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March 11, 2025

Texas Commission on Environmental Quality Air Permits Initial Review Team (APIRT), MC 161 12100 Park 35 Circle Building C, Third Floor Austin, TX 78753

RE: Application for Minor Revision
Title V Permit 01636
Arkema, Inc.
Beaumont Facility Chemical Manufacturing
CN600124044/RN100216373

Dear APIRT:

On behalf of Arkema, Inc., Trinity Consultants is hereby submitting this application for a minor revision of Site Operating Permit No. O1636 for the Beaumont Facility Chemical Manufacturing in Jefferson County, TX.

If you have any questions or require additional information, please feel free to contact me at 737-284-0687 or heriberto.guintanilla@trinityconsultants.com.

Sincerely,

TRINITY CONSULTANTS

Heriberto "Eddie" Quintanilla, P.E. Staff Consultant

Attachments

cc: Mr. Nicholas Ferraco, Plant Manager, Arkema, Inc., Beaumont, TX (email) Ms. Sarah Kirksey, Air Section Manager, TCEQ Region 10, Beaumont, TX EPA, Region 6. (R6AirPermitsTX@epa.gov)

MINOR REVISION APPLICATION

Site Operating Permit 01636

Arkema, Inc. /
Beaumont Facility Chemical Manufacturing
CN600124044
RN100216373

Prepared By:

Heriberto Quintanilla, P.E. – Consultant

TRINITY CONSULTANTS

9737 Great Hills Trail Suite 340 Austin, TX 78759

March 2025



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1. PROJECT INFORMATION

Arkema, Inc. (Arkema) owns and operates the Beaumont Facility Chemical Manufacturing in Jefferson County, Texas. Facilities at the site are operated under Site Operating Permit (SOP) O1636. The purpose of this application is to revise the SOP.

As part of this minor revision application, the following revisions are being requested:

- ▶ Incorporate the new dimethyl sulfide (DMDS) line and storage tank, which are authorized by NSR permit 865A/PSDTX1016M1.
- ▶ Add the new DMDS units with their applicable requirements, as detailed in the OP-SUMR and OP-UA forms.
- ► The Major NSR Summary Table is being updated to reflect the latest amendment to the NSR Permit No. 865A/PSDTX1016M1. Amendment/Renewal NSR project no. 387396 is still pending and isn't expected to be issued prior to submittal of the renewal application. Therefore, this amendment/renewal project is not incorporated at this time. The Major NSR Summary Table has been included at the end of this application and it's changes reflected using the "track changes" feature. A Word document is available upon request.

2. ADMINISTRATIVE FORMS

This section contains the following forms and information:

- ▶ OP-2 Application for Permit Revision/Renewal
- ► OP-SUMR Individual Unit Summary for Revisions

Federal Operating Permit Program Application for Permit Revision/Renewal Form OP-2-Table 1

Date:		03/11/202	5										
Permit No.:													
Regulated E	Regulated Entity No.: RN100216373												
Company N	Company Name: Arkema Inc.												
For Submis	sions to EPA	•											
Has an ele	Has an electronic copy of this application been submitted (or is being submitted) to EPA?												NO
I. Applicat	ion Type												
Indicate th	e type of appl	ication:											
	Renewal												
Х	Streamlined	Revision (Μι	ust include pr	ovisional teri	ms and cond	itions as expla	ined in the i	nstructions	.)				
	Significant F	Revision											
	Revision Re	questing Prio	r Approval										
	Administrati	ive Revision	e Revision										
	Response to	Reopening											
II. Qualific	ation Statem	ent											
For SOP	Revisions On	ly								Х	YES		NO
For GOP	Revisions On	ly									YES		NO
III. Major 9	Source Pollut	ants (Comple	ete this section	on if the perr	nit revision i	s due to a cha	ange at the s	site or char	nge in regulati	ons.)			
Indicate all	pollutants fo	r which the si	te is a major	source base	d on the site	's potential to	emit:						
(Check the	appropriate b	ox[es].)											
	VOC		NO _x	Х	SO ₂		PM ₁₀	Х	CO		Pb		HAPs
Other:		•	•			1			•	u.	•		
IV. Refere	nce Only Req	uirements (F	or reference	only)									
Has the ap	plicant paid e	missions fees	s for the mos	t recent ager	ncy fiscal yea	r (September 1	- August 31)?	Х	YES		NO		N/A
V. Delinqu	ent Fees and	d Penalties							_				
Notice: This	s form will no	t be processe	d until all del	inquent fees	and/or pena	alties owed to t	the TCEQ or	the Office o	f the Attorney	General on b	pehalf of the	TCEQ are paid	J in
accordance	with the Deli	nquent Fee a	nd penalty pr	otocol.									

Federal Operating Permit Program Application for Permit Revision/Renewal Form OP-2-Table 2

Texas Commission on Environmental Quality

Date:	03/11/2025
Permit No.:	01636
Regulated Entity No.:	RN100216373
Company Name:	Arkema Inc.

Using the table below, provide a description of the revision.

Revision	Revision		Unit/Group/Proces	SS	NSR Authorization	Description of Change and Provisional Tarms and Conditions			
No.	Code	New Unit	ID No.	Applicable Form	NSK Authorization	Description of Change and Provisional Terms and Conditions			
1	MS-A	N/A	N/A	OP-REO1	865A, PSDTX1016M1	Incorporate the new dimethyl sulfide (DMDS) line and storage tank,			
_	WIO /	14/71	14/71	OI ILQI	000/1, 1 0B1/11010WII	which are authorized by NSR permit 865A/PSDTX1016M1			
				DMDS-TK, DMDS-					
			LOADR, DMDS-LOADT, DMDS-LOADI, DMDS-	Various	865A, PSDTX1016M1	Add the new DMDS units with their applicable requirements, as			
2	MS-C	Yes				detailed in the OP-SUMR and OP-UA forms.			
			CT, DMDS-FUG, X-			detailed in the OF-Solvik and OF-OA forms.			
			7489	7489					

Texas Commission on Environmental Quality Federal Operating Permit Program Individual Unit Summary for Revisions Form OP-SUMR Table 1

Date	Permit No.	Regulated Entity No.
03/11/2025	01636	RN100216373

Unit/Process Al	Unit/Process Revision No.	Unit/Process ID No.	Unit/Process Applicable Form	Unit/Process Name/Description		Preconstruction Authorizations 30 TAC Chapter 116/30 TAC Chapter 106	Preconstruction Authorizations Title I
A	2	DMDS-TK	OP-UA03	DMDS Storage Tank		865A	PSDTX1016M1
A	2	DMDS-LOADR	OP-UA04	DMDS Railcar Loading		865A	PSDTX1016M1
A	2	DMDS-LOADT	OP-UA04	DMDS Truck Loading		865A	PSDTX1016M1
A	2	DMDS-LOADI	OP-UA04	DMDS Isocontainer loading		865A	PSDTX1016M1
Α	2	DMDS-CT	OP-REQ2	DMDS Cooling Tower		865A	PSDTX1016M1
Α	2	DMDS-FUG	OP-REQ2	DMDS Fugitives		865A	PSDTX1016M1
A	2	X-7489	OP-UA06	DMDS Boiler		865A	PSDTX1016M1

Texas Commission on Environmental Quality Federal Operating Program Individual Unit Summary for Revisions Form OP-SUMR

Table 2

Date	Permit No.	Regulated Entity No.
03/11/2025	01636	RN100216373

Revision No.	ID No.	Applicable Form	Group Al	Group ID No.
2	DMDS-LOADR	OP-UAO4	A	GRP-DMDS-LOAD
2	DMDS-LOADT	OP-UA04	A	GRP-DMDS-LOAD
2	DMDS-LOADI	OP-UAO4	A	GRP-DMDS-LOAD

3. UNIT ATTRIBUTE FORMS

This section contains the following Unit Attribute Forms:

- ► OP-UA03 Storage Tank Vessel Attributes
- ► OP-UA04 Loading/Unloading Operations Attributes
- ► OP-UA06 Boiler/Steam Generator/Steam Generating Unit Attributes

Storage Tank/Vessel Attributes Form OP-UA3 (Page 3)

Federal Operating Permit Program

Table 3: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)

Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels

(Including Petroleum Liquid Storage Vessels)

Date	Permit No.	Regulated Entity No.
03/11/2025	01636	RN100216373

Unit ID No.	SOP/GOP Index No.	Product Stored	Storage Capacity	WW Tank Control	Maximum TVP	Storage Vessel Description	AMEL ID No.	Guidepole	Reid Vapor Pressure	Control Device ID No.
DMDS-TK	60Kb-1	VOL	40K+	NONE	0.75-11.1	CVS-CD				INCIN
DMDS-TK	60Kb-2	VOL	40K+	NONE	0.75-11.1	CVS-FL				FLARE

Storage Tank/Vessel Attributes Form OP-UA3 (Page 4)

Federal Operating Permit Program

Table 4a: 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter B: Storage of Volatile Organic Compounds (VOCs)
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
03/11/2025	01636	RN100216373

Unit ID No.	SOP/GOP Index No.	Alternate Control Requirement	ACR ID No.	Product Stored	Storage Capacity	Throughput	Potential to Emit	Uncontrolled Emissions
DMDS-TK	R5112-1	NO		VOC1	A40K+			

Storage Tank/Vessel Attributes Form OP-UA3 (Page 5)

Federal Operating Permit Program

Table 4b: 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter B: Storage of Volatile Organic Compounds (VOCs)
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
03/11/2025	01636	RN100216373

Unit ID No.	SOP/GOP Index No.	Construction Date	Tank Description	True Vapor Pressure	Primary Seal	Secondary Seal	Control Device Type	Control Device ID No.
DMDS-TK	R5112-1		NONE1	1-				

Texas Commission on Environmental Quality Loading/Unloading Operations Attributes Form OP-UAO4 (Page 1)

Federal Operating Permit Program

Table 1a: 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter C: Loading and Unloading of Volatile Organic Compounds

Date	Permit No.	Regulated Entity No.		
03/11/2025	01636	RN100216373		

Unit ID No.	SOP/GOP Index No.	Chapter 115 Facility Type	Alternate Control Requirement (ACR)	ACR ID No.	Product Transferred	Transfer Type	True Vapor Pressure	Daily Throughput	Control Options
GRP-DMDS-LOAD	R5211-1	OTHER	NONE		VOC1	LOAD	0.5+	20K+	BAL

Texas Commission on Environmental Quality Loading/Unloading Operations Attributes Form OP-UA04 (Page 2)

Federal Operating Permit Program

Table 1b: 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter C: Loading and Unloading of Volatile Organic Compounds

Date	Permit No.	Regulated Entity No.		
03/11/2025	01636	RN100216373		

Unit ID No.	SOP/GOP Index No.	Chapter 115 Control Device Type	Chapter 115 Control Device ID No.	Vapor-Tight	Vapor Space Holding Tank	Marine Terminal Exemptions	VOC Flash Point	Uncontrolled VOC Emissions
GRP-DMDS-LOAD	R5211-1			NO				

Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 1)

Federal Operating Permit Program

Table 1a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)

Subpart D: Standards of Performance for Fossil Fuel-Fired Steam Generators

Date	Permit No.	Regulated Entity No.		
03/11/2025	01636	RN100216373		

Unit ID No.	SOP Index No.	Construction/ Modification Date	Covered Under Subpart Da or KKKK	Changes to Existing Affected Facility	Heat Input Rate	Alternate 42C	PM CEMS	Opacity Monitoring	Gas/Liquids Fuel	Fuels with 0.33 % or Less Sulfur	Specific Site
X-7489	60D-1	78+	NO	NO	250-						

Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 6)

Federal Operating Permit Program

Table 3a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)

${\bf Subpart\ Db:\ Standards\ of\ Performance\ for\ Industrial-Commercial\ Steam\ Generating\ Units}$

Date	Permit No.	Regulated Entity No.		
03/11/2025	01636	RN100216373		

Unit ID No.	SOP Index No.	Construction/ Modification Date	Heat Input Capacity	Subpart Da	Changes to Existing Affected Facility	Subpart Ea, Eb, or AAAA	Subpart KKKK	Subpart Cb or BBBB
X-7489	60DB-1	05+CR	100-					

Boiler/Steam Generator/Steam Generating Unit Attributes Form OP-UA6 (Page 13)

Federal Operating Permit Program

Table 5a: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117)

Subpart B: Combustion Control at Major Industrial, Commercial and

Institutional Sources in Ozone Nonattainment Areas

Date	Permit No.	Regulated Entity No.
03/11/2025	01636	RN100216373

Unit ID No.	SOP Index No.	Unit Type	MRC	RACT Date Placed in Service	Functionally Identical Replacement	Fuel Type	Fuel Type	Fuel Type	Annual Heat Input
X-7489	R7100-1	ICIB	40-						

4. APPLICABLE REQUIREMENTS SUMMARY FORMS

This section contains the following forms and information:

- ► Form OP-REQ1 pages 88 and 89 Application Area-Wide Applicability Determinations and General Information
- ► Form OP-REQ2 Negative Applicable Requirement Determinations
- ► Form OP-REQ3 Applicable Requirements Summary

Application Area-Wide Applicability Determinations and General Information Form OP-REO1 (Page 88)

Federal Operating Permit Program

Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
03/11/2025	O1636	RN100216373

For SOP applications, answer ALL questions unless otherwise directed.

For GOP applications, answer ONLY these questions unless otherwise directed.

XII. NSR Authorizations (Attach additional sheets if necessary for sections XII.E-J.)

E. PSD Permits and PSD Major Pollutants

Permit No.	Issuance Date	Pollutant(s):	Permit No.	Issuance Date	Pollutant(s):
PSDTX1016M1	05/02/2023				

If PSD Permits are held for the application area, please complete the Major NSR Summary Table located under the Technical Forms heading at: www.tceq.texas.gov/permitting/air/titlev/site/site_experts.html.

F. Nonattainment (NA) Permits and NA Major Pollutants

Permit No.	Issuance Date	Pollutant(s):	Permit No.	Issuance Date	Pollutant(s):

If NA Permits are held for the application area, please complete the Major NSR Summary Table located under the Technical Forms heading at: www.tceq.texas.gov/permitting/air/titlev/site/site_experts.html.

G. NSR Authorizations with FCAA § 112(g) Requirements

NSR Permit No.	Issuance Date	NSR Permit No.	Issuance Date	NSR Permit No	Issuance Date

Application Area-Wide Applicability Determinations and General Information Form OP-REQ1 (Page 89)

Federal Operating Permit Program Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
03/11/2025	O1636	RN100216373

- For SOP applications, answer ALL questions unless otherwise directed.
- For GOP applications, answer ONLY these questions unless otherwise directed.
 - XII. NSR Authorizations (continued) (Attach additional sheets if necessary for sections XII.E-J.)
- ♦ H. Title 30 TAC Chapter 116 Permits, Special Permits, Standard Permits, Other Authorizations (Other Than Permits By Rule, PSD Permits, NA Permits) for the Application Area

Authorization No.	Issuance Date	Authorization No.	Issuance Date	Authorization No.	Issuance Date
865A	05/02/2023				

♦ I. Permits by Rule (30 TAC Chapter 106) for the Application Area

A list of selected Permits by Rule (previously referred to as standard exemptions) that are required to be listed in the FOP application is available in the instructions.

PBR No.	Version No./Date	PBR No.	Version No./Date	PBR No.	Version No./Date
106.261	11/01/2003				
106.262	11/01/2003				
106.452	09/04/2000				
106.454	11/01/2001				
106.511	09/04/2000				

♦ J. Municipal Solid Waste and Industrial Hazardous Waste Permits with an Air Addendum

Permit No.	Issuance Date	Permit No.	Issuance Date	Permit No.	Issuance Date

Form OP-REQ2 Negative Applicable/Superseded Requirement Determinations Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.	
03/11/2025	01636	RN100216373	

Unit Al	Revision No.	Unit/Group/Process ID No.	Unit/Group/Process Applicable Form	Potentially Applicable Regulatory Name	Negative Applicability/Superseded Requirement Citation	Negative Applicability Reason
А	2	DMDS-CT	OP-REQ2	40 CFR Part 63, Subpart Q	§63.400(a)	The site is not a major source of HAPs, and was not a major source at the time of applicability.
А	2	DMDS-FUG	OP-REQ2	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§115.352	The process unit doesn't meet the definition of a synthetic organic chemicals manufacturing industry, as defined in §115.10.
А	2	DMDS-FUG	OP-REQ2	40 CFR Part 60, Subpart VVa	§60.489a	The process unit doesn't meet the definition of a synthetic organic chemicals manufacturing industry, as defined in §115.10.
А	2	X-7489	OP-UA06	30 TAC Chapter 112, Sulfur Compounds	§112.8(a), §112.9(a)	Boiler does not fire solid or liquid fuel.
А	2	X-7489	OP-UA06	30 TAC Chapter 117, Subchapter B	§117.103(a)(2)	Boiler is less than 40 MMBtu/hr and is located in Beaumont/Port Arthur area.
А	2	X-7489	OP-UA06	30 TAC Chapter 117, Utility Electric Generation	§117.1000(a)	Boiler is not used for electric power generation.
А	2	X-7489	OP-UA06	40 CFR Part 60, Subpart D	§60.40(a)	Boiler heat input is less than 250 MMBtu/hr.
А	2	X-7489	OP-UA06	40 CFR Part 60, Subpart Da	§60.40Da(a)(1)	Boiler heat input is less than 250 MMBtu/hr.
А	2	X-7489	OP-UA06	40 CFR Part 60, Subpart Db	§60.40b(a)	Boiler heat input is less than 100 MMBtu/hr.
А	2	X-7489	OP-UA06	40 CFR Part 60, Subpart Dc	§60.41c	Boiler generates steam using electricity and therefore does not meet the definition of steam generating unit per §60.41c.

Applicable Requirements Summary Form OP-REQ3 (Page 1) Federal Operating Permit Program

Table 1a: Additions

Date: 03/11/2025	Regulated Entity No.: RN100216373	Permit No.: 01636
Company Name: Arkema Inc.	Area Name: Beaumont Facility Chemical Manufacturing	

Revision No.	Unit/Group/Process ID No.	Unit/Group/Process Applicable Form	SOP/GOP Index No.	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
2	DMDS-TK	OP-UAO3	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§115.111(a)(1)
2	DMDS-TK	OP-UAO3	60Kb-1	VOC	40 CFR Part 60, Subpart Kb	[G]§60.112b(a)(3)
2	DMDS-TK	OP-UAO3	60Kb-2	voc	40 CFR Part 60, Subpart Kb	[G]§60.112b(a)(3) §60.18
2	GRP-DMDS-LOAD	OP-UAO4	R5211-1	voc	30 TAC Chapter 115, Loading and Unloading of VOCs	§115.212(a)(1) §115.212(a)(1)(B) §115.212(a)(3)(A) §115.212(a)(3)(A)(ii) §115.212(a)(3)(B) [G]§115.212(a)(3)(C), (a)(3)(E) §115.214(a)(1)(B), (a)(1)(C)

Applicable Requirements Summary Form OP-REQ3 (Page 2) Federal Operating Permit Program

Table 1b: Additions

Date: 03/11/2025	Regulated Entity No.: RN100216373	Permit No.: 01636
Company Name: Arkema Inc.	Area Name: Beaumont Facility Chemical Manufacturing	

Revision No.	Unit/Group/Process ID No.	SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
2	DMDS-TK	R5112-1	voc	[G]§115.117	§115.118(a)(1), (a)(5), (a)(7)	None
2	DMDS-TK	60Kb-1	voc	[G]§60.113b(c)(1) §60.113b(c)(2) §60.116b(a)-(b) §60.116b(e), (e)(1), [G](e)(3) [G]§60.485(b)	§60.115b, [G](c) §60.116b(a)-(b)	[G]§60.113b(c)(1) §60.115b
2	DMDS-TK	60Kb-2	VOC	§60.113b(d) §60.116b(a)-(b) §60.116b(e), (e)(1), [G](e)(3) [G]§60.485(b)	§60.115b, (d)(2) §60.116b(a)-(b)	§60.115b, (d)(1), (d)(3)
2	GRP-DMDS-LOAD	R5211-1	voc	§115.212(a)(3)(B) §115.214(a)(1)(A) §115.214(a)(1)(A)(i)-(iii) §115.215, (1), [G](2), (4), (9), (10)	§115.216, (2), (3)(A), (3)(A)(i) §115.216(3)(A)(ii), (3)(A)(iii) §115.216(3)(B)	None

5. MAJOR NSR SUMMARY TABLE

Major NSR Summary Table

Permit Numbers:	865A and PSDTX1016M1		Issuance Date: November 6, 2019May 2, 2023				
Emission Point		Air Contaminant	Emiss	ion Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
No. (1)	Source Name (2)	Name (3)	lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		<u>PM</u>	0.89	3.90		<u>5</u>	
		PM ₁₀	0.89	3.90		<u>5</u>	
		PM _{2.5}	0.89	3.90		<u>5</u>	
		<u>SO₂</u>	139.00	<u>78.00</u>	<u>13, 12</u>	<u>5, 13, 12</u>	<u>13</u>
<u>INCIN</u>	Incinerator - Total	<u>NOx</u>	<u>1.57</u>	<u>6.87</u>	<u>3, 12</u>	<u>3, 5, 12</u>	3
		CO	2.03	8.90	<u>3, 13, 12</u>	<u>3, 5, 13, 12</u>	<u>3, 13</u>
		<u>VOC</u>	0.37	1.48	<u>13, 12</u>	<u>5, 13, 12</u>	<u>13</u>
		<u>H₂S</u>	<u>0.10</u>	0.42	<u>13</u>	<u>5, 13</u>	<u>13</u>
		<u>TRS</u>	0.36	1.43	<u>13, 12</u>	<u>5, 13, 12</u>	<u>13</u>
		<u>PM</u>	<u>5.71</u>	<u>25.01</u>		<u>5</u>	
		PM ₁₀	<u>5.71</u>	<u>25.01</u>		<u>5</u>	
		PM _{2.5}	<u>5.71</u>	<u>25.01</u>		<u>5</u>	
		SO ₂ (Normal Operations)	23.66	13.93	14, 12	6, 5, 9, 14, 12	<u>14</u>
SULFOX-TO	Thermal Oxidizer 1	SO ₂ (MSS)	100.00		<u>14, 12</u>	6, 5, 9, 14, 12	<u>14</u>
		<u>NOx</u>	<u>16.16</u>	<u>70.66</u>	<u>14, 12</u>	<u>5, 14, 12</u>	<u>14</u>
		CO	32.70	70.52	14, 12	<u>5, 14, 12</u>	<u>14</u>
		<u>VOC</u>	6.66	<u>15.26</u>	<u>14, 35</u>	6, 5, 14, 13, 35	
		TRS	0.02	0.01	<u>35</u>	<u>6, 5, 35</u>	
		<u>SO₂</u>	0.02	0.02	21	<u>21</u>	
<u>S-1</u>	Sulfur Storage Tank	H ₂ S	0.03	0.02	<u>21</u>	<u>21</u>	
		TRS	0.03	0.02	<u>21</u>	<u>21</u>	
		<u>SO</u> ₂	0.06	0.06	<u>21</u>	<u>21</u>	

Permit Numbers:	865A and PSDTX1016M1		Issuance Date: November 6, 2019 May 2, 2023				
Eminals - Dali (Air Contoninant	Emiss	sion Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
<u>S-3</u>	Sulfur Truck	H ₂ S	0.02	0.02	<u>21</u>	<u>21</u>	
		TRS	0.02	0.02	<u>21</u>	<u>21</u>	
		<u>VOC</u>	< 0.01	0.02	3, 30, 33	3, 5, 30, 33	3
<u>F-1</u>	H ₂ S Plant Fugitives (8)	H ₂ S	< 0.01	<0.01	<u>33</u>	<u>5, 33</u>	
		TRS	<0.01	0.02	<u>33</u>	<u>5, 33</u>	
		VOC	<u>0.19</u>	0.85	3, 30, 33	3, 5, 30, 33	<u>3</u>
BMT-1M	Train 1 – MeSH Production Fugitives (8)	H ₂ S	0.02	0.07	<u>33</u>	<u>5, 33</u>	
		TRS	0.16	0.72	<u>33</u>	<u>5, 33</u>	
	Train 2 – MeSH Production Fugitives (8)	VOC	0.06	0.25	3, 30, 33	3, 5, 30, 33	<u>3</u>
BMT-2M		H ₂ S	0.02	0.10	<u>33</u>	<u>5, 33</u>	
		TRS	0.04	0.17	<u>33</u>	<u>5, 33</u>	
	Acrolein Process Fugitives (8)	VOC	0.35	<u>1.52</u>	3, 31, 32, 36, 39	3, 31, 32, 36, 39	<u>3</u>
ACRO-Fug		H ₂ S	< 0.01	< 0.01	31, 32	31, 32	
		TRS	< 0.01	< 0.01	31, 32	31, 32	
MAD E	MMP Process Area Fugitives	VOC	0.17	0.73	3, 33	<u>3, 5, 33</u>	<u>3</u>
MMP-Fug	(8)	TRS	0.08	<u>0.35</u>	<u>33</u>	<u>5, 33</u>	
Column Main	Acrolein Unit Column/Filter	VOC	0.01	0.01			
D007	Methanol Tank	VOC	2.32	0.22	3, 19	3, 18, 19	3
D307	Methanol Tank (MSS)	VOC (9)	3.08	1.86	3, 43 <u>49</u>	3, 18, 43 <u>49</u>	3
D0007	Methanol Tank	VOC	2.32	0.22	3, 19	3, 18, 19	3
D2307	Methanol Tank (MSS)	VOC (9)	3.08	1.86	3, 43 <u>49</u>	3, 18, 43 <u>49</u>	3
D398	Gasoline Tank	VOC	4.56	0.22			
D215	Diesel Tank	VOC	0.02	0.01			
D399	Diesel Tank	VOC	0.02	0.01			

Permit Numbers:	865A and PSDTX1016M1		Issuance Date: November 6, 2019 May 2, 2023				
Emission Point		Air Contominant	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
No. (1)	Source Name (2)	Air Contaminant Name (3)	lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
D3191A	Diesel Tank	VOC	0.02	0.01			
D3191B	Diesel Tank	VOC	0.02	0.01			
D8540	Caustic Tank	NaOH	0.01	0.01			
		СО	193.54	74.35	11	5, 11	
		H ₂ SH2S	24.08	2.82	11	5, 11	
		H ₂ SO ₄ H2SO4	7.21	04.57	11	5, 11	
		H ₂ SO ₄ H2SO ₄ (5)	29.18	31.57	11	5, 11	
	Flare Limits	NOx	22.56	8.67	11	5, 11	
FLARE	both routine and MSS operation (5)(6)	SO₂ SO2	625.00	448.96	11	5, 13, 11	
		SO ₂ SO ₂ (5)	3065.51		11	5, 13, 11	
		TRS	37.52 <u>37.87</u>	8.84	11, 31 <u>34</u>	5, 11, 31 <u>34</u>	
		TRS (5)	92.52		11, 31 <u>34</u>	5, 11, 31 <u>34</u>	
		VOC	49.38		3, 11, 31 <u>34</u>	3, 5, 13, 11, 31 <u>34</u>	3
		VOC (5)	70.32	6.63	3, 11, 31 <u>34</u>	3, 5, 13, 11, 31 <u>34</u>	3
		CO	<u>1.32</u>	<u>5.77</u>			
		NOx	<u>1.61</u>	<u>7.04</u>	3	<u>3</u>	<u>3</u>
		<u>PM</u>	<u>0.11</u>	0.52			
H401/H402	Sulfur Heater 401 & Methane Heater 402 (7)	PM ₁₀	0.11	0.52			
	Wothano Floator ToZ (T)	PM _{2.5}	<u>0.11</u>	0.52			
		<u>SO</u> ₂	0.01	0.05	8, 3	<u>8, 3</u>	3
		VOC	0.09	0.38			
		CO	1.32	<u>5.77</u>			
H501/H502	Sulfur Heater 501 & Methane Heater 502 (7)	NOx	1.61	7.04	<u>3</u>	<u>3</u>	<u>3</u>
_	ivietifatie meater 502 (7)	PM	<u>0.11</u>	0.52			

Permit Numbers:	865A and PSDTX1016M1		Issuance Date: November 6, 2019 May 2, 2023				
Emission Point		Air Contaminant	Emiss	ion Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
No. (1)	Source Name (2)	Name (3)	lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM ₁₀	0.11	0.52			
		PM _{2.5}	<u>0.11</u>	0.52			
		<u>SO₂</u>	0.01	0.05	<u>8, 3</u>	<u>8, 3</u>	3
		VOC	0.09	0.38			
		<u>PM</u>	0.04	0.18			
CHI FOY CT	Sulfox Cooling Tower	<u>PM₁₀</u>	0.04	0.18			
SULFOX-CT	Sullox Cooling Tower	PM _{2.5}	0.04	0.18			
		VOC	0.43	1.89	<u>3, 26</u>	3, 26	3
	Bag Filter	<u>PM</u>	0.08	0.01			
SULFOX-INH		PM ₁₀	0.08	0.01			
		PM _{2.5}	0.08	0.01			
		VOC	0.07	0.31	3, 30, 33	3, 5, 30, 33	3
BMT-1E/T	<u>Train 1 – EtSH or TBM</u> Production Fugitives (8)	H ₂ S	< 0.01	0.01	<u>33</u>	<u>5, 33</u>	
		TRS	< 0.01	0.01	<u>33</u>	<u>5, 33</u>	
STORAGE	Storage Tanks Fugitives (8)	VOC	0.21	0.93	3, 30, 33, 49	3, 5, 30, 33, 49	3, 49
STORAGE	Storage Tanks Fugitives (6)	TRS	<u>0.18</u>	0.80	<u>33, 49</u>	5, 33, 49	<u>49</u>
SulfoxChlr	Sulfox Chiller System (8)	<u>HCFC</u>	0.01	0.01	3	3	3
		СО	2.59	11.32			
		NOx	3.08	13.48	3	3	3
		PM/ PM2.5/PM10	0.23	1.02			
H202	Heat Transfer Fluid Heater (31 MMBtu/hr)	<u>PM₁₀</u>	0.23	1.02			
		PM _{2.5}	0.23	1.02			
		<u>SO₂SO</u> 2	0.02	0.08	8, 3	8, 3	3
		VOC	0.17	0.74			

Permit Numbers:	865A and PSDTX1016M1		Issuance Date: November 6, 2019May 2, 2023				
Emission Point		Air Contominant	Emiss	ion Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
No. (1)	Source Name (2)	Air Contaminant Name (3)	lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		co	1.32	5.77			
		NOx	1.61	7.04	3	3	3
H401/H402	Sulfur Heater 401 & Methane Heater 402 (7)	PM/PM2.5/PM10	0.11	0.52			
	(,)	SO2	0.01	0.05	8, 3	8, 3	3
		VOC	0.09	0.38			
		СО	2.59	11.32			
		NOx	3.08	13.48	3	3	3
	Heat Transfer Fluid Heater (31 MMBtu/hr)	PM /PM2.5/PM10	0.23	1.02			
H2202		PM ₁₀	0.23	1.02			
		PM _{2.5}	<u>0.23</u>	1.02			
		<u>SO₂SO2</u>	0.02	0.08	8, 3	8, 3	3
		VOC	0.17	0.74			
		CO	2.03	8.90	3, 13, 12	3, 5, 13, 12	3 , 13
		H2S	0.10	0.42	13	5, 13	13
		NOx	1.57	6.87	3, 12	3, 5, 12	3
INCIN	Incinerator - Total	PM/PM2.5/PM10	0.89	3.90		5	
		SO2	139.00	78.00	13, 12	5, 13, 12	13
		VOC	0.37	1.48	13, 32	5, 13, 32	13
		TRS	0.36	1.43	13, 32	5, 13, 32	13
		H2S	0.03	0.02	21	24	
S-1	Sulfur Storage Tank	SO2	0.02	0.02	21	24	
		TRS	0.03	0.02	21	21	
C 2	Culfus Truck	H2S	0.02	0.02	21	21	
S-3	Sulfur Truck	SO2	0.064	0.064	21	21	

Permit Numbers:	865A and PSDTX1016M1		Issuance Date: November 6, 2019May 2, 2023				
Fusionis D.		Air Contonin and	Emis	sion Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		TRS	0.02	0.02	21	21	
SULFOX-CT	Sulfox Cooling Tower	PM/PM2.5/PM10	0.04	0.18			
SULFUA-UT	Sullox Cooling Tower	VOC	0.43	1.89	3, 25	3, 25	3
SULFOX-INH	Bag Filter	PM/PM2.5/PM10	0.08	0.01			
		CO	32.70	70.52	14, 12	5, 14, 12	14
		NOx	16.16	70.66	14, 12	5, 14, 12	14
		PM/PM2.5/PM10	5.71	25.01		5	
SULFOX-TO	Thermal Oxidizer	SO2 (Normal Operations)	23.66		14, 12	6, 5, 9, 14, 12	14
		SO2 (MSS)	100.00	13.93	14, 12	6, 5, 9, 14, 12	14
		TRS	0.02	0.01	32	6, 5, 32	
		VOC	6.66	15.26	14, 32	6, 5, 14, 13, 32	
		СО	1.33	5.81			
		NOx	2.05	9.00	3	3	3
		PM /PM2.5/PM10	0.12	0.53			
X-426A	Steam Boiler (15.8 MMBtu/hr)	<u>PM₁₀</u>	0.12	0.53			
		PM _{2.5}	0.12	0.53			
		<u>SO₂SO2</u>	0.01	0.04	8, 3	8, 3	3
		VOC	0.09	0.38			
		CO	<u>1.33</u>	<u>5.81</u>			
		NOx	2.05	9.00	3	3	3
V 426B	Steam Boiler (15.8	<u>PM</u>	0.12	0.53			
<u>X-426B</u>	MMBtu/hr)	PM ₁₀	0.12	0.53			
		PM _{2.5}	0.12	0.53			
		SO ₂	0.01	0.04	8, 3	8, 3	3

Permit Numbers:	865A and PSDTX1016M1		Issuance Date: November 6, 2019May 2, 2023				
Emission Daint		Air Contominant	Emiss	ion Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		VOC	0.09	0.38			
DMDS-LOADT	DMDS Truck Loading –	VOC	0.39	<0.01		<u>25</u>	
DIVIDS-LOADT	<u>Uncaptured Emissions</u>	TRS	0.39	<0.01		<u>25</u>	
		<u>PM</u>	0.01	0.04	<u>28</u>	<u>28</u>	
DMDS-CT	DMDS Cooling Tower	PM ₁₀	0.01	0.03	<u>28</u>	<u>28</u>	
DIVIDS-CT	DIVIDS Cooling Tower	PM _{2.5}	<0.01	<0.01	<u>28</u>	<u>28</u>	
		<u>VOC</u>	0.04	0.18	<u>27, 28</u>	<u>27, 28</u>	
		<u>VOC</u>	0.22	0.98	<u>33</u>	<u>5, 33</u>	
DMDS-FUG	DMDS Fugitives (8)	<u>H₂S</u>	0.03	0.13	<u>33</u>	<u>33</u>	
		TRS	0.33	0.08	<u>33</u>	<u>33</u>	
	Acrolein Process Fugitives	VOC	0.35	1.52	3, 28, 29, 33, 36	3, 28, 29, 33, 36	3
ACRO-Fug		H2S	0.01	0.01	28, 29	28, 29	
		TRS	0.01	0.01	28, 29	28, 29	
		H2S	0.01	0.01	30	5, 30	
BMT-1E/T	Train 1 EtSH or TBM Production Fugitives (8)	TRS	0.01	0.01	30	5, 30	
DIVIT-TE/T	againes (e)	VOC	0.07	0.31	3, 27, 30	3, 5, 27, 30	3
		H2S	0.02	0.07	30	5, 30	
BMT-1M	Train 1 MeSH Production Fugitives (8)	TRS	0.16	0.72	30	5, 30	
		VOC	0.19	0.85	3, 27, 30	3, 5, 27, 30	3
		H2S	0.02	0.10	30	5, 30	
BMT-2M	Train 2 – MeSH Production Fugitives (8)	TRS	0.04	0.17	30	5, 30	
	T ugitives (o)	VOC	0.06	0.25	3, 27, 30	3, 5, 27, 30	3
E 4	H2S Plant Process Fugitives	H2S	0.01	0.01	30	5, 30	
F-1	(8)	TRS	0.01	0.02	30	5, 30	

Permit Numbers: 8	865A and PSDTX1016M1		Issuance Date: November 6, 2019May 2, 2023				
Emission Point No. (1) Source Name (2)		Air Contoninout	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
	Air Contaminant Name (3)	lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information	
		VOC	0.01	0.02	3, 27, 30	3, 5, 27, 30	3
MMP-Fug	MMP Process Area Fugitives	VOC	0.17	0.73	3, 30	3, 5, 30	3
WilviF-Fug	(8)	TRS	0.08	0.35	30	5, 30	
STORAGE	GE Storage Tanks Fugitives (8)	TRS	0.18	0.80	30, 43	5, 30, 43	43
STURAGE		VOC	0.21	0.93	3, 27, 30, 43	3, 5, 27, 30, 43	3, 43
SulfoxChlr	Sulfox Chiller System (8)	HCFC	0.01	0.01	3	3	3

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) CO carbon monoxide
 - NO_x total oxides of nitrogen
 - PM total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
 - PM₁₀ particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}
 - PM_{2.5} particulate matter equal to or less than 2.5 microns in diameter
 - SO₂ sulfur dioxide
 - VOC volatile organic compounds as defined in Title 30 Texas Administrative Code 101.1
 - NaOH sodium hydroxide
 - H₂SO₄ sulfuric acid
 - H₂S hydrogen sulfide
 - TRS total reduced sulfur, includes H₂S and sulfur bearing VOC, excludes SO₂
 - HFCF hydrochlorofluorocarbons
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Allowable Flare short term rate during high flow events, limited to 100 hours per year.
- (6) Includes operation of the flare as backup control device for EPN SULFOX-TO when it is not operating and 416 hours per calendar year for EPN INCIN when it is not operating.
- (7) Common exhaust stack.
- (8) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (9) Planned startup, shutdown and maintenance activity emissions.

Texas Commission on Environmental Quality

Title V Existing 1636

Site Information (Regulated Entity)

What is the name of the permit area to be BEAUMONT FACILITY CHEMICAL

authorized? MANUFACTURING

 County
 JEFFERSON

 Latitude (N) (##.#####)
 30.058055

 Longitude (W) (-###.#####)
 94.056944

 Primary SIC Code
 2869

Secondary SIC Code

Primary NAICS Code 325199

Secondary NAICS Code

Regulated Entity Site Information

What is the Regulated Entity's Number (RN)? RN100216373

What is the name of the Regulated Entity (RE)?

ARKEMA BEAUMONT PLANT

Does the RE site have a physical address?

Physical Address

Number and Street 2810 GULF STATES RD

City BEAUMONT

State TX ZIP 77704

 County
 JEFFERSON

 Latitude (N) (##.#####)
 30.058055

 Longitude (W) (-###.#####)
 -94.056944

Facility NAICS Code

What is the primary business of this entity?

MERCAPTANS & SULFIDES

Customer (Applicant) Information

How is this applicant associated with this site?

Owner Operator

What is the applicant's Customer Number

CN600124044

(CN)?

Type of Customer Corporation

Full legal name of the applicant:

Legal NameArkema Inc.Texas SOS Filing Number1221906Federal Tax ID230960890State Franchise Tax ID12309608904

State Sales Tax ID

Local Tax ID

DUNS Number 2290773

Number of Employees 501+

Independently Owned and Operated? Yes

Responsible Official Contact

Person TCEQ should contact for questions

about this application:

Organization Name ARKEMA INC

Prefix MR

First **NICHOLAS**

Middle

Last **FERRACO**

Suffix Credentials

Title PLANT MANAGER

Enter new address or copy one from list:

Mailing Address

Address Type Domestic Mailing Address (include Suite or Bldg. here, if PO BOX 1427

applicable)

Routing (such as Mail Code, Dept., or Attn:)

City **BEAUMONT**

TΧ State ZIP 77704

Phone (###-###-)

Extension

Alternate Phone (###-###-###)

Fax (###-###-###)

E-mail nick.ferraco@sartomer.com

4099515232

2810 GULF STATES ROAD

Technical Contact

Person TCEQ should contact for questions

about this application:

Select existing TC contact or enter a new **New Contact**

contact.

Arkema Inc Organization Name

Prefix MS Christy First

Middle

Last Hollier

Suffix

Credentials

Title **Environmental Specialist** Responsible Official Contact

Enter new address or copy one from list:

Address Type Domestic

Mailing Address (include Suite or Bldg. here, if

applicable)

Mailing Address

Routing (such as Mail Code, Dept., or Attn:)

City **BEAUMONT**

State TX ZIP 77701 4099515361

Phone (###-###-###) Extension

Alternate Phone (###-###-###)

E-mail

christy.hollier@arkema.com

Title V General Information - Existing

1) Permit Type: SOP

2) Permit Latitude Coordinate:
 30 Deg 3 Min 29 Sec
 3) Permit Longitude Coordinate:
 4) Is this submittal a new application or an
 New Application

4) Is this submittal a new application or an New Application?

4.1. What type of permitting action are you Streamlined Revision applying for?

4.1.1. Are there any permits that should be No voided upon issuance of this permit application through permit conversion?

4.1.2. Are there any permits that should be No voided upon issuance of this permit application

5) Does this application include Acid Rain No Program or Cross-State Air Pollution Rule

Title V Attachments Existing

requirements?

through permit consolidation?

Attach OP-1 (Site Information Summary)

Attach OP-2 (Application for Permit Revision/Renewal)

Attach OP-REQ1 (Application Area-Wide Applicability Determinations and General Information)

Attach OP-REQ2 (Negative Applicable Requirement Determinations)

Attach OP-REQ3 (Applicable Requirements Summary)

Attach OP-PBRSUP (Permits by Rule Supplemental Table)

Attach OP-SUMR (Individual Unit Summary for Revisions)

Attach OP-MON (Monitoring Requirements)

Attach OP-UA (Unit Attribute) Forms

If applicable, attach OP-AR1 (Acid Rain Permit Application)

Attach OP-CRO2 (Change of Responsible Official Information)

Attach OP-DEL (Delegation of Responsible Official)

Attach any other necessary information needed to complete the permit.

[File Properties]

File Name

Arkema SOP O1636 Minor Revision Application FINAL.pdf Hash

MIME-Type application/pdf

An additional space to attach any other necessary information needed to complete the permit.

Expedite Title V

1) Per Texas Health and Safety Code, Section 382.05155, does the applicant want to expedite the processing of this application?

No

Certification

I certify that I am the Responsible Official for this application and that, based on information and belief formed after reasonable inquiry, the statements and information on this form are true, accurate, and complete.

- 1. I am Nicholas R Ferraco, the owner of the STEERS account ER090639.
- 2. I have the authority to sign this data on behalf of the applicant named above.
- 3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
- 4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
- 5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
- 6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
- 7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
- 8. I am knowingly and intentionally signing Title V Existing 1636.
- 9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEC

OWNER OPERATOR Signature: Nicholas R Ferraco OWNER OPERATOR

Account Number: ER090639 Signature IP Address: 165.1.200.66 Signature Date: 2025-03-13

DEE63371ED2A941CA5C3C23443746A4B9F85BA6EBC1264B951E68A1F0ED64276 Signature Hash: Form Hash Code at 8E73E4EB4A58528E15DAFF6299645631F613F711A147951E88E329A4BB257BDF time of Signature:

Submission

Reference Number: The application reference number is 768675

Submitted by: The application was submitted by

ER090639/Nicholas R Ferraco

Submitted Timestamp: The application was submitted on 2025-03-13

at 13:39:32 CDT

The application was submitted from IP address Submitted From:

165.1.200.66

Confirmation Number: The confirmation number is 638918

Steers Version: The STEERS version is 6.88 Permit Number: The permit number is 1636

Additional Information

Application Creator: This account was created by Heriberto Quintanilla