

Chad Fackler
301 W. Rising St.
Davison, MI 48746
6/26/19

DEQ-AQD LANSING D.O.

JUL 01 2019

Samantha Braman
Environmental Quality Analyst
Air Quality Division

Dear Samantha Braman:

Thank you for contacting me, I appreciate you bringing the matter to my attention and I hope we can work together to bring a swift resolution to this problem.

Upon review of the data submitted with our 2018 MAERS report, we found two reasons for the cited violation you noted and why we did not know we were in violation:

1st – In 2018 we changed our totals formula to exclude acetone based on our belief that acetone is an exempt solvent, so emissions should be shown but not included in our VOC totals.

We came to the conclusion that acetone should be tracked but not included in the totals at the beginning of 2018 when we consulted with environmental specialists from our coating supplier, Sherwin Williams, as well as consultants from E2comply who actually prepares and submits our MAERS reports for us. Regardless, after speaking with you on the phone and reviewing the permit requirements, we agree and are now including acetone emissions in our totals and immediately adjusted our production volume in EUBOOTH4 to comply with the permit.

2nd - We found that we were overstating our VOC content on all products by using the lb/gal less exempt solvents numbers when it should use lb/gal total. For example, our vinyl sealer T67F6 VOC content was calculated as 4.55 lbs/gal instead of 1.86 lb/gal (see attached EDS for T67F6).

Based on the corrected data and formula calculations we reviewed the 12 month rolling calendar data to determine that Sept 2018 was when EUBOOTH4 went slightly over our permit limit at 24.48 and continued through the end of 2018 to 25.27, not 28.33 as stated on 2018 MAERS report.

In addition, we believe there is more information to consider that would show we did not fall out of compliance. Figure 1 is a summary of the information that was used to create our 2018 MAERS report. In this chart we included acetone VOC emissions and it shows we are in violation by 4.23 tons.

Booth 4 (top coat)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	12 MO.	VOC Content	VOC Emissions		
	18	18	18	18	18	18	18	18	18	18	18	18	TOTAL	(lbs/gal)	(tbs/yr)	ACT.	MAX
Operation hours														hrs	ACT.	ACT.	MAX
V66V21 Catalyst (goes in paint)	17.8	20.0	19.6	9.0	0.0	0.0	0.0	0.0	3.9	20.1	13.8	12.7	116.8	gal	4.76	0.28	
V66VH18 Kemvar Cat (paint Plural System)	0.0	0.0	0.0	25.0	30.0	40.0	20.0	45.0	15.0	0.0	0.0	0.0	175.0	gal	5.42	0.47	
V66V26 Catalyst for Kemvar TC													0.0	gal	6.22	0.00	
R6K30 MAK (goes in paint)	27.6	30.6	29.0	17.9	11.5	9.0	8.3	11.8	15.1	26.9	21.3	16.0	224.8	gal	6.76	0.76	
													0.0	gal	-	0.00	
H66PXW0842 White Conversion Varnish	120.0	137.0	157.0	134.0	149.0	109.0	131.0	153.0	117.0	161.0	102.0	83.0	1553.0	gal	4.07	3.16	
E63 W5 White Primer/Sealer	213.0	230.0	210.0	268.0	235.0	238.0	165.0	264.0	192.0	225.0	144.0	155.0	2539.0	gal	4.30	5.48	
H66PXW0559 Ivory Pig.Conv. Varnish	0.0	10.0	5.0	5.0	5.0	20.0	0.0	15.0	10.0	8.0	0.0	7.0	85.0	gal	4.10	0.17	
H66PXW18892 Linen Varnish	13.0	5.0	8.0	15.0	15.0	30.0	5.0	10.0	10.0	5.0	10.0	0.0	126.0	gal	4.07	0.26	
H66PXW1321 Mushroom Varnish	0.0	18.0	0.0	33.0	0.0	0.0	5.0	6.0	13.0	10.0	11.0	5.0	101.0	gal	3.92	0.20	
H66PXW17604 Polar Varnish	25.0	17.0	28.0	43.0	40.0	10.0	15.0	33.0	5.0	10.0	20.0	15.0	261.0	gal	4.00	0.52	
V66V22 Precat Catalyst (goes in sealer)	2.8	2.8	2.2	2.3	2.7	2.1	1.9	2.8	2.5	1.8	1.6	1.2	26.5	gal	4.37	0.06	
T67F6 Vinyl Sealer	235.0	237.0	184.0	195.0	230.0	180.0	165.0	235.0	212.0	150.0	140.0	100.0	2263.0	gal	4.55	5.15	
V66V27 Catalyst for Kemvar TC	29.3	29.3	25.8	27.5	31.1	25.2	19.3	30.5	25.2	23.0	15.8	13.1	295.1	gal	5.93	0.87	
V84F90041 Kemvar Clear Topcoat	250.0	250.0	220.0	235.0	265.0	215.0	165.0	260.0	215.0	196.0	135.0	112.0	2518.0	gal	4.50	5.67	
Butyl Acetate R6K18 (goes in TC)	25.0	25.0	22.0	23.5	26.5	21.5	16.5	26.0	21.5	19.6	13.5	11.2	251.8	gal	7.31	0.92	
	0.455	0.459	0.356	0.378	0.446	0.349	0.320	0.455	0.411	0.291	0.271	0.194				4.383	
																28.33	24.10

Figure 1 (Data used to compile the 2018 MAERS report)

As previously mentioned we did an audit of our EDS sheets with assistance from E2Comply and found corrections in the VOC lbs/gal for some of our coatings. We recompiled our data and listed the results in Figure 2.

Booth 4 (top coat)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	12 MO.	VOC Content	VOC Emissions		
	18	18	18	18	18	18	18	18	18	18	18	18	TOTAL	(lbs/gal)	(tbs/yr)	ACT.	MAX
Operation hours														hrs	ACT.	ACT.	MAX
V66V21 Catalyst (goes in paint)	17.8	20.0	19.6	9.0	0.0	0.0	0.0	0.0	3.9	20.1	13.8	12.7	116.8	gal	4.65	0.27	
V66VH18 Kemvar Cat (paint Plural System)	0.0	0.0	0.0	25.0	30.0	40.0	20.0	45.0	15.0	0.0	0.0	0.0	175.0	gal	5.27	0.46	
V66V26 Catalyst for Kemvar TC													0.0	gal	-	0.00	
R6K30 MAK (goes in paint)	27.6	30.6	29.0	17.9	11.5	9.0	8.3	11.8	15.1	26.9	21.3	16.0	224.8	gal	6.76	0.76	
													0.0	gal	-	0.00	
H66PXW0842 White Conversion Varnish	120.0	137.0	157.0	134.0	149.0	109.0	131.0	153.0	117.0	161.0	102.0	83.0	1553.0	gal	4.07	3.16	
E63 W5 White Primer/Sealer	213.0	230.0	210.0	268.0	235.0	238.0	165.0	264.0	192.0	225.0	144.0	155.0	2539.0	gal	4.30	5.46	
H66PXW0559 Ivory Pig.Conv. Varnish	0.0	10.0	5.0	5.0	5.0	20.0	0.0	15.0	10.0	8.0	0.0	7.0	85.0	gal	4.10	0.17	
H66PXW18892 Linen Varnish	13.0	5.0	8.0	15.0	15.0	30.0	5.0	10.0	10.0	5.0	10.0	0.0	126.0	gal	4.07	0.26	
H66PXW1321 Mushroom Varnish	0.0	18.0	0.0	33.0	0.0	0.0	5.0	6.0	13.0	10.0	11.0	5.0	101.0	gal	3.92	0.20	
H66PXW17604 Polar Varnish	25.0	17.0	28.0	43.0	40.0	10.0	15.0	33.0	5.0	10.0	20.0	15.0	261.0	gal	4.00	0.52	
V66V22 Precat Catalyst (goes in sealer)	2.8	2.8	2.2	2.3	2.7	2.1	1.9	2.8	2.5	1.8	1.6	1.2	26.5	gal	4.37	0.06	
T67F6 Vinyl Sealer	235.0	237.0	184.0	195.0	230.0	180.0	165.0	235.0	212.0	150.0	140.0	100.0	2263.0	gal	4.55	5.15	
V66V27 Catalyst for Kemvar TC	29.3	29.3	25.8	27.5	31.1	25.2	19.3	30.5	25.2	23.0	15.8	13.1	295.1	gal	5.93	0.87	
V84F90041 Kemvar Clear Topcoat	250.0	250.0	220.0	235.0	265.0	215.0	165.0	260.0	215.0	196.0	135.0	112.0	2518.0	gal	4.50	5.67	
Butyl Acetate R6K18 (goes in TC)	25.0	25.0	22.0	23.5	26.5	21.5	16.5	26.0	21.5	19.6	13.5	11.2	251.8	gal	7.31	0.92	
	0.455	0.459	0.356	0.378	0.446	0.349	0.320	0.455	0.411	0.291	0.271	0.194				4.383	
																25.27	24.10

Figure 2 (Data with corrected VOC lbs/gal)

When the corrected values are entered and with acetone included our new total is 25.27 tons, which is still 1.17 tons over our allowed limit. However, I believe there is additional information to consider. The coatings we used are catalyzed and can only be used on the day they were mixed, any left-over coating that was not sprayed must be disposed. In 2018 the coating log we kept assumed that all product that was mixed would be sprayed but that is not what actually takes place. We actually spray less than what we report because of the waste we have from left over coatings. In 2019 we started tracking what was wasted and what was actually sprayed. We found that on average we discard 11% of our primers, 14% of our pigmented top coat, and 21% of our clear top coat. We did not keep track of our wasted coating in 2018 but if you apply the same percentages that we have collected this year you get the following data.

Booth 4 (top coat) Adjusted for Waste	JAN 18	FEB 18	MAR 18	APR 18	MAY 18	JUN 18	JUL 18	AUG 18	SEP 18	OCT 18	NOV 18	DEC 18	12 MO. TOTAL	VOC Content (lbs/gal)	VOC Emissions (tons/yr)
Operation hours													hrs	ACT.	MAX
V66V21 Catalyst (goes in paint)	15.3	17.2	16.8	7.8	0.0	0.0	0.0	0.0	3.3	17.3	11.9	10.9	100.5 gal	4.65	0.23
V66VH18 Kemvar Cat (paint Plural System)	0.0	0.0	0.0	25.0	30.0	40.0	20.0	45.0	15.0	0.0	0.0	0.0	175.0 gal	5.27	0.46
V66V26 Catalyst for Kemvar TC													0.0 gal	-	0.00
R6K30 MAK (goes in paint)	23.7	26.3	24.9	15.4	9.9	7.7	7.1	10.1	13.0	23.1	18.3	13.8	193.3 gal	6.76	0.65
													0.0 gal	-	0.00
H66PXW0842 White Conversion Varnish	103.2	117.8	135.0	115.2	128.1	93.7	112.7	131.6	100.6	138.5	87.7	71.4	1335.6 gal	4.07	2.72
E63 W5 White Primer/Sealer	189.6	204.7	186.9	238.5	209.2	211.8	146.9	235.0	170.9	200.3	128.2	138.0	2259.7 gal	4.30	4.86
H66PXW0559 Ivory Pig.Conv. Varnish	0.0	8.6	4.3	4.3	4.3	17.2	0.0	12.9	8.6	6.9	0.0	6.0	73.1 gal	4.10	0.15
H66PXW18892 Linen Varnish	11.2	4.3	6.9	12.9	12.9	25.8	4.3	8.6	8.6	4.3	8.6	0.0	108.4 gal	4.07	0.22
H66PXW1321 Mushroom Varnish	0.0	15.5	0.0	28.4	0.0	0.0	4.3	5.2	11.2	8.6	9.5	4.3	86.9 gal	3.92	0.17
H66PXW17604 Polar Varnish	21.5	14.6	24.1	37.0	34.4	8.6	12.9	28.4	4.3	8.6	17.2	12.9	224.5 gal	4.00	0.45
V66V22 Precat Catalyst (goes in sealer)	2.8	2.8	2.2	2.3	2.7	2.1	1.9	2.8	2.5	1.8	1.6	1.2	26.5 gal	4.37	0.06
T67F6 Vinyl Sealer	235.0	237.0	184.0	195.0	230.0	180.0	165.0	235.0	212.0	150.0	140.0	100.0	2263.0 gal	1.86	2.10
V66V27 Catalyst for Kemvar TC	23.1	23.1	20.4	21.8	24.5	19.9	15.3	24.1	19.9	18.1	12.5	10.4	233.1 gal	5.91	0.69
V84F90041 Kemvar Clear Topcoat	197.5	197.5	173.8	185.7	209.4	169.9	130.4	205.4	169.9	154.8	106.7	88.5	1989.2 gal	4.50	4.48
Butyl Acetate R6K18 (goes in TC)	19.8	19.8	17.4	18.6	20.9	17.0	13.0	20.5	17.0	15.5	10.7	8.8	198.9 gal	7.31	0.73
	0.455	0.459	0.356	0.378	0.446	0.349	0.320	0.455	0.411	0.291	0.271	0.194			4.383
															22.35
															24.10

Figure 3 (Volumes adjusted for waste)

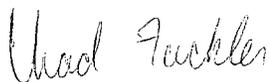
If we assume that we had similar waste level in 2018 then, our estimated VOC level for 2018 would be 22.35 tons, which is 1.75 tons under our limit. We realize that there is some speculation when applying 2019 waste level to 2018 actual data, but we believe it is relevant to the situation and should be considered.

In conclusion we believe that our actual VOC emissions for EUBOOTH4 including acetone were closer to 22.35 tons than 28.33 which was originally reported.

In order to correct this situation we have immediately taken the following steps:

1. Pioneer Cabinetry will now include acetone emissions in our VOC totals for record keeping. We keep a daily log of what is sprayed and wasted in EUBOOTH4 and will compile the information on a weekly basis to make sure we do not exceed 24.1 tons per year of VOC and acetone combined.
2. We will reduce production volume on EUBOOTH4 as needed to comply with the 24.1 tons per year limit.
3. We will apply for a permit change. As a facility we are permitted 90 tons per year of VOC emissions and only emit 49.79. We will seek permission to shift excess capacity from other booths to EUBOOTH4.

Sincerely,



Chad Fackler
 Plant Manager
 Pioneer Cabinetry Inc.

Cc: Ms. Jenine Camilleri, EGLE

✓

ENVIRONMENTAL DATA SHEET

(Certified Product Data Sheet)

24 00 [2678]

Date of Preparation
Sep 24, 2018

PRODUCT NUMBER

T67F6

PRODUCT NAME

SHER-WOOD® Fast Dry Vinyl Sealer, Clear

MANUFACTURER'S NAME

THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

This document includes all data required by 40 CFR 63.801(a) for a Certified Product Data Sheet under criteria specified in 40 CFR 63.805(a). All data given below are MAXIMUM THEORETICAL VALUES based on the product AS CURRENTLY FORMULATED. Variations may occur on individual batches due to adjustments made during production.

Product Weight

7.45 lb/gal

Specific Gravity

0.90

FLASH POINT

4 °F PMCC

Hazard Category (for SARA 311.312)

| Acute | Chronic | Fire |

Volatile Ingredients

Chemical / Compound	SARA 302 EHS	CERCLA	SARA 313 TC	HAPS 112	% by Weight	% by Volume
Ethanol 64-17-5	N	N	N	N	4	5
2-Propanol 67-63-0	N	N	N	N	4	4
1-Butanol 71-36-3	N	Y	Y	N	1	1
2-Methyl-1-propanol 78-83-1	N	Y	N	N	1	2
Acetone 67-64-1	N	Y	N	N	52	59
n-Butyl Acetate 123-86-4	N	Y	N	N	7	7
1-Methoxy-2-Propanol Acetate 108-65-6	N	N	N	N	7	6

Volatile Organic Compounds - U.S. EPA

A.	Coating Density	7.45 lb/gal	893 g/l	
B.	Total Volatiles	77.2% by wt.	85.1% by vol.	
C.	Federally exempt solvents:			
	Water	0.0% by wt.	0.0% by vol.	
	Acetone	52.2% by wt.	59.1% by vol.	
D.	Organic Volatiles	25.0% by wt.	26.0% by vol.	
E.	Percent Non-Volatile	22.8% by wt.	14.9% by vol.	
F.	VOC Content	1.86 lb/gal	223 g/l	total
		4.55 lb/gal	545 g/l	less exempt solvents
		12.48 lb/gal	1496 g/l	of solids
		1.09 lb/lb	1.09 kg/kg	of solids
		24.9%		by wt LVP-VOC
	Maximum Incremental Reactivity (MIR) (per US EPA Aerosol Ctg Rule, MIR Values 2009)			
		0.55		

Volatile Organic Compounds - California

A.	Coating Density	7.45 lb/gal	893 g/l	
B.	Total Volatiles	77.2% by wt.	85.1% by vol.	
C.	Exempt solvents:			
	Water	0.0% by wt.	0.0% by vol.	
	Acetone	52.2% by wt.	59.1% by vol.	
D.	Organic Volatiles	25.0% by wt.	26.0% by vol.	
E.	Percent Non-Volatile	22.8% by wt.	14.9% by vol.	
F.	VOC Content	1.86 lb/gal	223 g/l	total
		4.55 lb/gal	545 g/l	less exempt solvents
		12.48 lb/gal	1496 g/l	of solids
		1.09 lb/lb	1.09 kg/kg	of solids
		24.9%		by wt LVP-VOC

Maximum Incremental Reactivity (MIR) (per California Air Resources Board Aerosol Products Regulation, MIR Values 2010)
0.55

Volatile Organic Compounds - South Coast Air Quality Management District, California, US

A.	Coating Density	7.45 lb/gal	893 g/l	
B.	Total Volatiles	77.2% by wt.	85.1% by vol.	
C.	Exempt solvents:			
	Water	0.0% by wt.	0.0% by vol.	
	Acetone	52.2% by wt.	59.1% by vol.	
D.	Organic Volatiles	25.0% by wt.	26.0% by vol.	
E.	Percent Non-Volatile	22.8% by wt.	14.9% by vol.	
F.	VOC Content	1.86 lb/gal	223 g/l	total
		4.55 lb/gal	545 g/l	less exempt solvents
		12.48 lb/gal	1496 g/l	of solids
		1.09 lb/lb	1.09 kg/kg	of solids
		24.9%		by wt LVP-VOC

Volatile Organic Compounds - EU Directive 2010/75/EU

Total Volatiles	77.2% by wt.	85.1% by vol.
VOC Content	5.75 lb/gal	689 g/l

Hazardous Air Pollutants (Clean Air Act, Section 112(b))

Volatile HAPS	0.00 lb/gal	0.000 kg/l
	0.00 lb/gal	0.000 kg/l of solids
	0.00 lb/lb	0.00 kg/kg of solids

Air Quality Data**Density of Organic Solvent Blend**

6.77 lb/gal

Photochemically Reactive

No

Additional Regulatory Information**US EPA TSCA:**

Not Applicable

Relevant identified uses of the substance or mixture and uses advised against:

Not Applicable

Waste Disposal

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

T67F6

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Addition of reducers or other additives to this product may substantially alter the above data. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.