISIONS

1. It is, therefore, ordered by the TCEQ that the Respondent pay an administrative penalty as set forth in Section I, Paragraph 6 above. The payment of this administrative penalty

and the Respondent'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: Arkema Inc., Docket No. 2013-1600-AIR-E" to:

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

2. The Respondent shall implement and complete a SEP in accordance with TEX. WATER CODE § 7.067. As set forth in Section I, Paragraph 6 above, Forty-One Thousand Nine Hundred Eighty-Five Dollars (\$41,985) of the assessed administrative penalty shall be offset with the condition that the SEP defined in Attachment A, incorporated herein by reference, is implemented by the Respondent. The Respondent'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 the Respondent. The Respondent 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 the Respondent 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, the Respondent's failure to comply is not a violation of this Agreed Order. The Respondent shall have the burden of establishing to the Executive Director's satisfaction that such an event has occurred. The Respondent shall notify the Executive Director within seven days after the Respondent 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 the Respondent shall be made in writing to the Executive Director. Extensions are not effective until the Respondent 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 the Respondent 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 Agreed Order may be executed in separate and multiple counterparts, which together shall constitute a single instrument. Any page of this Agreed Order may be

copied, scanned, digitized, converted to electronic portable document format ("pdf"), or otherwise reproduced and may be transmitted by digital or electronic transmission, including but not limited to facsimile transmission and electronic mail. Any signature affixed to this Agreed Order shall constitute an original signature for all purposes and may be used, filed, substituted, or issued for any purpose for which an original signature could be used. The term "signature" shall include manual signatures and true and accurate reproductions of manual signatures created, executed, endorsed, adopted, or authorized by the person or persons to whom the signatures are attributable. Signatures may be copied or reproduced digitally, electronically, by photocopying, engraving, imprinting, lithographing, electronic mail, facsimile transmission, stamping, or any other means or process which the Executive Director deems acceptable. In this paragraph exclusively, the terms "electronic transmission", "owner", "person", "writing", and "written" shall have the meanings assigned to them under TEX. BUS. ORG. CODE § 1.002.

8. Under 30 TEX. ADMIN. CODE § 70.10(b), the effective date is the date of hand-delivery of the Order to the Respondent, or three days after the date on which the Commission mails notice of the Order to the Respondent, whichever is earlier.

## SIGNATURE PAGE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

Pam Doran  
For the Executive Director

7/23/14  
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.

AB Jais  
Signature

3/31/2014  
Date

RAJ JONNALAGADDA  
Name (Printed or typed)  
Authorized Representative of  
Arkema Inc.

PLANT MANAGER  
Title

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



**Attachment A**  
**Docket Number: 2013-1600-AIR-E**  
**SUPPLEMENTAL ENVIRONMENTAL PROJECT**

<b>Respondent:</b>	<b>Arkema Inc.</b>
<b>Penalty Amount:</b>	<b>Eighty-Three Thousand Nine Hundred Seventy-One Dollars (\$83,971)</b>
<b>SEP Offset Amount:</b>	<b>Forty-One Thousand Nine Hundred Eighty-Five Dollars (\$41,985)</b>
<b>Type of SEP:</b>	<b>Contribution to a Third-Party Administrator SEP</b>
<b>Third-Party Administrator:</b>	<b>Southeast Texas Regional Planning Commission</b>
<b>Project Name:</b>	<b>Meteorological and Air Monitoring Network</b>
<b>Location of SEP:</b>	<b>Jefferson 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 Offset 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 shall contribute the SEP Offset Amount to the Third-Party Administrator named above. The contribution will be to the **Southeast Texas Regional Planning Commission** for the *Meteorological and Air Monitoring Network* project. The contribution will be used in accordance with the SEP between the Third-Party Administrator and the TCEQ (the “Project”). Specifically, the SEP Offset Amount will be used to operate, maintain, and potentially expand the existing Southeast Texas Regional Air Monitoring Network which includes nine monitoring stations currently at the following locations:

- Beaumont CAM#2
- Cove School CAM #C695
- Mauriceville CAM#642
- Port Arthur (Motiva) Industrial Site CAM #C628
- Port Arthur Memorial High School campus CAM #C689
- Port Neches CAM #136

Arkema Inc.  
Agreed Order - Attachment A

- Sabine Pass CAM #C640
- Southeast Texas Regional Airport CAM #C643
- West Orange CAM #C9

Operation and maintenance of the ambient air monitoring stations includes canister sampling and gas chromatographs. Ancillary equipment includes sample conditioning systems, meteorological towers, climate controlled equipment shelters, a remote communications system, and electronic data logging capability. Ambient monitoring protocols have been and will continue to conform to applicable TCEQ or U.S. Environmental Protection Agency guidelines. The SEP will be done in accordance with all federal, state, and local environmental laws and regulations.

All dollars contributed will be used solely for the direct cost of implementing the Project, including, but not limited to supplies, materials, and equipment. Any portion of this contribution that is not spent on the specifically identified SEP may, at the discretion of the Executive Director ("ED"), be applied to another pre-approved SEP.

The Respondent's signature affixed to this Agreed Order certifies that the Respondent has no prior commitment to make this contribution and that it is being contributed solely in an effort to settle this enforcement action. The Respondent shall not profit in any manner from this SEP.

b. Environmental Benefit

Particulate matter ("PM"), sulfides ("SO, SO<sub>2</sub>"), oxides of nitrogen ("NO<sub>x</sub>"), volatile organic carbon ("VOC") compounds, and ambient air conditions are measured at the stations and the data are made accessible to TCEQ and the public. Sites may also provide continuous assessment of benzene, 1, 3-butadiene and styrene. This monitoring was not previously covered by existing ambient air monitoring systems.

Continued monitoring in this area of the community will help better understand air quality pollutants and will enable better identification of emission sources. The data will focus on specific chemicals that may raise air quality concerns.

c. Minimum Expenditure

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

Arkema Inc.  
Agreed Order - Attachment A

## **2. Performance Schedule**

Within 30 days after the effective date of this Agreed Order, the Respondent must contribute the SEP Offset Amount to the Third-Party Administrator. The Respondent shall make the check payable to **Southeast Texas Regional Planning Commission SEP** and shall mail the contribution with a copy of the Agreed Order to:

Southeast Texas Regional Planning Commission  
Attention: Bob Dickinson, Director  
2210 Eastex Freeway  
Beaumont, Texas 77703-4929

## **3. Records and Reporting**

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

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

## **4. Failure to Fully Perform**

If the Respondent does not perform its obligations under this Attachment A, including full expenditure of the SEP Offset Amount and submittal of the required reporting described in Sections 2 and 3 above, the ED may require immediate payment of all or part of the SEP Offset Amount.

In the event the ED determines that the Respondent failed to fully implement and complete the Project, the Respondent shall remit payment for all or a portion of the SEP Offset Amount, as determined by the ED, and as set forth in the attached Agreed Order. After receiving notice of failure to complete the SEP, the Respondent shall include the docket number of the attached Agreed Order and a note that the enclosed payment is for the reimbursement of a SEP; shall make the check payable to "Texas Commission on Environmental Quality;" and shall mail it to:

Arkema Inc.  
Agreed Order - Attachment A

Texas Commission on Environmental Quality  
Litigation Division  
Attention: SEP Coordinator, MC 175  
P.O. Box 13087  
Austin, Texas 78711-3087

**5. Publicity**

Any public statements concerning this SEP and/or project, 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 Offset Amount identified in this Attachment A and in the attached Agreed Order has not been, and shall not be, included as a SEP for the Respondent under any other Agreed Order negotiated with the TCEQ or any other agency of the state or federal government.