

**Burbidge & Son Ltd, Awson Street, Coventry**

**Permit No: PPC/045**

**Woodcoating**

**Solvent Management Plan**

**2017 usage**

## **1. Objective**

To establish a Solvent Management Plan following the Secretary of State's Guidance for Wood Coating PG6/33 (11 rev. 14). This document particularly refers to the requirements of paragraph 4.12.

## **2. Definitions and Interpretations**

The Guidance Note refers to specific Inputs and Outputs of organic solvent. The interpretation of the definitions in relation to Burbidge & Son Ltd is as follows;

Definition Ref	Interpretation
I <sub>1</sub>	The input quantity of VOC will be the sum of all coatings and thinners used in the application process and solvent used for cleaning purposes
I <sub>2</sub>	Organic solvents recovered and reused as solvent input into the process.
O <sub>1</sub>	The emission of VOC from the exhaust stacks in the spray booths, drying ovens and paint kitchens. This is calculated as the difference between the input VOC and the other output VOC.
O <sub>2</sub>	Burbidge & Son Ltd do not use a process where solvents are washed in water and therefore this output requirement is not applicable
O <sub>3</sub>	The potential retention of solvent in the coating is a significant problem to the industry. This can lead to coating instability that normally becomes visible as cracks in the lacquer film and also leads to the panels sticking when stacked together and to the imprinting of packaging onto the surface. As these issues are not apparent at Burbidge & Son Ltd then we believe that no solvent is retained in the final product and therefore this output requirement is not applicable.
O <sub>4</sub>	All mixing of the coating components, transfer of coatings and cleaning of application equipment is carried out in extracted areas. This output requirement is therefore not applicable.
O <sub>5</sub>	None of the coatings used at Burbidge & Son Ltd generate emissions from chemical or physical reactions and therefore this output is not applicable.
O <sub>6</sub>	Organic solvents contained in collected waste arise from the residue of coating materials left in the drums. The drums are partially vented then sealed prior to collection.  There are no processes at Burbidge & Son that involve the wiping of excess solvent. There is a very low usage of rags for housekeeping purposes. A proportion of this includes contact with a small quantity of solvent but this is carried out in a spraybooth environment and it is believed that the solvent vapour is removed by the airflow into the spraybooth.

O <sub>7</sub>	All materials mixed are used on site and not sold on as a commercially valuable product and therefore this output requirement is not applicable.
O <sub>8</sub>	Materials are sent for recovery and resale but are not reused in the process.
O <sub>9</sub>	To the best of our knowledge all solvent releases are accounted for in the above definitions and therefore this output is not applicable.

### 3. Methodology

#### Inputs

##### 3.1 Input I<sub>1</sub>

The input data for materials used in the process is calculated from information supplied by the materials manufacturers.

##### 3.2 Input I<sub>2</sub>

Organic solvents recovered and reused as solvent input into the process, I<sub>2</sub>, are calculated from the capacity of the recycle still and the number of times this is used.

#### Outputs

The known outputs cannot realistically be calculated with this level of accuracy and traceability. In order to estimate the relevant outputs the following methodologies have been used.

##### 3.3 Output O<sub>6</sub> - Organic solvents contained in collected waste arise from the residue of coating materials left in the drums.

This output is calculated from an estimated 5mm thick residual layer in a coatings container after emptying into a mixing drum or being pumped to the spray gun.

The coating VOC content used to determine O<sub>6</sub> is a weighted figure calculated from the total VOC weight of all materials in kg divided by the total usage of all materials in litres. (It is not an average VOC content of the materials used)

For example assuming a two material usage as follows

100 litres of material with a VOC content of 500 grams/litre

10 litres of material with a VOC content of 800 grams/litre

The simple average VOC content is

$$(500 + 800)/2 = 650$$

The weighted average taking into account relative volumes is

$$((100 \times 500) + (10 \times 800))/110 = 527$$

This weighted average is the VOC content of the mix.

For the residual waste calculation the average VOC content is determined from the data given in the annual VOC return and is calculated by dividing the total VOC by the total volume of material.

The volume of material in a drum varies with the type of material. For a typical full drum the depth of material would be 500mm. The residue therefore is equivalent to 1% of the drum height and therefore volume of coating in the drum. The calculated average coating VOC content can be used to determine the VOC content of the residue then extrapolated to give a total for O<sub>6</sub>. The average coating VOC content of the residue is 65.61%. Therefore the residual VOC equates to 65.61% of the 1% of residue i.e. 0.6561%. The output O<sub>6</sub> is therefore 0.6561% of the materials given in I<sub>1</sub>.

3.4 Output O<sub>8</sub> - Materials are sent for recovery and resale but are not reused in the process.

The data for solvent materials sent for recovery is calculated from information supplied by the recycling contractor.

#### **4. Determination of Annual Solvent Consumption**

The VOC content and solids content are available from data supplied by the coating manufacturer. The VOC or solids content of the total coating used can be determined by multiplying the volume by VOC or solids content as appropriate.

The annual actual consumption of organic solvents (C) is

$$C = I_1 - O_8$$

#### **5. Determination of Target Emission**

The Target Emission for a wood coating installation in the 15 tonne or more solvent consumption band is

$$\text{Total Mass of Solids} \times 1.0 \text{ (see Table 6 PG6/33(11))}$$

Compliance with the Reduction Scheme is achieved if the annual actual solvent emission determined by the Solvent Management Plan is less than or equal to the Target Emission.

## **6. Determination of Annual Actual Solvent Emission**

The annual actual solvent emission (para 4.7 PG6/33(11)) is

$$I_1 - O_8 - O_7 - O_6$$

## **7. Solvent Management Plan**

Using the definitions in paragraph 4.12 the input of VOC is

$$I_1$$

The outputs are

$$O_1 + O_6 + O_8 \text{ (other outputs equal zero)}$$

where

$I_1$ = the quantity of organic solvents used in preparations and as thinners is taken from the annual VOC return

$O_1$ = the quantity of organic solvent in exhaust stacks from the spray booths, drying ovens and paint kitchens and is the difference between the input VOC and the other outputs

$O_6$ = organic solvents contained in collected empty drums and is calculated in section 3.3

$O_8$ = organic solvents sent for recovery and re-sale but not re-used on site

For Burbidge & Son Ltd during 2017

$I_1 = 52.356$  tonnes

$O_1 = 34.054$  tonnes

$O_6 = 0.339$  tonnes

$O_8 = 18.302$  tonnes

The annual actual consumption (C) of organic solvents in 2017 is

$$C = 52.356 - 18.302 = 34.054 \text{ tonnes}$$

The annual actual solvent emission for Burbidge & Son Ltd in 2017 equals

$$O_1 = 52.356 - 18.302 - 0.339 = 33.751 \text{ tonnes}$$

The total mass of solids is shown in the annual VOC return for Burbidge & Son Ltd. and is

24.310 tonnes

The target emission is therefore

$$24.310 \times 1.0 = 24.310 \text{ tonnes}$$

The annual actual solvent emission is therefore greater than the target emission.

The ratio for 2017 was 1.38:1

## **Data**

## Renner Ltd

CODE	TOTAL PURCHASES	UM	DESCRIPTION	DENSITY	VOC g/LT	SOLIDS g/LT	VOC TOTAL KG	SOLIDS TOTAL KG
AY---M460/-----51	150	KG	WB CLEANER	0.984	192	0	29.3	0.0
CDA 478/-----51	25	KG	MUSSEL WB TOPCOAT	1.181	70	476	1.5	10.1
CDA 733/-----51	950	KG	SOFT GREY WB TOPCOAT	1.122	33	451	27.9	381.9
CDA 751/-----51	400	KG	ALABASTER WB UV TOPCOAT	1.122	32	450	11.4	160.4
CDA 752/-----51	550	KG	PUTTY WB UV	1.122	32	451	15.7	221.1
DA 374/-----51	475	KG	SEAL GREY UV TOPCOAT - B	1.110	34	450	14.5	192.6
DF---M008/-----46	300	LT	SOLVENT FOR PU	0.836	836	0	250.8	0.0
DS 370/-----54	500	KG	GREY PRIMER - BURBIDGE	1.174	174	516	74.1	219.9
FC---M003/-----41	300	LT	PU HARDENER	0.933	709	224	212.7	67.3
YC---M402/-----10	100	KG	HARDENER FOR WB PU	1.090	218	771	20.0	70.7
<b>Grand Total</b>	<b>3750</b>						<b>657.9</b>	<b>1324.0</b>

**Sherwin &  
Williams**

Item	Description	Contents	Invoiced	Total Weight or Volume	Density Kg/L	VOC g/L	Solids Wt %	Solids g/L	VOC kg	Solids kg		
AF0618/00-6	AF0618/00 WB SELF SEALER 6KG	6.00	KG	4	24.00	KG	1.04	5.89	29.10	302.35	0.14	6.98
AF7210/00-6	AF7210/00 CLEAR WB 10% 6L	6.00	L	2	12.00	L	1.02	59.00	31.80	324.36	0.71	3.89
DM1132-0025-C	DM1132-0025 AC TOPCOAT 25% 20L	20.00	L	5	100.00	L	0.98	490.00	50.00	490.00	49.00	49.00
DM394-0010-C	DM394-0010 MATT AC TOPCOAT 10% 20L	20.00	L	110	2,200.00	L	0.98	490.00	50.00	490.00	1,078.00	1,078.00
DT1150/00-25	DT1150 CLEAR 25L	25.00	L	15	375.00	L	0.85	848.00	0.00	0.00	318.00	0.00
DT1150/00-25	DT1150 CLEAR 25L	25.00	L	264	6,600.00	L	0.85	848.00	0.00	0.00	5,596.80	0.00
DT2004-P	DT2004 CLEAR 20L	20.00	L	15	300.00	L	0.86	861.15	0.00	0.00	258.35	0.00
DV309-D2	DV309 CLEAR 2L	2.00	L	13	26.00	L	0.87	675.00	74.82	650.93	17.55	16.92
DV309-A	DV309 CLEAR 25L	25.00	L	22	550.00	L	0.91	675.00	25.00	226.25	371.25	124.44
ZZL0455005	L0455 BLACK TZ9910 5KG	5.00	L	1	5.00	L	1.11	525.15	52.46	579.68	2.63	2.90
ZZL0987005	L0987 OLD WHITE/SAGE TZ9910 5KG	5.00	KG	2	10.00	KG	1.37	460.62	66.25	904.47	3.37	6.63
ZZL0987005	L0987 OLD WHITE/SAGE TZ9910 5KG	5.00	KG	45	225.00	KG	1.37	460.62	66.25	904.47	75.92	149.07
ZZL0988005	L0988 CREAM TZ9910 5KG	5.00	KG	175	875.00	KG	1.35	460.42	65.95	891.69	297.98	577.09
ZZL1222005	L1222005	5.00	KG	10	50.00	KG	1.37	460.62	66.25	904.31	16.87	33.13
ZZL1437005	L1437A Cornflower TZ9910 5L	5.00	L	140	700.00	L	1.35	458.68	66.05	892.15	321.08	624.50
ZZL2569500	L2569 OLD WHITE TOUCH UPS 500ML	0.50	L	30	15.00	L	1.19	578.05	51.43	612.28	8.67	9.18
ZZL2607500	L2607 SZ9910 CORNFLOWER 500ML	0.50	L	30	15.00	L	1.20	577.62	51.95	624.44	8.66	9.37
ZZL2609500	L2609 TOUCH UP POTS 500ML	0.50	L	50	25.00	L	1.20	577.62	51.95	624.57	14.44	15.61
ZZL2766005	L2766 OYSTER MATT PU TOPCOAT 5KG	5.00	KG	10	50.00	KG	1.37	460.62	66.25	904.45	16.87	33.13
ZZL2766005	L2766 OYSTER MATT PU TOPCOAT 5KG	5.00	KG	200	1,000.00	KG	1.37	460.62	66.25	904.45	337.40	662.50
ZZL2931005	L2931 GRAVEL TZ9910 5KG	5.00	KG	185	925.00	KG	1.37	460.62	66.26	904.62	312.07	612.89
ZZL2975500	L2975 OYSTER TOUCH UP 500ML	0.50	L	60	30.00	L	1.20	577.62	51.95	624.69	17.33	18.74
ZZL3081005	L3081 HESSIAN TZ9910 5KG	5.00	KG	60	300.00	KG	1.37	460.62	66.25	904.31	101.24	198.75
ZZL3319500	L3319500	0.50	L	10	5.00	L	1.20	577.62	51.94	624.32	2.89	3.12
ZZL3368005	L3368 SLATE TZ9910 5L	5.00	L	102	510.00	L	1.11	525.15	52.47	580.10	267.83	295.85
ZZL3369005	L3369 CHALK PU TZ9910 5KG	5.00	KG	200	1,000.00	KG	1.37	460.62	66.25	904.82	337.28	662.53
ZZL3370005	L3370 BONE PU TZ9910 5KG	5.00	KG	175	875.00	KG	1.37	460.62	66.26	904.39	295.27	579.74
ZZL3371005	L3371 PUTTY TZ9910 5KG	5.00	KG	180	900.00	KG	1.37	460.62	66.25	904.49	303.66	596.28
ZZL3552005	L3552 CREAM 64 TZ9910 5KG	5.00	KG	2	10.00	KG	1.37	460.62	66.25	904.31	3.37	6.63
ZZL3618500	L3618500	0.50	L	30	15.00	L	1.20	577.62	51.94	624.32	8.66	9.36
ZZL3619500	L3619 CHALK NC TOUCH UP 500ML	0.50	L	50	25.00	L	1.20	577.62	51.95	624.83	14.44	15.62

ZZL3620500	L3620500	0.50	L	60	30.00	L	0.97	719.99	25.02	241.94	21.60	7.26
ZZL3623500	L3623 PUTTY NC TOUCH UP 500ML	0.50	L	210	105.00	L	1.19	580.57	51.04	605.33	60.96	63.56
ZZL4911005	L4911 JUTE PU TOPCOAT TZ9910 5KG	5.00	KG	60	300.00	KG	1.37	460.62	66.25	904.83	101.18	198.76
ZZL4944005	L4944 SOFT GREY PU TZ9910 5KG	5.00	KG	295	1,475.00	KG	1.37	460.62	66.25	904.76	497.52	977.25
ZZL5039005	L5039 CHARCOAL TZ9910 5L	5.00	L	125	625.00	L	1.11	525.15	52.47	580.18	328.22	362.61
ZZL5231500	L5231500	0.50	L	30	15.00	L	1.20	577.62	51.94	624.32	8.66	9.36
ZZL5232500	L5232 SOFT GREY NC TOUCH UP 500ML	0.50	L	260	130.00	L	1.20	577.62	51.94	624.38	75.09	81.17
ZZL5233500	L5233 CHARCOAL NC TOUCH UP 500ML	0.50	L	50	25.00	L	0.96	719.99	25.02	240.19	18.00	6.00
ZZL5290005	L5290 MATT PU DOWN PIPE 5L	5.00	L	175	875.00	L	1.11	525.15	52.47	580.08	459.51	507.57
ZZL5493005	L5493 KASHMIR PU TZ9910 5KG	5.00	KG	80	400.00	KG	1.36	457.14	66.48	906.36	134.12	265.91
ZZL5620005	L5620 MOLES BREATH TZ9910 5L	5.00	L	135	675.00	L	1.11	525.15	52.46	579.68	354.48	391.29
ZZL5716005	L5716 CEMENT MATT PU TOPCOAT 5KG	5.00	KG	40	200.00	KG	1.37	460.62	66.26	904.74	67.47	132.51
ZZL5756005	L5756 MUSSEL TZ9910 PU 5KG	5.00	KG	45	225.00	KG	1.37	460.62	66.25	904.46	75.92	149.06
ZZL5757005	L5757 ALABASTER TZ9910 5KG	5.00	KG	55	275.00	KG	1.37	460.62	66.26	904.57	92.79	182.21
ZZL5758005	L5758 GOOSEBERRY PU TOPCOAT 5KG	5.00	KG	100	500.00	KG	1.37	460.62	66.26	904.73	168.66	331.28
ZZL5760005	L5760005	5.00	L	5	25.00	L	1.11	525.15	52.46	579.68	13.13	14.49
ZZL5761005	L5761 LEAD PU TZ9910 5KG	5.00	KG	215	1,075.00	KG	1.37	460.62	66.25	904.55	362.68	712.22
ZZL5845500	L5845 CASHMERE TOUCH UP SZ9910	0.50	KG	20	10.00	KG	1.20	577.62	51.94	624.32	4.81	5.19
ZZL5847500	L5847 GREY TEAL TOUCH UP SZ9910	0.50	L	10	5.00	L	1.20	577.62	51.95	624.73	2.89	3.12
ZZL5849500	L5849 MUSSEL TOUCH UP 500ML	0.50	L	20	10.00	L	1.20	577.62	51.94	624.32	5.78	6.24
ZZL5850500	L5850 500ML ALABASTER	0.50	L	100	50.00	L	1.20	577.62	51.94	624.32	28.88	31.22
ZZL5851500	L5851 500ML	0.50	L	30	15.00	L	1.20	577.62	51.94	624.32	8.66	9.36
ZZL5853500	L5853 TOUCH UP PAINT LEAD	0.50	L	60	30.00	L	1.20	577.62	51.95	624.53	17.33	18.74
ZZL6161005	L6161 PORCELAIN TZ9910 5KG L6406 BURBIDGE LIGHT GREY TZ9910	5.00	KG	11	55.00	KG	1.37	460.62	66.25	904.31	18.56	36.44
ZZL6406005	5KG	5.00	KG	16	80.00	KG	1.36	466.64	65.62	890.46	27.51	52.50
ZZL6495005	L6495 BLUE GRAY TZ9910 5KG	5.00	KG	95	475.00	KG	1.37	453.97	66.91	917.63	157.23	317.81
ZZL6537005	L6537 PEWTER TZ9910 5L	5.00	L	50	250.00	L	1.02	476.00	53.13	539.27	119.00	134.82
ZZL6538005	L6538 OLD NAVY TZ9910 5KG	5.00	KG	115	575.00	KG	1.14	499.84	55.99	635.77	253.09	321.92
ZZL6598005	L6598 MALMO WHITE TZ9910 5KG	5.00	KG	160	800.00	KG	1.35	460.77	65.90	890.33	272.85	527.22
ZZL6789500	L6789 SEAL GREY TOUCH UP SZ9910	0.50	L	60	30.00	L	0.96	719.99	25.03	240.95	21.60	7.23
ZZL6790500	L6790 GRAVEL SZ9910 TOUCH UP	0.50	L	20	10.00	L	1.20	577.62	51.95	624.40	5.78	6.24
ZZL6791500	L6791 MINK TOUCH UP SZ9910	0.50	L	50	25.00	L	0.97	719.99	25.02	242.29	18.00	6.06
ZZL6792500	L6792 OLD NAVY TOUCH UP SZ9910	0.50	L	40	20.00	L	0.97	719.99	25.03	241.93	14.40	4.84
ZZL6793500	L6793 PEWTER SZ9910 TOUCH UP	0.50	L	30	15.00	L	1.20	577.62	51.94	624.73	8.66	9.37
ZZL6794500	L6794 SOFT MOSS SZ9910 TOUCH UP	0.50	L	30	15.00	L	1.20	577.62	51.94	624.59	8.66	9.37
ZZL6795500	L6795 MATT WHITE TOUCH UP 500ML	0.50	L	20	10.00	L	1.20	577.62	51.94	624.33	5.78	6.24
ZZL7156005	L7156 MARINE BLUE TZ9910 5L	5.00	L	18	90.00	L	1.12	497.19	55.75	626.33	44.75	56.37

ZZL7157005	L7157 TRUE TAUPE TZ9910 5L	5.00	L	32	160.00	L	1.21	497.59	58.86	712.02	79.61	113.92
ZZL7187005	L7187 POWDER TZ9910 5KG	5.00	KG	22	110.00	KG	1.35	460.08	65.96	891.32	37.45	72.56
ZZL7188005	L7188 CHAMOIS TZ9910 5L	5.00	L	22	110.00	L	1.19	499.76	57.97	689.16	54.97	75.81
ZZL7189005	L7189 PALE NAVY TZ9910 5L	5.00	L	37	185.00	L	1.17	494.13	57.60	671.37	91.41	124.20
ZZL7283500	L7283 PEIGNOR 286 SZ9910 500ML	0.50	L	10	5.00	L	1.19	580.93	50.97	604.00	2.90	3.02
ZZL7284500	L7284 TRUE TAUPE 240 500ML	0.50	L	10	5.00	L	1.13	654.54	41.99	473.73	3.27	2.37
ZZL7285500	L7285 NEPTUNE LEAD LIGHT 500ML	0.50	L	10	5.00	L	1.11	656.98	40.80	452.71	3.28	2.26
ZZL7286500	L7286 JUNIPER ASH 500ML	0.50	L	29	14.50	L	1.11	631.09	43.13	478.50	9.15	6.94
ZZL7287500	L7287 MARINE BLUE 95 500ML	0.50	L	10	5.00	L	1.05	646.49	38.64	407.00	3.23	2.03
ZZL7351025	L7351 SOFT GREY AR6125 25KG	25.00	KG	1	25.00	KG	1.19	0.01	0.78	9.29	0.00	0.20
ZZL7652025	L7652 SOFT GREY AR3105 25KG	25.00	KG	1	25.00	KG	1.15	14.18	42.36	488.01	0.31	10.59
BUTACE025	N-BUTYL ACETATE 25L	25.00	L	6	150.00	L	0.88	880.00	0.00	0.00	132.00	0.00
BUTACE025	N-BUTYL ACETATE 25L P352 SMOKEMALMO 25L SOLVENT	25.00	L	30	750.00	L	0.88	880.00	0.00	0.00	660.00	0.00
ZZP352025	STAIN	25.00	L	2	50.00	L	0.86	815.78	5.09	43.77	40.79	2.19
ZZP833020	P833 TINTED WOODWASH 20L	20.00	L	1	20.00	L	0.95	739.22	22.13	210.90	14.78	4.22
ZZP899025	P899 ARS5122 SOFT GREY 25KG	25.00	KG	1	25.00	KG	1.18	49.10	41.65	490.22	1.04	10.41
SU0340/13-20	SU0340/13 PRE CAT WHT PRIMER 20L	20.00	L	17	340.00	L	1.20	639.00	53.28	639.36	217.26	217.38
SU0340/13-20	SU0340/13 PRE CAT WHT PRIMER 20L THL3355/00 CLEAR ACRYLIC	20.00	L	57	1,140.00	L	1.20	639.00	53.28	639.36	728.46	728.87
THL3355/00-5	HARDERNER	5.00	L	533	2,665.00	L	0.89	724.74	18.90	168.97	1,931.43	450.29
TH0720/00-12,5	TH720 CLEAR PU HARDENER 12.5L	12.50	L	45	562.50	L	0.96	707.00	26.00	248.30	397.69	139.67
TH0720/00-12,5	TH720 CLEAR PU HARDENER 12.5L	12.50	L	512	6,400.00	L	0.96	707.00	26.00	248.30	4,524.80	1,589.12
TH0735/00-12,5	TH735 CLEAR HARDENER 12.5L TUL3535/13 WHITE ACRYLI BASECOAT	12.50	L	3	37.50	L	1.00	0.00	44.00	439.12	0.00	16.47
TUL3535/13-20	20L	20.00	L	527	10,540.00	L	1.25	617.87	50.42	628.23	6,512.35	6,621.58
TU6110/00-25	TU6110/00 CLEAR PU 10% 25L	25.00	L	4	100.00	L	0.97	558.00	42.44	411.67	55.80	41.17
TV132-J	TV132 PU HARDNER 12.5L	12.50	L	1	12.50	L	0.98	539.90	45.00	441.90	6.75	5.52
WM1629-0005-C	WM1629-0005 DEADMATT WB UV TOP 20L	20.00	L	50	1,000.00	L	1.05	55.86	36.23	380.78	55.86	380.78
<b>Totals</b>					<b>51,719.00</b>						<b>29,906.52</b>	<b>22,986.23</b>



**VOC AUDIT FOR BURBIDGE & SON LIMITED**

01/01/17 - 31/12/17

<u>Stock Code</u>	<u>Stock Description</u>	<u>S.G.</u>	<u>Solids (g/l)</u> <u>DEFRA 3</u>	<u>VOC (g/l)</u> <u>(DEFRA 4)</u>	<u>Quantity (L)</u> <u>DEFRA 5</u>	<u>Mass of</u> <u>Solvent (Kg)</u>	<u>Mass of</u> <u>Solids (Kg)</u>
31608/25/BRG	Standard Thinners	0.85	0.00	834.91	26,100.00	21,791.18	0.00
EMPTY/205/OWB	Delivery empty 205L O/top barrel fo			0.00	136.00	0.00	
FORM	Hazardous waste consignment note			0.00	31.00	0.00	
MOBILE	Collect Paint Waste Sludge (Fully F	0.90	-180.00	-720.00	17,630.00	-12,693.60	-3,173.40
THICK	Collect heavy / thick waste paint sl	0.90	-180.00	-720.00	7,790.00	-5,608.80	-1,402.20
THICK/205/OWB	Deliver empty open drum for waste	0.90	0.00	0.00	820.00	0.00	0.00
<b>Grand Totals</b>				<b>52,507.00</b>	<b>3,488.78</b>	<b>-4,575.60</b>	

Burbidge & Son Ltd, Awson Street, Coventry

Permit No: PPC/045

Coatings on Wood, Usage 2017

Recovery

Company	Type	VOC kg/l	total litres	total VOC kg
Intercoat	waste to reclaim	0.720	25,420	18,302
			Total	18,302

Burbidge & Son Ltd, Awson Street, Coventry

Permit No: PPC/045

Coatings on Wood, Usage 2016

VOC by supplier/ tonnes	Sherwin Williams	29.907
	Intercoat	21.791
	Renner	0.658
Total VOC Input (I <sub>1</sub> )/ tonnes		52,356

Total VOC Output in tin residues (O <sub>6</sub> )/tonnes	0.339
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Total VOC Output to Reclaim (O <sub>8</sub> )/tonnes	18.302
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<b>Nett Consumption VOC (C<sub>1</sub>)/ tonnes</b>	<b>33.715</b>
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Solids by supplier/ tonnes	Sherwin Williams	22.986
	Intercoat	0
	Renner	1.324
<b>Total solids/ tonnes</b>		<b>24.310</b>

<b>Ratio VOC : solids</b>	<b>1.38 : 1</b>
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### **Solvent reduction progress and other areas of investigation during 2017**

- The company has continued to undertake testing and development work to identify suitable low solvent and high solids coatings.
- Waterborne coatings have been tested extensively but have had drying problems
- The solvent reclaim still has been out of action for part of the year awaiting repair