

RN#102805090

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Keppel AmFELS

Keppel AmFELS, Inc.
P.O. Box 3107
20000 State Highway 48
Brownsville, Texas 78523
USA

Tel: 956 831 8220
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July 25, 2016

Mr. Francisco J. Chavero, Jr.
Section Manager for Air
TCEQ Region 15 Office
1804 West Jefferson Ave.
Harlingen, Texas 78550-5247

Subject: MACT MMMM Semi-Annual Compliance Report
Compliance Period: January 2016 through June 2016
Keppel AmFELS, LLC – Brownsville, Texas

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Dear Mr. Chavero:

Please find enclosed a copy of the submitted Semi-Annual Compliance Report to the USEPA Region VI for the miscellaneous metal parts and product surface coating operations performed from January 1, 2016 through June 30, 2016 at the Brownsville, Texas facility. Miscellaneous metal parts and products surface coating operations at the facility are subject to the requirements of Title 40, Code of Federal Regulations Part 63, Subpart MMMM (National Emission Standards for Miscellaneous Metal Parts and Products (Surface Coating)). This report is being provided in accordance with the MACT MMMM reporting requirements.

If there are any questions regarding the information contained in this correspondence, please contact me at (956) 831-8220.

Sincerely,

Keppel AmFELS, LLC


Victor Bouchot
Environmental Supervisor



Keppel AmFELS, Inc.
P.O. Box 3107
20000 State Highway 48
Brownsville, Texas 78523
USA

Tel: 956 831 8220
Fax: 956 831 6220

July 25, 2016

Ms. Margaret Osbourne
Chief
Air Toxics Enforcement Section (6EN-AT)
United States Environmental Protection Agency Region VI
1445 Ross Avenue
Dallas, Texas 75202-2733

[Handwritten signature]
JUL 25 2016

Subject: MACT MMMM Semi-Annual Compliance Report
Compliance Period: January 2016 – June 2016
Keppel AmFELS, LLC – Brownsville, Texas

Dear Ms. Osbourne:

Keppel AmFELS, LLC is pleased to provide to the United States Environmental Protection Agency (USEPA) Region VI this Semi-Annual Compliance Report for the miscellaneous metal parts and products surface coating operations performed from January 2016 through June 2016 at the Brownsville, Texas facility. Miscellaneous metal parts and products coating operations at the Brownsville, Texas facility are subject to the requirements of Title 40, Code of Federal Regulations Part 63, Subpart MMMM (National Emission Standards for Miscellaneous Metal Parts and Products (Surface Coating)).

In accordance with 40 CFR §63.3910(c)(1)-(11), this report includes the following information:

§63.3910(c)(1) - Company name and address:

Keppel AmFELS, LLC
P. O. Box 3107
(20,000 S. Highway 48)
Brownsville, Texas 78523-3107

§63.3910(c)(2) - Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report:

The statement is included at the end of this cover letter.

§63.3910(c)(3) - Date of the report and beginning and ending dates of the reporting period. The reporting period is the initial compliance period described in Sec. 63.3940, 63.3950, or 63.3960 that applies to your affected source:

Date of report: Date of report is listed above

Reporting Period: January 1, 2016 through June 30, 2016

§63.3910(c)(4) - Identification of the compliance option or options specified in Sec. 63.3891 that you used on each coating operation in the affected source during the initial compliance period:

The compliance option utilized for the facility coating operations as specified in Sec. 63.3891(b) is the Emission Rate without Add on Controls.

§63.3910(c)(5) - Statement of whether or not the affected source achieved the emission limitations for the initial compliance period:

The facility achieved compliance with the emission limitations for the compliance period as required.

§63.3910(c)(6) - If you had a deviation, include the information in paragraphs (c)(6)(i) and (ii) of this section:

i. A description and statement of the cause of the deviation.

ii. If you failed to meet the applicable emission limit in Sec. 63.3890, include all the calculations you used to determine the kg (lb) of organic HAP emitted per liter (gal) coating solids used. You do not need to submit information provided by the materials' suppliers or manufacturers, or test reports:

The facility had no deviations during the compliance period; therefore, the information in paragraphs (c)(6)(i) and (ii) is not required for this notification.

§63.3910(c)(7) - For each of the data items listed in paragraphs (c)(7)(i) through (iv) of this section that is required by the compliance option(s) you used to demonstrate compliance with the emission limit, include an example of how you determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to Sec. 63.3941(a), (b), or (c). You do not need to submit copies of any test reports:

i. Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material.

ii. Volume fraction of coating solids for one coating

iii. Density for one coating, one thinner and/or other additive, and oneleaning material, except that if you use the compliant material option, only the example coating density is required.

iv. The amount of waste materials and the mass of organic HAP contained in the waste materials for which you are claiming an allowance in Equation 1 of Sec. 63.3951.

A tabular summary of the materials used during the compliance period documenting the mass fraction of HAP, volume fraction of coating solids, and density for each is supplied in Attachment 1.

§63.3910(c)(8) - The calculation of kg (lb) of organic HAP emitted per liter (gal) coating solids used for the compliance option(s) you used, as specified in paragraphs (c)(8)(i) through (iii) of this section:

- i. For the compliant material option, provide an example calculation of the organic HAP content for one coating, using Equation 2 of Sec. 63.3941.*
- ii. For the emission rate without add-on controls option, provide the calculation of the total mass of organic HAP emissions for each month; the calculation of the total volume of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of Sec. 63.3951.*
- iii. For the emission rate with add-on controls option, provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month, using Equations 1 and 1A through 1C of Sec. 63.3951; the calculation of the total volume of coating solids used each month using Equation 2 of Sec. 63.3951; the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of Sec. 63.3961 and Equations 2, 3, and 3A through 3C of Sec. 63.3961 as applicable; the calculation of the total mass of organic HAP emissions each month using Equation 4 of Sec. 63.3961; and the calculation of the 12-month organic HAP emission rate using Equation 5 of Sec. 63.3961.*

The information specified in (c)(8)(ii) listed above documenting the records demonstrating compliance with the HAP emission limitation by month and the 12-month average is provided in Attachment 2.

§63.3910(c)(9) - For the emission rate with add-on controls option, you must include the information specified in paragraphs (c)(9)(i) through (iv) of this section, except that the requirements in paragraphs (c)(9)(i) through (iii) of this section do not apply to solvent recovery systems for which you conduct liquid-liquid material balances according to Sec. 63.3961(j).

- i. For each emission capture system, a summary of the data and copies of the calculations supporting the determination that the emission capture system is a permanent total enclosure (PTE) or a measurement of the emission capture system efficiency. Include a description of the protocol followed for measuring capture efficiency, summaries of any capture efficiency tests conducted, and any calculations supporting the capture efficiency determination. If you use the data quality objective (DQO) or lower confidence limit (LCL) approach, you must also include the statistical calculations to show you meet the DQO or LCL criteria in appendix A to subpart KK of this part. You do not need to submit complete test reports.*
- ii. A summary of the results of each add-on control device performance test. You do not need to submit complete test reports.*
- iii. A list of each emission capture system's and add-on control device's operating limits and a summary of the data used to calculate those limits.*
- iv. A statement of whether or not you developed and implemented the work practice plan required by Sec. 63.3893*

The facility does not comply with the emission rate with add-on controls option; therefore, the information specified in (c)(9) listed above is not included with this report.

§63.3910(c)(10) - If you are complying with a single emission limit representing the predominant activity under Sec. 63.3890(c)(1), include the calculations and supporting information used to demonstrate that this emission limit represents the predominant activity as specified in Sec. 63.3890(c)(1).

The facility is not complying with a single emission limit as described above.

§63.3910(c)(11) - If you are complying with a facility-specific emission limit under Sec. 63.3890(c)(2), include the calculation of the facility-specific emission limit and any supporting information as specified in Sec. 63.3890(c)(2)

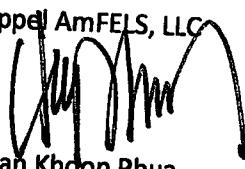
The facility is not complying with a facility-specific emission limit as under Sec. 63.3890(c)(2).

Certification of Truth, Accuracy, and Completeness

I, Hwan Khoon Phua certify that I am the Duly Authorized Representative and that, based on information and belief formed after reasonable inquiry, the statements and information included in this notification are true, accurate, and complete.

If there are any questions regarding the information contained in this correspondence, please contact me or Mr. Victor Bouchot at (956) 831-8220.

Sincerely,

Keppel AmFELS, LLC

Hwan Khoon Phua
Vice President Commercial

cc: see attached list

cc: Mr. Mike Wilson, P.E. – MC163, Director
Air Permits Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Mr. Francisco J. Chavero, Jr., Section Manager for Air
TCEQ Region 15 Office
1804 West Jefferson Ave.
Harlingen, Texas 78550-5247

Mr. J Scot Vann, P.E., President
Edge Engineering and Science, LLC
16360 Park Ten Place, Suite 300
Houston, Texas 77084

Materials Used During Compliance Period

ATTACHMENT 1

ATTACHMENT 1
MACT MMMM - Materials Data Summary Table
Keppel AmFELS, LLC
Brownsville, Texas

Manufacturer	Component	Density (lb/gal)	VOC Content		Solids Content		Total HAP Content ⁽¹⁾		
			(% by wt)	(% by vol)	(% by wt)	(% by vol)	(% by wt)	(lb HAP/gal coating)	(lb HAP/gal solids)
HEMPEL ⁽¹⁾	HEMPAXANE 55009 GRAY	11.55	12.20	19.40	87.80	80.60	5.60	0.65	0.80
	HEMPAXANE 55009 WHITE	11.50	12.30	19.40	87.70	80.60	5.70	0.66	0.81
	HEMPEL 08080 THINNER	7.23	100	100	0	0	100	7.23	na
	HEMPEL 08450 THINNER	7.09	100	100	0	0	50.95	3.61	na
	HEMPEL 15139 BLACK	10.66	22.86	33.93	77.14	66.07	18.65	1.99	3.01
	HEMPEL 15139 BROWN	10.75	23.20	34.70	76.80	65.30	18.70	2.01	3.08
	HEMPEL 15552 OFF-WHITE 11630	11.38	38.50	60.70	61.50	39.30	8.55	0.97	2.48
	HEMPEL 17369 RED	22.37	12.40	36.75	87.60	61.25	8.39	1.88	3.06
	HEMPEL 17639 GRAY	22.37	12.40	38.75	87.60	61.25	8.39	1.88	3.06
	HEMPEL 45755 BLACK	11.54	22.60	35.50	77.40	64.50	15.62	1.80	2.80
	HEMPEL 45755 RED	14.65	13.60	28.20	86.40	71.80	9.03	1.32	1.84
	HEMPEL 45881 YELLOW	13.19	15.80	29.50	84.20	70.50	10.40	1.37	1.95
	HEMPEL 45889 BLACK	12.35	14.92	24.90	85.08	75.10	11.24	1.39	1.85
	HEMPEL 45889 MASTIC BLACK	11.69	18.31	28.34	81.69	71.66	12.02	1.41	1.98
	HEMPEL 45889 MASTIC BUFF	11.40	18.76	28.30	81.24	71.70	12.04	1.37	1.91
	HEMPEL 45889 MASTIC CREAM	11.69	18.31	28.34	81.69	71.66	12.02	1.41	1.96
	HEMPEL 45889 OFF WHITE	12.06	17.76	28.32	82.24	71.68	11.40	1.37	1.92
	HEMPEL 45889 RED	11.69	18.31	28.34	81.69	71.66	12.02	1.41	1.96
	HEMPEL 45889 WHITE	11.80	18.08	28.22	81.92	71.78	11.63	1.37	1.91
	HEMPEL 55219 BLUE	12.21	17.80	28.40	82.40	71.60	11.50	1.40	1.96
	HEMPEL 55219 RED	10.89	41.00	51.60	59.00	48.40	12.30	1.34	2.77
	HEMPEL 55219 TOP COAT WHITE	9.07	41.15	51.54	58.85	48.46	19.36	1.76	3.62
	HEMPEL 55219 YELLOW/BROWN/BLACK	10.12	36.23	50.55	63.77	49.45	16.50	1.67	3.38
	HEMPEL 5585U GREY	8.83	42.19	51.38	57.81	48.62	19.50	1.72	3.54
	HEMPEL 5585U RED	10.94	23.60	36.10	76.40	63.80	0.40	0.04	0.07
	HEMPEL 5585U WHITE	9.64	28.01	38.12	71.89	61.88	0.43	0.04	0.07
	HEMPEL 76800 BLACK	10.90	23.70	36.10	76.30	63.90	0.37	0.04	0.07
	HEMPEL 821 THINNER	17.80	15.41	38.71	84.59	61.29	10.89	1.90	3.10
	HEMPEL 85675 LT RED	7.39	100	100	0	0	3.37	0.25	na
	HEMPEL 85675 OFF WHITE	14.06	19.60	38.50	80.40	61.50	14.90	2.09	3.41
	HEMPEL 99610 TOOL CLEANER	14.08	19.60	38.40	80.40	61.60	14.80	2.08	3.38
	HEMPEL ALUMINUM HEAT RESIST 56910	7.40	77.71	83.44	20.04	16.56	30.01	2.22	13.41
	HEMPEL GREY 55219	9.34	52.20	69.00	47.80	31.00	39.00	3.64	11.75
	HEMPEL LIGHT CLEAN 98350	10.43	35.81	51.28	64.19	48.72	10.59	1.10	2.27
	HEMPEL MULTI-STRENGTH 45755 RED	8.81	0.00	5.31	100.00	94.69	0.00	0.00	0.00
	HEMPEL SHOPPRIMER ZS15890	13.19	15.80	29.50	84.20	70.50	10.40	1.37	1.95
	HEMPEL SPRAY-GUARD 35490	10.76	50.80	82.80	49.20	17.20	9.70	1.04	6.07
	HEMPEL 45881 ALUMINUM	15.50	0	0	100	100	0	0	0
	HEMPEL 45881 BUFF	10.82	22.40	32.30	77.60	67.80	13.97	1.51	2.23
	HEMPEL 45881 GRAY	12.01	16.90	24.80	83.10	75.20	12.66	1.52	2.02
	HEMPEL 45881 GRAY	12.16	16.70	24.80	83.30	75.30	12.50	1.52	2.02
	HEMPEL 5585 BLACK	11.69	18.31	28.34	81.69	71.66	18.31	2.14	2.99
	HEMPEL 5585U YELLOW	10.72	23.90	35.80	76.10	64.20	23.80	2.53	3.94
	HEMPEL 76800 LT RED	10.25	25.30	36.10	74.70	63.90	0.40	0.04	0.06
	HEMPEL 76800 RED	18.17	15.40	39.30	84.60	60.70	11.38	2.07	3.41
	HEMPEL 85671 OFF WHITE	18.19	15.40	39.40	84.60	60.60	11.38	2.07	3.42
	HEMPEL 17639 RED	14.07	19.90	37.40	80.10	62.60	14.79	2.08	3.32
	HEMPEL 45755 BLACK	14.65	13.60	34.60	86.40	65.40	13.60	1.99	3.05
	HEMPEL 45755 GREY	14.65	13.60	29.50	86.40	70.50	9.03	1.32	1.88
	HEMPEL 17630 GRAY	14.65	13.60	29.50	86.40	70.50	13.60	1.99	2.83
	HEMPEL 17630 RED	11.52	21.92	35.60	78.08	64.40	15.24	1.76	2.73
	HEMPEL 17633 GRAY	11.83	20.90	34.60	79.10	65.40	24.81	2.94	4.49
		11.52	21.92	35.30	78.08	64.70	11.14	1.28	1.98

ATTACHMENT 1
MACT MMMM - Materials Data Summary Table
Keppel AmFELS, LLC
Brownsville, Texas

Manufacturer	Component	Density (lb/gal)	VOC Content		Solids Content		Total HAP Content ⁽¹⁾		
			(% by wt)	(% by vol)	(% by wt)	(% by vol)	(% by wt)	(lb HAP/gal coating)	(lb HAP/gal solids)
	HEMPEL 17633 RED	11.74	22.70	35.00	77.30	65.00	14.65	1.72	2.65
	HEMPEL 17634 RED	11.54	19.90	32.20	80.10	67.80	14.98	1.73	2.55
	HEMPEL 17634 YELLOW	11.68	19.80	32.20	80.20	67.80	14.59	1.70	2.51
	HEMPEL 45880 BUFF	12.01	16.80	24.60	83.20	75.40	12.56	1.51	2.00
	HEMPEL 45880 ALUMINUM	10.82	22.30	32.10	77.80	67.90	13.85	1.50	2.21
	HEMPEL 17360 GRAY	22.37	12.40	38.75	87.60	61.25	8.39	1.88	3.06
	HEMPEL 17639 ZINC	11.46	22.00	35.10	78.10	64.90	15.13	1.73	2.67
	HEMPEL 45751 BLACK	13.05	15.60	27.60	84.40	72.40	9.72	1.27	1.75
	HEMPEL 45751 GRAY	13.15	17.30	29.50	82.70	70.50	10.24	1.35	1.91
	HEMPEL 45751 RED	13.19	15.80	28.50	84.20	70.50	10.40	1.37	1.95
	HEMPEL 45880 RED	12.26	16.50	24.60	83.50	75.40	12.30	1.51	2.00
	HEMPEL 45881 BLACK	11.78	17.00	24.80	83.00	75.30	12.90	1.52	2.02
	HEMPEL 45881 GREEN	11.93	16.80	24.60	83.20	75.40	12.64	1.51	2.00
	HEMPEL 45881 RED	12.26	16.60	24.80	83.40	75.30	12.40	1.52	2.02
	HEMPEL 45881 WHITE	12.72	16.20	24.80	83.80	75.30	11.95	1.52	2.02
	HEMPEL 55610 BLACK	11.91	22.80	37.10	77.00	62.90	0.92	0.11	0.17
	HEMPEL 55610 GRAY	12.14	22.40	37.00	77.60	63.00	0.90	0.11	0.17
	HEMPEL 55610 YELLOW	10.01	29.10	39.30	70.90	60.70	1.11	0.11	0.18
	HEMPEL 55610 WHITE	12.03	23.20	37.30	76.80	62.80	0.91	0.11	0.17
	HEMPEL 55610 RED	11.05	28.30	38.20	71.60	61.80	1.10	0.12	0.20
	HEMPEL 85671 GRAY	14.07	19.80	37.40	80.10	62.60	14.79	2.08	3.32
	HEMPEL 85671 LIGHT RED	14.04	20.00	37.50	80.00	62.50	14.90	2.09	3.35
	HEMPEL 85671 RED	14.06	19.60	43.70	80.40	56.30	14.86	2.09	3.71
	HEMPEL GALVOSIL 15680	29.12	9.12	10.00	90.88	90.00	0.20	0.06	0.06
	HEMPEL 55610 ORANGE	10.93	25.60	37.30	74.30	62.70	0.91	0.10	0.16
	HEMPEL 45680 BLACK	11.79	15.30	24.54	84.70	75.46	12.80	1.51	2.00
	HEMPEL 45680 GREEN	11.94	15.11	24.54	84.89	75.46	12.64	1.51	2.00
	HEMPEL 45680 WHITE	12.73	14.17	24.56	85.83	75.44	11.85	1.51	2.00
	HEMPEL 35490 SPRAY GUARD	15.44	0	0	100	100	0	0	0
	HEMPEL 17360 ZINC	22.32	12.40	38.67	87.60	61.33	7.26	1.62	2.64
	HEMPEL 17360 RED	22.32	12.40	38.67	87.60	61.33	7.26	1.62	2.64
	HEMPEL 35530 RED	11.24	0.68	0.88	99.32	99.13	0	0	0
	HEMPEL 35530 GRAY	11.20	1.00	1.00	99.00	99.00	0	0	0
	HEMPEL 56910 LIGHT ALUMINUM	9.21	49.88	65.00	50.12	35.00	39.35	3.63	10.36
	HEMPEL 476 US BEIGE	11.49	26.39	31.00	73.61	69.00	14.30	1.64	2.38
	HEMPEL 476 US BLACK	11.23	17.90	31.30	82.10	66.70	14.68	1.65	2.40
	HEMPEL 55610 BLUE	12.07	22.60	37.10	77.40	62.90	0.91	0.11	0.17
	HEMPEL 17630 BLACK	11.23	24.00	35.60	76.00	64.40	15.78	1.77	2.75
	HEMPEL 56913 ALUMINUM	9.95	35.00	49.00	65.00	51.00	8.76	0.87	1.71
	HEMPEL 56980 GREY	15.97	20.60	26.00	79.40	74.00	4.67	0.75	1.01
	HEMPEL 56980 DARK GREY	15.87	21.00	26.00	79.00	74.00	4.67	0.74	1.00
	HEMPEL 35480 SPRAY GUARD GREY	15.35	0	0	100	100	0	0	0
	HEMPEL 15680 REDDISH GREY	29.11	9.20	10.00	90.80	90.00	0.15	0.04	0.05
	HEMPEL 55610 BLUE 3716H	11.21	28.20	43.00	71.80	57.00	0.00	0.00	0.00
INTERNATIONAL PAINTS ⁽²⁾	INTERNATIONAL 345	11.68	22.80	30.00	77.20	70.00	5.39	0.63	0.90
	INTERNATIONAL 251 RED	11.51	28.20	37.00	71.20	63.00	20.93	2.43	3.86
	INTERNATIONAL 07 THINNER	7.24	100	100	0	0	100	7.24	na
	INTERNATIONAL 415 THINNER	7.30	100	100	0	0	64.93	4.74	na
	INTERNATIONAL 60/40 THINNER	6.94	100	100	0	0	100	6.94	na
	INTERNATIONAL 220 THINNER	7.13	100	100	0	0	3.09	0.22	na
	INTERNATIONAL 198 BUFF	11.21	37.60	59.00	62.40	41.00	18.38	2.06	5.02
	INTERNATIONAL 262 RED	11.40	23.40	27.00	76.60	73.00	0	0	0
	INTERZINC 22	20.90	19.60	37.00	80.40	63.00	3.21	0.67	1.06

ATTACHMENT 1
MACT MMMM - Materials Data Summary Table
Kepel AmFELS, LLC
Brownsville, Texas

Manufacturer	Component	Density (lb/gal)	VOC Content		Solids Content		Total HAP Content ⁽¹⁾		
			(% by wt)	(% by vol)	(% by wt)	(% by vol)	(% by wt)	(lb HAP/gal coating)	(lb HAP/gal solids)
	INTERZONE 854 WHITE	12.79	9.70	14.00	90.30	86.00	10.63	1.36	1.56
	INTERLINE 850	12.97	14.50	24.00	85.50	76.00	0	0	0
	INTERZINC 75	16.30	14.40	36.00	85.60	64.00	1.42	0.26	0.41
	INTERNATIONAL 882	10.04	1.30	6.50	97.40	93.50	0.13	0.01	0.01
	INTERLAC 885 WHITE	9.34	37.50	53.00	62.50	47.00	0.21	0.02	0.04
	INTERLAC 885 SURF GREY	9.02	61.20	47.00	38.80	53.00	0.11	0.01	0.02
	INTERFINE 979 WHITE	11.02	13.10	24.00	86.90	76.00	8.71	0.96	1.26
	INTERNATIONAL THINNER GTA 101	7.00	100	0	0	100	7	na	
	INTERTHERM 50	9.43	43.70	55.00	56.30	45.00	33.19	3.13	6.96
	INTERSPEED 8400 NA	18.42	17.42	40.00	82.58	60.00	13.30	2.45	4.08
	INTERSEAL 670HS (EGA010/EGA247)	13.53	14.80	18.00	85.20	82.00	9.90	1.34	1.63
	INTERNATIONAL 870 BUFF	13.49	14.83	18.00	85.17	82.00	12.01	1.62	1.98
	INTERNATIONAL 870 GRAY	13.49	14.83	18.00	85.17	82.00	12.01	1.62	1.98
	INTERNATIONAL 870 WHITE	13.53	14.78	18.00	85.22	82.00	9.90	1.34	1.63
	INTERNATIONAL 954 BLACK	12.79	9.70	14.00	90.30	86.00	9.70	1.24	1.44
	INTERNATIONAL 954 BUFF	12.79	9.70	14.00	90.30	86.00	9.70	1.24	1.44
	INTERNATIONAL 954 GRAY	12.79	9.70	14.00	90.30	86.00	9.70	1.24	1.44
	INTERNATIONAL 979 GRAY	10.93	16.80	24.00	83.40	76.00	12.26	1.34	1.76
	INTERNATIONAL 262 GRAY	11.40	23.40	27.00	76.60	73.00	0	0	0
	INTERNATIONAL 52 ZINC	21.70	12.90	41.00	87.10	59.00	3.73	0.81	1.37
	INTERNATIONAL 890 BLACK	12.38	22.05	32.00	77.95	68.00	0	0	0
	INTERNATIONAL 890 GRAY	12.38	22.05	32.00	77.95	68.00	0	0	0
	INTERNATIONAL 890 ORANGE	12.38	22.05	32.00	77.95	68.00	0	0	0
	INTERNATIONAL 890 WHITE	12.38	22.05	32.00	77.95	68.00	0	0	0
	INTERNATIONAL 302 ZINC	16.19	22.20	44.00	77.80	56.00	6.79	1.10	1.96
	INTERNATIONAL 52 GREEN	21.70	12.80	41.00	87.10	59.00	3.73	0.81	1.37
	INTERNATIONAL 870 BLACK	13.61	14.70	18.00	85.30	82.00	9.85	1.34	1.63
	INTERNATIONAL 75 ZINC	18.30	14.40	36.00	85.60	64.00	1.42	0.26	0.41
JOTUN PAINTS, INC ^[3]	JOTUN MUKI Z WB-14	23.80	0	0	88.14	45.70	0	0	0
	JOTAMASTIC 80	12.66	16.35	27.60	83.65	72.40	11.06	1.40	1.93
	JOTUN HARDTOP XP	9.24	24.08	39.60	75.92	60.40	15.51	1.43	2.37
	JOTUN 28 THINNER	7.34	100	100	0	0	0	0	na
	JOTUN 23 THINNER	7.22	100	100	0	0	0	0	na
	JOTUN TANKGUARD 412	11.28	0.24	1.31	99.76	98.69	0.24	0.03	0.03
	JOTUN 17 THINNER	7.13	100	100	0	60.00	4.28	na	
	JOTUN 87 ALUMINUM	11.49	17.60	29.60	82.40	70.40	10.30	1.18	1.68
AMERON INTERNATIONAL ^[4]	DIMETCOTE 302H GREEN 302F0250 RESIN	19.07	13.75	38.32	86.25	61.68	0	0	0
	AMEROCAUT 185H OXIDE RED 185HS70048	12.36	22.49	24.66	77.51	75.34	2.68	0.33	0.44
	AMEROCAUT 240 OXIDE RED DV7821 RESIN KIT 240K70061	12.54	10.00	18.21	90.00	81.79	0.26	0.03	0.04
	AMEROCAUT 240 HAZE GRAY F/S 26270 KIT 240K20002	12.43	9.97	17.98	90.03	82.02	0.20	0.02	0.03
	AMEROCAUT 240 BLACK KIT 240K90000	12.12	10.21	17.99	89.79	82.01	0.20	0.02	0.03
	AMEROCAUT 65 THINNER 65T00032	7.25	100	100	0	0	100	7.25	na
	AMEROCAUT 78HB BLACK COAL TAR EPOXY RESIN WITH HARDENER 78HBK90043	12.32	16.32	28.00	83.68	72.00	1.11	0.14	0.19
	AMEROCAUT 450H CUSTOM COLOR WITH CURE 450HKCLR	13.12	18.04	27.68	81.96	72.32	0.11	0.01	0.02
	AMEROCAUT 450H WHITE RESIN WITH CURE 450HK30000	12.22	18.09	30.00	81.81	70.00	0.11	0.01	0.02
	AMERLOCK 400 PEARL GRAY RESIN	11.81	11.61	19.01	88.39	80.99	7.88	0.93	1.15
	AMERLOCK 2/400 PEARL GRAY WITH CURE 2K20130	11.86	10.87	17.87	89.13	82.13	7.27	0.86	1.05
	AMERLOCK 2/400 IVORY RESIN WITH CURE 2K80048	12.23	10.47	17.75	89.53	82.25	7.33	0.90	1.09
	AMERLOCK 2/400 OXIDE RED WITH CURE 2K70046	11.89	10.77	17.76	89.23	82.24	7.26	0.86	1.05
	AMERLOCK 2/400 WHITE WITH CURE 2K30000	12.27	10.43	17.75	89.57	82.25	7.30	0.90	1.09
	AMEROCAUT PSX 1001 DEEP TINT (GREEN)	10.19	26.31	37.11	73.69	62.89	16.65	1.70	2.70
	DIMECOTE 9	20.10	18.74	55.01	81.26	44.99	1.33	0.27	0.59
	AMERCOAT 12 THINNER	6.93	100	100	0	52.05	3.61	na	

ATTACHMENT 1
MACT Mmmm - Materials Data Summary Table
Koppel AmFELS, LLC
Brownsville, Texas

Manufacturer	Component	Density (lb/gal)	VOC Content		Solids Content		Total HAP Content ^[1]		
			(% by wt)	(% by vol)	(% by wt)	(% by vol)	(% by wt)	(lb HAP/gal coating)	(lb HAP/gal solids)
SIGMA	AMERLOCK 2/400 BUFF BROWN	12.16	9.73	16.41	90.27	83.59	7.02	0.85	1.02
	1108 YELLOW VOID COAT	10.77	48.15	74.48	51.85	25.52	0	0	0
	SIGMA 7417 EP UNIVERSAL PRIMER II GREEN	12.09	22.2	30	77.8	70	15.15	1.83	2.62
	SIGMA 91-92 THINNER	7.08	100	100	0	0	74.97	5.31	na
	SIGMACOVER ZP PRIMER 7427US-9553 GRAY / SIGMACOVER 435 ^[2]	11.39	21.90	36.24	78.10	63.76	19.60	2.23	3.50
	SIGMACOVER TCX 5481 BLACK 8000 / SIGMACOVER 520 ^[3]	11.89	18.48	31.10	81.52	68.80	0.56	0.07	0.10
	SIGMA EPOXY COATING TCC 5480-2001 RED BROWN	11.16	23.72	36.53	76.28	63.47	14.96	1.67	2.63
	SIGMACOVER 520 RED BROWN	11.85	19.69	33.10	80.31	66.80	13.14	1.56	2.33
	SIGMACOVER PRIMER II 7413US-4009 GREEN / SIGMACOVER 280 ^[4]	12.08	15.30	27.00	84.70	73.00	0	0	0
	SIGMAGUARD 720 GREEN (7433)	11.41	16.13	25.74	83.87	74.26	9.80	1.12	1.51
	SIGMASHIELD 1080 GREY (7480)	11.89	16.82	28.05	83.18	71.95	8.65	1.03	1.43
	SIGMA 500 GREEN (7427)	11.90	16.55	27.50	83.45	72.50	8.64	1.03	1.42
	SIGMADUR 500 RED (5522) ^[5]	16.39	0.93	0.65	99.07	99.35	0	0	0
	SIGMACOVER 456 GREY (7456) ^[6]	12.04	24.67	41.05	75.33	58.95	17.67	2.13	3.61
	SIGMADUR 500 GREY (5481) ^[7]	11.97	21.55	36.00	78.45	64.00	0.42	0.05	0.08
	SIGMADUR 500 WHITE ^[8]	10.54	28.37	38.59	71.63	61.41	23.22	2.45	3.98
	SIGMADUR 500 BLUE ^[9]	11.97	21.55	36.00	78.45	64.00	0.42	0.06	0.09
	SIGMA 426 ^[10]	11.55	24.01	39.24	75.99	60.76	0.54	0.05	0.08
	SIGMA 650 ^[11]	11.76	0.05	6.35	99.95	93.65	0.10	0.01	0.10
	CAPASTIC	10.86	0.11	14.51	99.89	85.49	0.88	0.10	0.11
SIEMENS	CERAM-KOTE 54	11.95	0.20	6.00	99.80	94.00	0	0	0
FREECOM		13.70	11.00	22.00	89.00	78.00	3.50	0.48	0.61

NOTES:

- [1] Hempel Products - Information from Air Quality Data Sheet
- [2] International Paints Products - Information from Air Quality Emissions Report. The Air Quality Emissions Report for a certain banner name (e.g., Intergard 345, Interlac 665, etc.) applies to all products (all colors) in that group.
- [3] Jotun Paints Products - Information from Emission Report Sheet
- [4] Ameron International Products - Information from Emission Report Sheet
- [5] Solids Content for both % by wt and % by vol have been estimated assuming remaining content of material - VOC content is solids.
- [6] Solids Content for % by vol has been estimated assuming remaining content of material - VOC content is solids.
- [7] Total HAP Content (% by weight) and (lb HAP/gal solids) are calculated based on (lb HAP/gal coating) information.

Facility HAP Emission Rate Tables

ATTACHMENT 2

MACT MMMM - Facility HAP Emission Rate Data
Keppel AmFELS, LLC
Brownsville, Texas

Facility-Wide Operations Summary							
Year	Month	HAP Emissions (lbs)	Solids Used (gal)	Monthly HAP Emission Rate [MER] (lbs HAP/gal solids)	12-Month Rolling Average HAP Emission Rate [RAER] (lbs HAP/gal solids)	HAP Emission Limitation [EL] (lbs HAP/gal solids)	HAP RAER less than HAP EL (Y/N)
2016	January	2,264	1,284	1.76	1.45	2.60	Yes
	February	843	481	1.75	1.52	2.60	Yes
	March	61	23	2.65	1.66	2.60	Yes
	April	397	162	2.45	1.78	2.60	Yes
	May	864	514	1.68	1.80	2.60	Yes
	June	435	277	1.57	1.82	2.60	Yes

Facility Emission Rate Data - January 2016
Keppel AmFELS, LLC
Brownsville, Texas

Facility Wide Operations Summary					
Area	HAP Emissions (lbs)	Solids Used (gal)	HAP Emission Rate (lbs HAP/gal solids)	HAP Emission Limitation (lbs HAP/gal solids)	HAP ER less than HAP EL (Y/N)
East Yard	0.00	0.00	na	2.60	na
West Yard	0.00	0.00	na	2.60	na
WestKey Yard	0.00	0.00	na	2.60	na
Blast House Booth 1	816.41	419.64	1.95	2.60	na
Blast House Booth 2	1338.95	684.26	1.96	2.60	Y
Wheelabrator 1	0.00	140.00	0.00	2.60	Y
Wheelabrator 2	0.00	0.00	na	2.60	na
Wheelabrator 3	0.00	0.00	na	2.60	na
Dock 1	0.00	0.00	na	2.60	na
Dock 2	0.00	0.00	na	2.60	na
Dock 3	108.19	39.64	2.73	2.60	N
Dock 4	0.00	0.00	na	2.60	na
Dock 5	0.00	0.00	na	2.60	na
Dock 6	0.00	0.00	na	2.60	na
TOTALS	2263.55	1283.54	1.76	2.60	Y

Facility Emission Rate Data - February 2016
Keppel AmFELS, LLC
Brownsville, Texas

Facility Wide Operations Summary					
Area	HAP Emissions (lbs)	Solids Used (gal)	HAP Emission Rate (lbs HAP/gal solids)	HAP Emission Limitation (lbs HAP/gal solids)	HAP ER less than HAP EL (Y/N)
East Yard	0.00	0.00	na	2.60	na
West Yard	12.69	20.35	0.62	2.60	Y
WestKey Yard	0.00	0.00	na	2.60	na
Blast House Booth 1	579.47	264.06	2.19	2.60	na
Blast House Booth 2	166.53	68.08	2.45	2.60	Y
Wheelabrator 1	0.00	101.00	0.00	2.60	Y
Wheelabrator 2	0.00	0.00	na	2.60	Y
Wheelabrator 3	0.00	0.00	na	2.60	na
Dock 1	0.00	0.00	na	2.60	na
Dock 2	0.00	0.00	na	2.60	na
Dock 3	0.00	0.00	na	2.60	na
Dock 4	84.67	27.49	3.08	2.60	na
Dock 5	0.00	0.00	na	2.60	N
Dock 6	0.00	0.00	na	2.60	na
TOTALS	843.36	480.98	1.75	2.60	Y

Facility Emission Rate Data - March 2016
Keppel AmFELS, LLC
Brownsville, Texas

Facility Wide Operations Summary					
Area	HAP Emissions (lbs)	Solids Used (gal)	HAP Emission Rate (lbs HAP/gal solids)	HAP Emission Limitation (lbs HAP/gal solids)	HAP ER less than HAP EL (Y/N)
East Yard	0.00	0.00	na	2.60	na
West Yard	0.00	0.00	na	2.60	na
WestKey Yard	0.00	0.00	na	2.60	na
Blast House Booth 1	0.00	0.00	na	2.60	na
Blast House Booth 2	0.00	0.00	na	2.60	na
Wheelabrator 1	0.00	0.00	na	2.60	na
Wheelabrator 2	0.00	0.00	na	2.60	na
Wheelabrator 3	0.00	0.00	na	2.60	na
Dock 1	0.00	0.00	na	2.60	na
Dock 2	0.00	0.00	na	2.60	na
Dock 3	61.09	23.02	2.65	2.60	na
Dock 4	0.00	0.00	na	2.60	N
Dock 5	0.00	0.00	na	2.60	na
Dock 6	0.00	0.00	na	2.60	na
TOTALS	61.09	23.02	2.65	2.60	N

Facility Emission Rate Data - April 2016
Keppel AmFELS, LLC
Brownsville, Texas

Facility Wide Operations Summary					
Area	HAP Emissions (lbs)	Solids Used (gal)	HAP Emission Rate (lbs HAP/gal solids)	HAP Emission Limitation (lbs HAP/gal solids)	HAP ER less than HAP EL (Y/N)
East Yard	0.00	0.00	na	2.60	na
West Yard	0.00	0.00	na	2.60	na
WestKey Yard	0.00	0.00	na	2.60	na
Blast House Booth 1	12.50	10.94	1.14	2.60	na
Blast House Booth 2	0.00	0.00	na	2.60	Y
Wheelabrator 1	0.00	0.00	na	2.60	na
Wheelabrator 2	0.00	0.00	na	2.60	na
Wheelabrator 3	0.00	0.00	na	2.60	na
Dock 1	192.15	87.62	2.19	2.60	na
Dock 2	191.89	63.28	3.03	2.60	Y
Dock 3	0.00	0.00	na	2.60	N
Dock 4	0.00	0.00	na	2.60	na
Dock 5	0.00	0.00	na	2.60	na
Dock 6	0.00	0.00	na	2.60	na
TOTALS	396.55	161.84	2.45	2.60	Y

Facility Emission Rate Data - May 2016
Keppel AmFELS, LLC
Brownsville, Texas

Facility Wide Operations Summary					
Area	HAP Emissions (lbs)	Solids Used (gal)	HAP Emission Rate (lbs HAP/gal solids)	HAP Emission Limitation (lbs HAP/gal solids)	HAP ER less than HAP EL (Y/N)
East Yard	267.42	138.40	1.93	2.60	Y
West Yard	0.00	0.00	na	2.60	na
WestKey Yard	0.00	0.00	na	2.60	na
Blast House Booth 1	8.34	7.09	1.18	2.60	Y
Blast House Booth 2	0.00	0.00	na	2.60	na
Wheelabrator 1	0.00	0.00	na	2.60	na
Wheelabrator 2	0.00	0.00	na	2.60	na
Wheelabrator 3	0.00	0.00	na	2.60	na
Dock 1	469.10	326.19	1.44	2.60	Y
Dock 2	119.29	42.76	2.79	2.60	N
Dock 3	0.00	0.00	na	2.60	na
Dock 4	0.00	0.00	na	2.60	na
Dock 5	0.00	0.00	na	2.60	na
Dock 6	0.00	0.00	na	2.60	na
TOTALS	864.15	514.43	1.68	2.60	Y

Facility Emission Rate Data - June 2016
Keppel AmFELS, LLC
Brownsville, Texas

Facility Wide Operations Summary					
Area	HAP Emissions (lbs)	Solids Used (gal)	HAP Emission Rate (lbs HAP/gal solids)	HAP Emission Limitation (lbs HAP/gal solids)	HAP ER less than HAP EL (Y/N)
East Yard	0.00	0.00	na	2.60	na
West Yard	0.00	0.00	na	2.60	na
WestKey Yard	0.00	0.00	na	2.60	na
Blast House Booth 1	0.00	0.00	na	2.60	na
Blast House Booth 2	0.00	0.00	na	2.60	na
Wheelabrator 1	0.00	0.00	na	2.60	na
Wheelabrator 2	0.00	0.00	na	2.60	na
Wheelabrator 3	0.00	0.00	na	2.60	na
Dock 1	435.40	276.90	1.57	2.60	na
Dock 2	0.00	0.00	na	2.60	Y
Dock 3	0.00	0.00	na	2.60	na
Dock 4	0.00	0.00	na	2.60	na
Dock 5	0.00	0.00	na	2.60	na
Dock 6	0.00	0.00	na	2.60	na
TOTALS	435.40	276.90	1.57	2.60	Y