



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Engineering and Compliance Office

APPLICATION PROCESSING AND CALCULATIONS

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Deminimus Significant Title V Permit Revision  
Change of Rule 1401 Condition B59.4  
Roller Coater, D27

Legal Owner  
or Operator:

ARDAGH METAL PACKAGING USA INC  
936 BARRACUDA STREET  
TERMINAL ISLAND, CA 90731

ID: 124619

Equipment  
Location:

936 BARRACUDA STREET, TERMINAL ISLAND, CA 90731

Equipment Description:

A/N 540066 [Title V Permit Revision]

Equipment	ID No.	Connected To	Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 1: Lithographic Printing</b>					
COATER, ROLL, LINE NO. 3, WAGNER A/N: 49262+ 540065	D27	C29		VOC: (9) [RULE 1125, 1-13-1995; RULE 1125, 3-7-2008; RULE 1171, 2-1-2008; RULE 1171, 5-1-2009]	A63.1, <u>A63.5</u> , B59.4, H23.4, K67.1

History

The applicant was previously known as Impress USA Inc. Since 4-15-11, its name has been changed to Ardagh Metal Packaging USA Inc. An administrative Facility name change request was submitted under A/N 526013.

In this project, the applicant is proposing to amend an existing condition, No. B59.4, which currently states:

"Materials containing any toxic air contaminants listed in Table 1 of Rule 1401, with effective date of May 2, 2003 or earlier, except ethyl benzene (CAS 100-41-4), ethylene glycol butyl ether (CAS 11-76-2), formaldehyde (CAS 50-00-0), isophorone (CAS 78-59-1), methyl ethyl ketone (CAS 78-93-3), toluene (CAS 108-88-3) and xylenes (CAS 1330-20-7)."

with a revised condition, B59.4, which will state:

"Materials containing any toxic air contaminants listed in Table 1 of Rule 1401, with effective date of September 10, 2010 or earlier, except ethyl benzene (CAS 100-41-4), ethylene glycol butyl ether (CAS 11-76-2), formaldehyde (CAS 50-00-0), isophorone (CAS 78-59-1), methyl ethyl ketone (CAS 78-93-3), toluene (CAS 108-88-3), naphthalene (CAS 91-20-3), propylene glycol mono methyl ether (CAS 107-98-2), and xylenes (CAS 1330-20-7)."



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Ardagh is not proposing to increase its throughput. Therefore, emission increases of criteria pollutants are not expected from the proposed project.

The company Title V Permit has been renewed on 1-19-11. This project is considered a De minimus Significant Permit Revision to the renewal Title V permit.

The company operates various pieces of equipment at the above address without causing any public nuisances. A Notice of Violation (NOV) P54960 was served on 6-23-11 for not complying with the existing B59.4 condition of using materials containing naphthalene in device D27 roll coater on 01-01-10. This project is in response to the NOV since Ardagh is anticipating future use of naphthalene containing materials after this project is approved.

In addition, Ardagh was issued a Notice to Comply on 6-29-12, requiring the applicant to provide various emission records and proof of compliance with permit conditions. The applicant provided the requested records and is currently operating in compliance with the permit conditions and District rules and regulations.

### Process Description

This facility manufactures metal containers. The facility operates roller coaters, flow coaters, ovens, storage tanks, and other supporting equipment. VOC emissions from the metal coating operation are vented to two afterburners.

### Emission Calculations

The D27 roller coater is subject to A63.1 condition with a monthly VOC emission limit of not more than 9240 pounds. The applicant is not proposing any changes to this condition. Therefore, this project is expected to result in no VOC emission increases.

The company is however proposing to change condition B59.4 by adding the usage of material containing naphthalene and propylene glycol mono methyl ether (PGME) to the list of material allowed to be used in the roller coater D27. The company is proposing a daily maximum usage of up to 400 gallons for a combination of the following naphthalene and PGME-containing materials in D27:



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<b>Coating Product ID</b>	<b>Density (lb/gal)</b>	<b>VOC (lb/gal)</b>	<b>Average usage (gal/day)</b>	<b>Maximum usage (gal/day)</b>
Modified Polyester (20S67WE)	8.35	5.51	200	400
Exterior Closure Coating (26S96ED)	11.70	4.27	200	400
Exterior Closure Coating (26S96EF)	11.69	4.27	200	400
Exterior Varnish (27S92AD)	8.41	4.78	200	400
Valspar 31S44AM	8.37	5.44	200	400
Valspar 31S44AP	8.50	5.20	200	400
Clear Polyester Exterior (31S44AD)	8.30	5.40	200	400
Modified Flexible Topcoat for EOE (657HE13501)	8.67	4.82	200	400
<i>MAXIMUM values</i>	11.70	5.51		

NSR (=AEIS) :

$$\text{VOC (R1)} = (400)(5.51) \text{ lb/dy} = 2204 \text{ lb/dy}$$

$$= 2204/24 \text{ lb/hr} = 91.83 \text{ lb/hr}$$

$$\text{VOC (R2)} = (2204)(1-90\%) \text{ lb/dy} = 220.4 \text{ lb/dy}$$

$$= 220.4/24 \text{ lb/hr} = 9.18 \text{ lb/hr}$$

Since VOC emission increases are not expected from this project, the 30-DA value has been manually entered as zero for this project.

Rule 1401 Evaluation

Based on MSDS, the above proposed coatings contain the following naphthalene and PGME in weight percentages:

<b>Coating Product ID</b>	<b>naphthalene</b>	<b>PGME</b>
Modified Polyester (20S67WE)	1.3	
Exterior Closure Coating (26S96ED)	2.2	
Exterior Closure Coating (26S96EF)	2.5	
Exterior Varnish (27S92AD)	0.5	
Valspar 31S44AM	1.7	1.9



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<i>Valspar 31S44AP</i>	1.6	1.8
<i>Clear Polyester Exterior (31S44AD)</i>	1.44	
<i>Modified Flexible Topcoat for EOE (657HE13501)</i>	1.8	
<i>MAXIMUM values</i>	2.5	1.9

The above maximum values for 2.5 weight % of naphthalene and 1.9 weight % of PGME are used in calculations for a worst case analysis. The applicant has agreed to a monthly limit of 53 pounds of naphthalene. The following is a summary of calculated risks:

<i>Compound</i>	<i>MICR Residential</i>	<i>MICR Commercial</i>
<i>Naphthalene</i>	6.70E-07	9.99E-07
<b>Total</b>	6.70E-07	9.99E-07
	<b>PASS</b>	<b>PASS</b>

<b>Cancer Burden:</b>	<b>1.13E-05</b>
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<b>Target Organs</b>	<b>Acute</b>	<b>Chronic</b>	<b>Acute Pass/Fail</b>
Alimentary system (liver) - AL		1.07E-04	Pass
Bones and teeth - BN			Pass
Cardiovascular system - CV			Pass
Developmental - DEV			Pass
Endocrine system - END			Pass
Eye			Pass
Hematopoietic system - HEM			Pass
Immune system - IMM			Pass
Kidney - KID			Pass
Nervous system - NS			Pass
Reproductive system - REP			Pass
Respiratory system - RES		1.63E-02	Pass
Skin			Pass

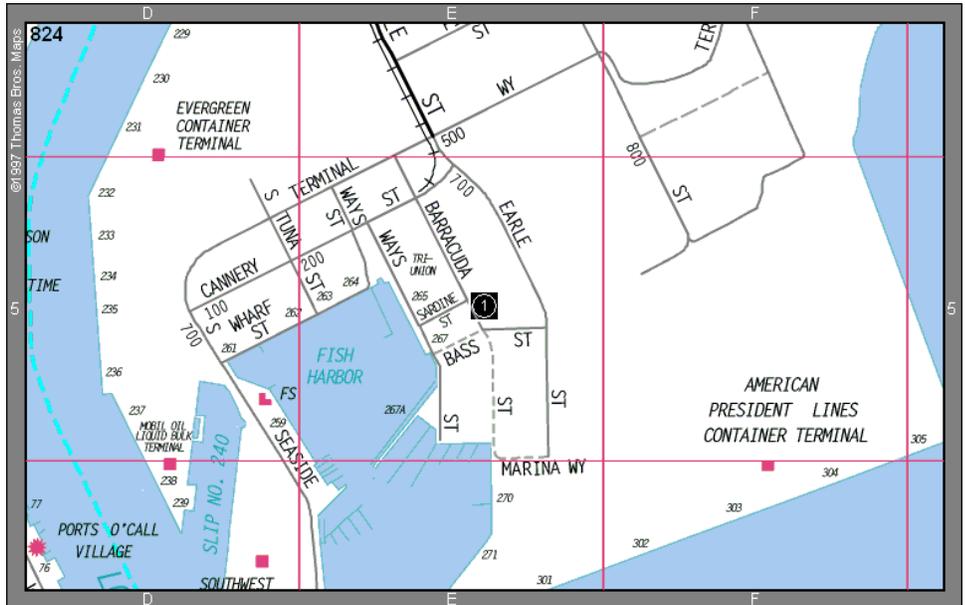


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### Rule Evaluation

Rule 212(c)(1):

This section requires a public notice for all new or modified permit units that may emit air contaminants located within 1,000 feet from the outer boundary of a school.



Since no school is located within 1,000 ft, a public notice will not be required.

Rule 212(c)(2):

This section requires a public notice for all new or modified facilities that have on-site emission increases exceeding any of the daily maximums as specified by Rule 212(g).

	Controlled Emissions (lb/dy)					
	ROG	NO <sub>x</sub>	PM <sub>10</sub>	SO <sub>2</sub>	CO	Pb
Total R1=R2 Emission Increase	0	0	0	0	0	0
MAX Limit	30	40	30	60	220	3
Compliance Status	Yes	Yes	Yes	Yes	Yes	yes

The above table summarizes the emission limits and increases. Since emission increases are less than the limits, a public notice will not be required.

Rule 212(c)(3):

The proposed project results in TAC emission increases. However, the calculated MICR is less than 1E-6. Therefore, for this project, a public notification will not be required.



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Rule 212(g)(2): This section requires a public notice for all new or modified sources that have equipment emission increases exceeding any of the daily maximums as specified by Rule 212(g).

	Controlled Emissions (lb/dy)					
	ROG	NO <sub>x</sub>	PM <sub>10</sub>	SO <sub>2</sub>	CO	Pb
Total R1=R2 Emission Increase	0	0	0	0	0	0
MAX Limit	30	40	30	60	220	3
Compliance Status	Yes	Yes	Yes	Yes	Yes	yes

The above table summarizes the emission limits and increases. Since emission increases are less than the limits, a public notice will not be required.

Rule 401: Visible emissions are not expected with the proper operation of the equipment.

Rule 402: Nuisance is not expected with the proper operation of the equipment.

Rule 1125 & 1171: The proposed project will not result in changes in throughput or the addition of any new VOC-containing materials used in the roller coater. The company will continue to use the same compliant VOC-containing materials. In addition, VOC emissions are controlled by an air pollution control system that achieves a minimum overall efficiency of 90%.

Rule 1303(a): No VOC emission increases are expected. Therefore, this project is not subject to BACT requirements.

Rule 1303(b)(1): The proposed project will not result in any criteria pollutant emission increase. Therefore, the requirements of this rule are not triggered.



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Rule 1303(b)(2): The following summarizes the estimated emission increases from this project:

	Controlled Emissions (lb/dy)				
	ROG	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	CO
Total Emission Increase	0	0	0	0	0

Thus, there is no offset needed for this project.

Rule 1401: The applicant is agreed to a monthly naphthalene emission limit of 53 pounds. The attached calculation worksheets show that the project passes Tier III screening, with MICRs, HIAs & HICs, less than 1E-6, 1.0 & 1.0 respectively.

Regulation XXX Evaluation

This facility is in the RECLAIM program. The proposed project is considered as a "de minimis significant permit revision" for non-RECLAIM pollutants or hazardous air pollutants (HAPs), and a "minor permit revision" for RECLAIM pollutants to the RECLAIM/Title V permit for this facility.

Non-RECLAIM Pollutants or HAPs

Rule 3000(b)(6) defines a "de minimis significant permit revision" as any Title V permit revision where the cumulative emission increases of non-RECLAIM pollutants or HAPs from these permit revisions during the term of the permit are not greater than any of the following emission threshold levels:

Air Contaminant	Daily Maximum (lbs/day)
HAP	30
VOC	30
NO <sub>x</sub> *	40
PM <sub>10</sub>	30
SO <sub>x</sub> *	60
CO	220

\* Not applicable if this is a RECLAIM pollutant



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To determine if a project is considered as a "de minimis significant permit revision" for non-RECLAIM pollutants or HAPs, emission increases for non-RECLAIM pollutants or HAPs resulting from all permit revisions that are made after the issuance of the Title V renewal permit] shall be accumulated and compared to the above threshold levels. This proposed project is the 1st permit revision to the Title V renewal permit issued to this facility on January 19, 2011. The following table summarizes the cumulative emission increases resulting from all permit revisions since the Title V renewal permit was issued:

	HAP	VOC	NOx*	PM10	SOx	CO
Revision-Name Change	0	0	0	0	0	0
Revision-R1401 CC	1.76	0	0	0	0	0
Cumulative Total	1.76	0	0	0	0	0
Maximum Daily	30	30	40	30	60	220

\*RECLAIM pollutant (Ardagh is in NOx RECLAIM program)

Since the cumulative emission increases resulting from all permit revisions are not greater than any of the emission threshold levels, this proposed project is considered as a "de minimis significant permit revision" for non-RECLAIM pollutants or HAPs.

RECLAIM Pollutants

Rule 3000(b)(12)(A)(v) defines a "minor permit revision" as any Title V permit revision that does not result in an emission increase of RECLAIM pollutants over the facility starting Allocation plus nontradeable Allocations, or higher Allocation amount which has previously undergone a significant permit revision process.

Since NOx is a RECLAIM pollutant for this facility, a separate analysis shall be made to determine if the proposed permit revision is considered a "minor permit revision" for RECLAIM pollutants. The proposed change of permit condition will not result in any NOx emissions increase. As a result, this proposed project is considered as a "minor permit revision" for RECLAIM pollutants.



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Recommendation

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a "de minimis significant permit revision" for non-RECLAIM pollutants or hazardous air pollutants (HAPs), and a "minor permit revision" for RECLAIM pollutants, it is exempt from the public participation requirements under Rule 3006(b). A proposed permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not have any objections within the review period, a revised Title V/RECLAIM permit will be issued to this facility with the following revised B59.4 condition and new condition A63.5:

B59.4 "Materials containing any toxic air contaminants listed in Table 1 of Rule 1401, with effective date of September 10, 2010 or earlier, except ethyl benzene (CAS 100-41-4), ethylene glycol butyl ether (CAS 11-76-2), formaldehyde (CAS 50-00-0), isophorone (CAS 78-59-1), methyl ethyl ketone (CAS 78-93-3), toluene (CAS 108-88-3), naphthalene (CAS 91-20-3), propylene glycol mono methyl ether (CAS 107-98-2), and xylenes (CAS 1330-20-7)."

A63.5 THE OPERATOR SHALL LIMIT EMISSIONS FROM THIS EQUIPMENT AS FOLLOWS:

CONTAMINANT	EMISSIONS LIMIT
NAPHTHALENE	LESS THAN OR EQUAL TO 53 LBS IN ANY ONE MONTH

The operator shall maintain records to demonstrate compliance with this condition.