

AIR QUALITY

MANAGEMENT DISTRICT

**STATEMENT OF BASIS
FOR
3rd RENEWAL OF TITLE V FEDERAL OPERATING PERMIT**

APPLICATION NO.:	<u>TV2016-15-01</u>
DATE:	<u>November 14, 2018</u>
REVIEWING ENGINEER:	<u>Steve Mosunic</u>

A. FACILITY INFORMATION

<u>FACILITY NAME:</u>	Silgan Can Company
<u>LOCATION:</u>	6200 Franklin Boulevard, Suite 100 Sacramento, CA
<u>MAILING ADDRESS:</u>	6200 Franklin Boulevard, Suite 100 Sacramento, CA 95824
<u>RESPONSIBLE OFFICIAL:</u>	Glenn Hohloch, Plant Manager (916) 399-2594
<u>CONTACT PERSON:</u>	Glenn Hohloch, Plant Manager (916) 399-2594

B. PURPOSE OF THIS STATEMENT OF BASIS

The Title V Federal Operating Permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes, which makes the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose of this Statement of Basis is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This report will also include background narrative and explanations of regulatory decisions made by the reviewer. It should be emphasized that this Statement of Basis, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

C. PERMIT HISTORY

This Statement of Basis is for the third renewal of the Title V Federal Operating Permit No. 2010-15-01 issued to Silgan Can Company on August 29, 2011. The following permit actions have occurred since the initial Federal Operating Permit No. TV99-15-01 was issued:

<u>Permit Action</u>	<u>Date</u>	<u>Permit No.</u>
Initial permit issued:	08-29-2001	TV99-15-01
1 st Administrative Amendment	11-25-2002	TV99-15-01A
1 st Minor Modification	07-26-2005	TV99-15-02
1 st Permit Renewal	08-29-2006	TV2005-15-01
1 st Administrative Amendment	06-07-2010	TV2005-15-01A
2 nd Permit Renewal	08-29-2011	TV2010-15-01
1 st Administrative Amendment	Subsumed*	TV2010-15-01B
2 nd Minor Modification	Subsumed*	TV2010-15-02
3 rd Minor Modification	Subsumed*	TV2010-15-03

*Subsumed under permit TV2016-15-01

This 3rd permit renewal will be assigned the following permit number: TV2016-15-01.

Silgan Can Company is requesting to renew the Title V federal operating permit for its facility which was issued on 08-29-2011. This permit renewal will also include an administrative permit modification to add PPG P4553304 to Permit to Operate 22883 to the list of approved coatings, a minor modification to add PPG P4553304 to Permit to Operate 23328 to the list of approved coatings, and a minor modification to remove the requirement to list coatings individually in Permit to Operate 23454. Permit to Operate 22883 and 23328 were cancelled and subsumed by Permit to Operate 23454.

D. FACILITY DESCRIPTION

Silgan Can Company manufactures steel cans for the food canning industry. They purchased their Sacramento facility from Campbell Soup Company in June 1998.

Silgan Can Company produces both two-piece and three-piece cans. The air pollutant emissions from three-piece can manufacturing have changed significantly from what they were when Campbell Soup was conducting the operation. The three-piece can manufacturing process no longer produces air pollutant emissions and is considered exempt equipment for this permit evaluation. Silgan has not used the three-piece can manufacturing process since June of 2013.

The two-piece can manufacturing process and related processes are described below.

Drawn and Ironed (D and I) Can Production:

The process of manufacturing Drawn and Ironed cans begins with the receipt of steel coil stock. The coil is unwound, fed through the lubricator, and finally the cupping press. The formed cups are fed to the bodymakers where, through a punch and ring assembly, the can body is formed by the draw and ironing technique with an integral bottom. Lubrication oils are applied to facilitate the mechanical action and act as a coolant. No significant emissions result from this first phase of the D and I can production.

Following this operation, the cans enter the trimmer where excess metal around the can rim is removed to give a uniform height to the can body. After trimming, the unfinished can is transported to the washer where the lubricator oils are removed. The can body is then treated by a flow coating application of a water borne enamel. After the flow coat application of the enamel, the enameled can body enters the wash coat oven.

After the oven, the can body goes to the flanger where the rim of the can body is flanged. The can then goes to the beader where concentric rings are impressed on the side wall of the can. From here the can body passes to the tester to approve the integrity of the container.

The next step of the process is to apply a water borne inside spray enamel to the inside can body. This coating is similar in composition to the washcoat enamel. This coating is applied in an enclosed machine, where overspray and solvent wash-off is captured and ducted to a thermal oxidizer. There are eight (8) spray machines at the Sacramento Facility. The cans are then conveyed in a covered conveyor to the inside bake oven.

Both ovens, the spray machine manifold, and the covered conveyor are vented to a 15,000 scfm thermal oxidizer which typically operates at 1500°F with a retention time of 1 second.

D. FACILITY DESCRIPTION (continued)

Drawn and Ironed Can Production Line

Process Description	Source Description	Emission Type	Emission Point
Drawn and Ironed Can Manufacturing	Outside Washcoat	Point	Coater Vent
	Washcoat Oven	Point	Thermal Oxidizer Stack
	Washcoat Process Fugitives	Fugitive	Building
	Inside Spray Machines	Point	Thermal Oxidizer Stack
	Inside Spray Process Fugitives	Fugitive	Building
	Covered Conveyor	Point	Thermal Oxidizer Stack
	Inside Bake Oven	Point	Thermal Oxidizer Stack

Maintenance and Support Activities:

These activities are performed for the purpose of maintenance, repair and upkeep of the facility equipment and grounds. Examples of these types of activities include welding, degreasing, use of lubricants, forklift activity, architectural coating, grounds maintenance, vehicle traffic, work performed by contractors, etc. The facility exclusively uses solvents for cleanup and degreasing that do not contain reactive organic compounds (ROC) or halogenated compounds.

Storage Tanks:

The bulk storage tanks for liquid or gaseous compounds all fall into the exempt equipment category. There are also a number of small, sealed drums and containers which are not expected to emit any type of air pollutants.

E. SIGNIFICANT EMISSIONS UNIT INFORMATION

This section describes the emission units that have a current and valid Permits to Operate from the SMAQMD and are part of the Title V Federal Operating Permit.

1. DRAWN AND IRONED CAN MANUFACTURING LINE

SMAQMD Permit No. 23454 (Previously SMAQMD Permit No. 22883 & 23328)

Consisting of:

- a. Various bodymaking equipment
- b. Washcoat application equipment
- c. Inside spray coating equipment (vented to thermal oxidizer)

2. WASHCOAT OVEN

SMAQMD Permit No. 13712

Cincinnati Machinery, Model WCS-C46S, 6.4 MMBTU/hour (vented to thermal oxidizer)

3. INSIDE BAKE OVEN

SMAQMD Permit No. 13713

Somerset Ross, 14 MMBTU/hour (vented to thermal oxidizer)

4. THERMAL OXIDIZER

SMAQMD Permit No. 22884

Somerset Ross, Model RI-3-15000-95, (1) 4 MMBTU/hour burner, (2) 0.4 MMBTU/hour burners. Equipped with a pulse jet cartridge dust collector. Micro Air, Model RP-42, 7.5 HP fan.

F. INSIGNIFICANT EMISSIONS UNIT INFORMATION

This section contains a list of emissions units operated at the facility that are considered insignificant emission sources and are listed as such in the Title V permit. The basis for determining whether equipment is an insignificant emission unit is made based on the SMAQMD "List and Criteria" document, Part B (List of Title V Insignificant Activities), Section 5 which was last revised on April 26, 2001.

Drawn and Ironed Can Manufacturing

Process Description	Basis for Determination of Insignificant Emissions Unit is made based on SMAQMD "List and Criteria", Part B, Section 5 modified April 2001.
1. Uncoiler	<i>No Specific Source Category applies to these processes.</i> [Part B, Section 5, II]
2. Lubricator	
3. Cupper	<i>Meets General Criteria for Insignificant Activities.</i> Emits < 0.5 tons per year of a federal hazardous air pollutant (HAP) and no more than 2 tons per year of a regulated pollutant that is not a HAP. [Part B, Section 5, I]
4. Bodymakers	
5. Trimmers	
6. Washer	
7. Flanger	
8. Beader	
9. Light Tester	<i>Meets Metal Products Specific Source Category Criteria.</i> Equipment is used exclusively for the inspection of metal products. [Part B, Section 5, II, S]

Can Assembly

Process Description	Basis for Determination of Insignificant Emissions Unit is made based on SMAQMD "List and Criteria", Part B, Section 5 modified April 2001.
10. Slitter	<i>No Specific Source Category applies to these processes.</i> [Part B, Section 5, II]
11. Flanger	
12. Beader	<i>Meets General Criteria for Insignificant Activities.</i> Emits < 0.5 tons per year of a federal hazardous air pollutant (HAP) and no more than 2 tons per year of a regulated pollutant that is not a HAP. [Part B, Section 5, I]
13. Seamer	
14. Bodymaker No. 1	
15. Bodymaker No. 2	
16. Air Tester	<i>Meets Metal Products Specific Source Category Criteria.</i> Equipment is used exclusively for the inspection of metal products. [Part B, Section 5, II, S]

F. INSIGNIFICANT EMISSIONS UNIT INFORMATION (continued)

Maintenance and Support Activities:

Equipment Description	Basis for Determination of Insignificant Emissions Unit is made based on SMAQMD "List and Criteria", Part B, Section 5 modified April 2001.
17. Forklifts	<i>No Specific Source Category applies to these processes. [Part B, Section 5, II]</i>
18. Vacuum Pumps	
19. Hot Water Heaters (electric)	<i>Meets General Criteria for Insignificant Activities. Emits < 0.5 tons per year of a federal hazardous air pollutant (HAP) and no more than 2 tons per year of a regulated pollutant that is not a HAP. [Part B, Section 5, I]</i>
20. Air Conditioning System	
21. Building Ventilation	
22. Ventilation Heat Tunnels	
23. Laboratory Equipment	
24. Air Flow Cleaners	
25. Lubrication Stations	
26. Battery Usage/Charging	
27. Maintenance Welding Hoods	<i>Meets Brazing, Soldering, Welding, and Cutting Torches Specific Source Category Criteria. Welding equipment is used for maintenance, as part of the manufacturing process, which is included on the U.S. EPA List of Trivial Activities and the total HAP potential to emit is less than 0.5 tons per year. [Part B, Section 5, II, Q]</i>

F. INSIGNIFICANT EMISSIONS UNIT INFORMATION (continued)

Storage Tanks:

Equipment Description	Basis for Determination of Insignificant Emissions Unit is made based on SMAQMD "List and Criteria", Part B, Section 5 modified April 2001.
28.D and I Washcoat Tank	<p><i>Meets Storage Containers, Reservoirs, and Tanks – General Organic and VOC-containing Material Specific Source Category Criteria.</i></p> <p>Vapor pressure < 0.1 psi as determined by ASTM test method D-2879-86.</p> <p>[Part B, Section 5, II, H, 1, b]</p>
29.D and I Enamel Tank	<p><i>No Specific Source Category applies to this process.</i></p> <p>[Part B, Section 5, II]</p> <p><i>Meets General Criteria for Insignificant Activities.</i></p> <p>Emits < 0.5 tons per year of a federal hazardous air pollutant (HAP) and no more than 2 tons per year of a regulated pollutant that is not a HAP.</p> <p>[Part B, Section 5, I]</p>
30.D and I Inside Enamel Tank	<p><i>Meets Storage Containers, Reservoirs, and Tanks – General Organic and VOC-containing Material Specific Source Category Criteria.</i></p> <p>Capacity < 6,077 gallons and vapor pressure < 1.5 psi as determined by ASTM test method D-2879-86.</p> <p>[Part B, Section 5, II, H, 3]</p>

F. INSIGNIFICANT EMISSIONS UNIT INFORMATION (continued)

Miscellaneous Processes:

Equipment Description	Basis for Determination of Insignificant Emissions Unit is made based on SMAQMD "List and Criteria", Part B, Section 5 modified April 2001.
31. Cooling Tower, HVAC	<i>Meets Cooling Tower Specific Source Category Criteria.</i> Has a circulation rate of less than 10,000 gallons per minute, and is not used to cool process water, water from barometric jets, or water from barometric condensers. [Part B, Section 5, II, C]
32. Cooling Tower, Air Compressor	
33. Degreasers, Exempt Solvent	<i>No Specific Source Category applies to this process.</i> [Part B, Section 5, II]
34. Can Coding (6) Videojet Printers	
35. Can Coding (8) Dotjet Printers	<i>Meets General Criteria for Insignificant Activities.</i> Emits < 0.5 tons per year of a federal hazardous air pollutant (HAP) and no more than 2 tons per year of a regulated pollutant that is not a HAP. [Part B, Section 5, I]
36. Side Seam Powder Coating	

G. ALTERNATE OPERATING SCENARIOS

None requested by the permittee.

H. RECENT PERMIT ACTIONS

Below is a description of local permit actions that have taken place since the last update to the Title V permit.

Permit Cancellations:

The following Permits to Operate have been cancelled and their reference will be removed from the Title V permit:

Cancelled Permits to Operate			
PO No.	Date Cancelled	Equipment Description	Reason for Cancellation
22883	5/07/2012	D & I Can Manufacturing Line	Permit modified by SMAQMD Permit No. 23328 to add PPG 4553304 to the list of approved coatings.
23328	01/13/2015	D & I Can Manufacturing Line	Permit modified by SMAQMD Permit No. 23454 to remove requirement to list coatings individually.

New Permits to Operate:

The following Permits to Operate have been issued since the last Title V update and will be incorporated into the Title V permit:

New Permits to Operate			
PO No.	Date Issued	Equipment Description	Reason for Permit
23328	04/03/2012	D & I Can Manufacturing Line	Modification of existing D & I Can Manufacturing previously permitted under SMAQMD Permit No. 22883.
23454	12/05/2014	D & I Can Manufacturing Line	Modification of existing D & I Can Manufacturing previously permitted under SMAQMD Permit No. 23328.

I. FACILITY EMISSIONS

Maximum Allowable Emissions (tons per year)								
SMAQMD Permit No.	Process or Equipment	ROC	NOx	PM10	SOx	CO	Single HAP	Total HAPs
23454	D & I Can Manufacturing Line	27.5	0.0	0.0	0.0	0.0	9.9	24.9
13712	Washcoat Oven	0.1	1.1	0.01	0.1	0.2	0.0	0.0
13713	Inside Bake Oven	0.1	4.2	0.02	0.4	1.0	0.0	0.0
22884	Thermal Oxidizer	8.7	15.5	0.04	0.8	7.6	0.0	0.0
Total		36.3	20.8	0.1	1.3	8.8	9.9	24.9

J. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS

General Requirements

SMAQMD Rule 201 - General Permit Requirements

SIP approved: 07-13-1987 (52 FR 26148)
11-20-1984 rule version is SIP approved
08-24-2006 rule version is the current version and is not SIP approved

Rule Description: This rule provides an orderly procedure for the review of new sources of air pollution and of the modification and operation of existing sources through the issuance of permits.

Compliance Status: Silgan Can Company has active permits for all sources that require permits.

The following SMAQMD rule is not an applicable federal requirement but is discussed here to document the non-applicability determination for the record:

SMAQMD Rule 202 - New Source Review

SIP Approved: SIP approval of 11-20-1984 rule version was withdrawn on 08-19-2011.
08-23-2012 rule version is the current version and is not SIP approved.
This rule is not Federally enforceable.

Rule Description: This rule sets the procedures for review of new and modified stationary sources and provides the mechanisms for evaluating the applicability of BACT and/or offset requirements.

Compliance Status: The permit holder's past permit actions have been in compliance with this rule.

SMAQMD Rule 207 - Title V Federal Operating Permits

SIP approved: 11-21-2003 (68 FR 65637) (as part of the Title V Federal Operating Permit program approval)

Rule Description: This rule sets forth the procedures for review, issuance and renewal of Title V operating permits.

Compliance Status: The permit holder has submitted a complete Title V initial permit application. . The applicant has requested a permit shield from SMAQMD Rule 202 & 214 Section 229 (Modification).

Silgan originally proposed this request as an Alternative Operating Scenario but it was decided that a Permit Shield was the appropriate method to clarify the situation.

J. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS

General Requirements (continued)

Silgan has a need to periodically change the size of the cans that they manufacture. This change to can diameter and height involves tooling changes. Silgan will be able to manufacture the different can sizes without changing the emission limits and coating limits imposed by the current conditions on the Title V permit. Silgan is concerned that the tooling changes may be viewed as equipment modifications and therefore necessitate a permit modification. The permit shield specifies that such tooling changes would not be considered an equipment modification and would not trigger New Source Review.

SMAQMD Rule 214 - Federal New Source Review

SIP Approved: 08-29-2013 (78 FR 53271)
08-23-2012 rule version is SIP approved.

Rule Description: This rule sets the procedures for review of emissions units at new and modified major stationary sources and provides the mechanisms for evaluating the applicability of BACT and/or offset requirements.

Compliance Status: This is a recently adopted and SIP approved rule. The permit holder's equipment will be reviewed pursuant to this rule, if applicable, for all future permitting actions.

SMAQMD Rule 217 - Public Notice Requirements for Permits

SIP Approved: 08-29-2013 (78 FR 53271)
08-23-2012 rule version is SIP approved.

Rule Description: This rule provides an administrative mechanism for public notification and review of the issuance of authorities to construct and permits to operate at new and modified stationary air pollution sources.

Compliance Status: This is a recently adopted and SIP approved rule. The permit holder's equipment will be reviewed pursuant to this rule, if applicable, for all future permitting actions.

SMAQMD Rule 301 - Permit Fees - Stationary Source

SIP Approved: The rule is not SIP approved but the portions of the rule related to Title V permit fees are applicable because they are part of the SMAQMD Title V Federal Operating Permit program approved by U.S. EPA on 11-21-2003 (68 FR 65637).

J. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS General Requirements (continued)
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Rule Description: This rule requires Title V sources to pay specified fees.

Compliance Status: The owner/operator is expected to comply with the Title V fee requirement.

SMAQMD Rule 401 - Ringelmann Chart

SIP approved: 02-01-1984 (49 FR 3987)
04-19-1983 rule version is SIP approved

Rule Description: This rule limits the discharge of air contaminants into the atmosphere through visible emissions and opacity limitations.

Compliance Status: All equipment is expected to comply with the visible emissions requirement.

SMAQMD Rule 403 - Fugitive Dust

SIP approved: 12-05-1984 (49 FR 47490)
08-03-1977 rule version is SIP approved

Rule Description: This rule regulates processes which may periodically cause fugitive dust emissions into the atmosphere.

Compliance Status: The facility complies with this rule by taking the necessary precautions to ensure that fugitive dust is not airborne beyond the property line.

SMAQMD Rule 404 - Particulate Matter

SIP approved: 07-13-1987 (52 FR 26148)
11-20-1984 rule version is SIP approved

Rule Description: This rule regulates processes which emit particulate matter into the atmosphere, other than combustion contaminants.

Compliance Status: The facility complies with this rule by capturing particulate matter with air pollution control equipment.

J. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS General Requirements (continued)
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SMAQMD Rule 442 - Architectural Coatings

SIP Approved: 10-04-16 (81 FR 68320)
09-24-15 rule version is SIP approved

Rule Description: This rule limits the quantity of volatile organic compounds in architectural coatings supplied, sold, offered for sale, applied, solicited for application or manufactured for use within the District.

Compliance Status: The affected coatings used by the permit holder are received and stored in containers that display the required manufacturer's labels and demonstrate compliance with the rule's requirements. All coating and solvents are expected to be in compliance with this rule.

J. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS General Requirements (continued)
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40 CFR 68 (begin at 68.1) - Chemical Accident Prevention Provisions

Promulgated: 01-31-1994 (59 FR 4493)
[04-09-2004 (69 FR 18831) most recent amendment]

Rule Description: This regulation specifies requirements for owners or operators of stationary sources concerning the prevention of accidental chemical releases.

An owner or operator of a stationary source that has more than the threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, must comply with the requirements of 40 CFR Part 68.

40 CFR 68.215 requires that the air permitting authority include in the Title V permit for a facility specified statements regarding the regulation. Those statements are included in the Federally Enforceable Requirements - General section of the permit.

Compliance Status: The permittee stores more than the designated amounts of the specified chemical substances in 40 CFR 68 and is in compliance with the requirements of the regulation.

40 CFR 82 Subpart F (begin at 82.150) - Protection of Stratospheric Ozone - Recycling and Emissions Reduction

Promulgated: 05-14-1993 (58 FR 28712)
[08-11-2011 most recent amendment]

Rule Description: The purpose of this subpart is to reduce emissions of class I and class II refrigerants and their substitutes to the lowest achievable level by maximizing the recapture and recycling of such refrigerants during the service, maintenance, repair and disposal of appliances and restricting the sale of refrigerants consisting in whole or in part of a class I and class II ODS in accordance with Title VI of the Clean Air Act.

This subpart applies to any person servicing, maintaining or repairing appliances. This subpart also applies to persons disposing of appliances, including small appliances and motor vehicle air conditioners. In addition, this subpart applies to refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale and persons purchasing class I or class II refrigerants.

J. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS General Requirements (continued)
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As indicated in 40 CFR 70.6, Title V permits need to assure compliance with all applicable requirements at the time of permit issuance. Part 70 defines applicable requirements as: "Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Act, unless the Administrator has determined that such requirements need not be contained in a Title V permit." [40 CFR 70.2(12)]. The applicable requirements of Title VI are included in the Federally Enforceable Requirements - General section of the permit.

Compliance Status: The permittee employs qualified contractors to maintain equipment that contains class I or class II refrigerants. All of the permit holder's equipment is expected to comply with the requirements of this NESHAP.

K. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS Equipment Specific Requirements Section 1 - Thermal Oxidizer
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40 CFR 64 (begin at 64.1) Compliance Assurance Monitoring:

Promulgated: 10-22-1997 (52 FR 54940)

Rule Description: The Compliance Assurance Monitoring regulation applies to pollutant-specific emissions units at a major source if the unit satisfies all of the following criteria:

“The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or surrogate thereof), other than an emission limitation or standard that is exempt under paragraph (b)(1) of this section;”
[40 CFR 64.2(a)(1)]

"The unit uses a control device to achieve compliance with any such emission limitation or standard; and"
[40 CFR 64.2(a)(2)]

“The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount to be classified as a major source. For purposes of this paragraph, “potential pre-control device emissions” shall have the same meaning as “potential to emit,” as defined in §64.1, except that emission reductions achieved by the applicable control device shall not be taken into account.”
[40 CFR 64.2(a)(3)]

ROC emissions from the D&I Can Manufacturing Line satisfy all three of the applicability criteria; therefore the Thermal Oxidizer used to control the ROC emissions from the D&I Can Manufacturing Line is subject to 40 CFR 64 Compliance Assurance Monitoring.

The Compliance Assurance Monitoring regulation requires facilities to develop a monitoring plan to assure the control device used to meet the emission limitation or standard is working properly.

The permittee has submitted a monitoring plan to the District based on presumptively acceptable monitoring identified in Appendix A.1a of the EPA CAM Technical Guidance Document for a thermal incinerator used for ROC control. The District has reviewed the monitoring plan and has determined the proposed monitoring satisfies the general criteria, performance criteria, and evaluation factors for monitoring design in 40 CFR 64.3, and the submittal requirements in 40 CFR 64.4.

<p>K. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS Equipment Specific Requirements Section 1 - Thermal Oxidizer (continued)</p>

Thermal oxidizer combustion bed temperature was selected as the indicator that the thermal oxidizer is working properly. The approved monitoring plan states that the combustion bed temperature must be maintained above 1,485°F and that an excursion would occur if the combustion bed temperature dropped below 1485°F and the D&I Can Manufacturing Line continued to operate. The system has an interlock which would stop the D&I Manufacturing line if the combustion bed temperature drops below 1,485°F. The combustion bed temperature is monitored continuously with two thermocouples located in each of the thermal oxidizer's combustion beds. Temperature data is recorded continuously on chart paper and by an electronic data logger.

40 CFR 64.6(c) establishes what information must be specified in the permit, and includes:

- Indicator(s) to be monitored
- Means or device to be used to measure indicator(s)
- Performance requirements established to meet performance requirements in 40 CFR 64.3(b)
- The level at which an excursion will be deemed to occur
- The obligation to conduct monitoring and fulfill other obligations specified in 40 CFR 64.7 – 64.9.

The District has reviewed existing permit conditions to ensure that the requirements in 40 CFR 64.6(c) have been satisfied; and added or modified permit conditions as needed. Compliance with the requirements of 40 CFR 64 - Compliance Assurance Monitoring will be ensured with the permit conditions listed in the table below:

K. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS
Equipment Specific Requirements
Section 1 - Thermal Oxidizer (continued)

Rule Description (continued):

TV2016-15-01 Permit Condition under Federally Enforceable Requirements	Basis in 40 CFR 64
Equipment Specific Requirements (#10)	§64.6(c)(1)(i)
Equipment Specific Requirements (#11)	§64.6(c)(1)(ii)
Equipment Specific Requirements (#12)	§64.6(c)(1)(iii) and §64.7(b) and §64.7(c)
Equipment Specific Requirements (#13)	§64.6(c)(2) and §64.7(d)
Equipment Specific Requirements (#14)	§64.6(c)(3) and §64.7
Equipment Specific Requirements (#15)	§64.7(d)(2) and §64.8
Equipment Specific Requirements (#16)	§64.6(c)(3) and §64.9
General Requirements (#16)	§64.9(a)(1)
General Requirements (#22)	§64.9(b)(1)
Equipment Specific Requirements (#22)	§64.9(b)(1)

Compliance Status: The permittee is in compliance with this regulation.

K. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS

Equipment Specific Requirements

Section 2 - Combustion Sources: Washcoat Oven, Inside Bake Oven & Thermal Oxidizer

SMAQMD Rule 406 - Specific Contaminants

SIP approved: 12-05-1984 (49 FR 47490)
12-06-1978 rule version is SIP approved

Rule Description: This rule regulates emissions of sulfur compounds and combustion contaminants by limiting the emission concentration of particulate matter (PM) and SO₂. Sulfur compounds cannot exceed 0.2% by volume calculated as SO₂, PM cannot exceed 0.1 gr/DSCF corrected to 12% CO₂

Compliance Status: The combustion equipment is expected to emit SO₂ at less than 0.001% SO₂ by volume, and PM₁₀ at less than 0.001 grains/dscf at 12% CO₂.

See Attachment A for calculation of SO₂ and PM emission concentrations.

The rule emission limits for SO₂ are 0.2% SO₂ by volume and for PM are 0.1 grains/dscf at 12% CO₂, respectively. The emissions from the ovens and thermal oxidizer at the permittee's facility comply with this rule.

SMAQMD Rule 420 - Sulfur Content of Fuels

SIP approved: 12-05-1984 (49 FR 47490)

Rule Description: This rule regulates emissions of sulfur compounds from combustion of fuels by limiting the sulfur content of the fuel.

Compliance Status: The following table illustrates the SMAQMD Rule 420 sulfur limits for gaseous fuels and the expected sulfur content of gaseous fuels combusted in equipment at the facility.

The permittee's equipment complies with this rule.

Equipment	Fuel	SMAQMD Rule 420 Allowable Sulfur Content of Fuel (grains S per 100 cubic feet)	Expected Sulfur Content of Fuel Used (grains S per 100 cubic feet)
Washcoat Oven Inside Bake Oven Thermal Oxidizer	Natural Gas	50	0.22 (A)

(A) Based on the sulfur content of pipeline-quality natural gas in Sacramento County.

K. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS Equipment Specific Requirements Section 3 - Drawn & Ironed Can Manufacturing Line

SMAQMD Rule 452 - Can Coating

SIP approved: 04-09-2010 (75 FR 18068):

Rule Description: This rule limits emissions of VOC from can coating processes by limiting the VOC content of the coating and requires an Operation and Maintenance Plan be submitted annually for the emission control device serving the coating operation.

Compliance Status: The can coatings used by the permit holder are expected to comply with the coating VOC limits established by the rule and has submitted an Operation and Maintenance Plan. Additionally, the permit holder will be required to resubmit the Operation and Maintenance Plan annually to the APCO for approval.

The following federal regulation is not an applicable federal requirement but is discussed here to document the non-applicability determination for the record.

40 CFR, Part 63, Subpart KKKK – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans

Promulgated: 11-13-2003 (68 FR 64446)
[04-20-2006 (71 FR 20464) most recent amendment]

Rule Description: The purpose of this subpart is to establish national emission standards for hazardous air pollutants (NESHAP) for metal can surface coating facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

Subpart KKKK applies to new, reconstructed, and existing affected sources that use more than 1,500 gallons per year of coatings in one of the four source categories defined in §63.3481(a) and is a major source, located at a major source, or is part of a major source of Hazardous Air Pollutants (HAPs). A major source of HAP emissions is any source with a potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAPs at a rate of 25 tons or more per year.

Compliance Status: Silgan Can Company is an existing affected source that uses more than 1,500 gallons per year of coatings in one of the source categories defined in §63.3481(a), however it is not a major source of HAP emissions; therefore the Subpart KKKK is not applicable.

K. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS

Equipment Specific Requirements

Section 4 - Combustion Sources and Drawn & Ironed Can Manufacturing Line

Permit Conditions on SMAQMD Rule 201 Permits to Operate

Condition Description: The conditions of operation on the SMAQMD Rule 201 Permits to Operate limit emission concentrations, mass emissions and require recordkeeping and reporting.

The following table indicates the conditions on the SMAQMD Rule 201 permits that are not applicable federally enforceable requirements.

Equipment	SMAQMD Rule 201 Permit No.	Permit conditions that are <u>not</u> federally enforceable
<ul style="list-style-type: none">• Washcoat Oven• Inside Bake Oven• Thermal Oxidizer• Drawn and Ironed Can Manufacturing Line	13712 13713 22884 23454	Condition Nos. 1, 2, 3, 4, and 6 – These are administrative requirements not contained in any SIP-approved rule or other federally enforceable regulation. All other permit conditions are federally enforceable.

Compliance Status: The permittee's equipment complies with the SMAQMD Rule 201 permit conditions.

L. TITLE V PERMIT CONDITIONS

It is recommended that the Silgan Can Company Title V Federal Operating Permit be renewed.

See proposed Title V Federal Operating Permit No. TV2016-15-01 for permit conditions.

Approved by: _____ Date: _____

ATTACHMENT A

SMAQMD Rule 406

Compliance Calculations

for

Washcoat Oven, Inside Bake Oven,

& Thermal Oxidizer

**Calculation of SO₂ and PM Emission Concentrations
from Washcoat Oven, Inside Bake Oven, and Thermal Oxidizer**

Thermal Oxidizer

Assumptions for calculations:

Natural gas fuel F-factor	=	8,710 ft ³ exh. gas/MMBTU (at 0% O ₂ , by definition of F factor)
Molecular weight of SO ₂	=	64 lb SO ₂ /lb mole
Standard molar volume	=	385.3 ft ³ /lb mole (at 68 degrees F and 1 atm)
SO ₂ emission factor	=	0.6 lb SO ₂ /MMft ³ natural gas
PM emission factor	=	7.6 lb PM ₁₀ /MMft ³ natural gas
Outlet carbon dioxide	=	~1% (from 11/2005 source test)
Outlet oxygen	=	~19.4% (from 11/2005 source test)

SO₂ from Thermal Oxidizer

The following demonstration of compliance with SMAQMD Rule 406 is based on combusting natural gas fuel that meets the permit requirement of a maximum of 50 grains/100 ft³ of sulfur compounds.

Based on the SO₂ emission factor in U.S. EPA AP42 Table 1.4-2 (07/1998) for combusting natural gas fuel, the SO₂ emission concentration from the thermal oxidizer is calculated to be:

$$= \frac{0.6 \text{ lb SO}_2}{\text{MMft}^3 \text{ nat. gas}} \times \frac{1 \text{ ft}^3 \text{ nat. gas}}{1 \text{ MMBTU}} \times \frac{1 \text{ MMBTU}}{8710 \text{ ft}^3 \text{ exh. gas}} \times \frac{385.3 \text{ ft}^3 \text{ SO}_2/\text{lb mole}}{64 \text{ lb SO}_2/\text{lb mole}}$$

$$= \frac{0.0004 \text{ ft}^3 \text{ SO}_2}{\text{MMft}^3 \text{ exh. gas}}$$

$$= 0.0004 \text{ ppmv at 0\% O}_2 \text{ (F factor conditions)}$$

$$= 0.006 \text{ ppmv at 19.4\% O}_2 \text{ (actual conditions)}$$

$$= 0.0000006\% \text{ SO}_2 \text{ by volume (actual conditions)}$$

SMAQMD Rule 406 emission limits for SO₂ are 0.2% SO₂ by volume

Therefore, the SO₂ emissions from the thermal oxidizer complies with SMAQMD Rule 406.

**Calculation of SO₂ and PM Emission Concentrations
from Washcoat Oven, Inside Bake Oven, and Thermal Oxidizer (continued)**

PM from Thermal oxidizer

The following demonstration of compliance with SMAQMD Rule 406 is based on combusting natural gas fuel.

Based on the PM emission factor in U.S. EPA AP42 Tables 1.4-2 (07/1998) combusting natural gas fuel, the PM emission concentration from the thermal oxidizer is calculated to be:

$$= \frac{7.6 \text{ lb PM}}{\text{MMft}^3 \text{ nat. gas}} \times \frac{1 \text{ ft}^3 \text{ nat. gas}}{1 \text{ MMBTU}} \times \frac{1 \text{ MMBTU}}{8710 \text{ ft}^3 \text{ exh. gas}} \times \frac{7000 \text{ grains}}{\text{lb}}$$

$$= 0.000006 \text{ grains PM/ft}^3 \text{ of exhaust gas at 0\% O}_2 \text{ (F factor conditions)}$$

$$= 0.000085 \text{ grains PM/ft}^3 \text{ of exhaust gas at 19.4\% O}_2 \text{ and 1\% CO}_2 \text{ (actual conditions)}$$

$$= 0.001 \text{ grains PM/ft}^3 \text{ of exhaust gas at 12\% CO}_2$$

SMAQMD Rule 406 emission limits for PM are 0.1 grains/ft³ at 12% CO₂

Therefore, the PM emissions from the thermal oxidizer complies with SMAQMD Rule 406.

SO₂ and PM from Ovens

The SO₂ and PM emissions from the ovens are expected to be similar to the thermal oxidizer since they also combust natural gas.

ATTACHMENT B

**SMAQMD RULES THAT ARE
"APPLICABLE FEDERALLY
ENFORCEABLE REQUIREMENTS"
FOR
SILGAN CAN COMPANY**

SMAQMD RULES THAT ARE "APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS" FOR SILGAN CAN SUPPLY COMPANY

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
●	●	101	General Provisions and Definitions 10-27-2011 version	Yes - no related conditions are included in the permit because of general nature of the rule.
●	●	102	Circumvention 11-29-1983 adoption	Yes - no related conditions are included in the permit because of general nature of the rule.
	●	103	Exceptions 11/29/1983 adoption	No - source does not operate the type of equipment described in this rule.
	●	104	General Conformity 11-03-1994 adoption	No - the rule's purpose is to have the SMAQMD review federal conformity findings.
●	●	105	Emission Statement 09/05/1996 adoption	No - actual historical emissions of ROC and NOx are less than 25 tons/year.
		107	Alternative Compliance	No - it is not a SIP approved rule.
●		108	Minor Violations	No - it is not a SIP approved rule.
●	●	201	General Permit Requirements 11-20-1984 version 08-24-2006 version is not SIP approved	Yes - no related conditions are included in the permit.

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
●		202	New Source Review 8-23-2012 version	No - Related conditions are included in the permit. SIP approved version (11-20-1984) was withdrawn from SIP approval on 8-19-2011. Current version (8-23-2012) is not SIP approved.
●	●	203	Prevention of Significant Deterioration 01-27-2011 version	Yes - Rule became effective on 8-19-2011. Projects processed after this date are evaluated under this rule.
		204	Emission Reduction Credits	No - it is not a SIP approved rule.
		205	Community Bank and Priority Reserve Bank	No - it is not a SIP approved rule.
		206	Mobile and Transportation Source Emission Reduction Credits	No - it is not a SIP approved rule.
●	*	207	Title V Federal Operating Permit Program	Yes - related conditions are included in the permit. (*Although this is not a SIP approved rule it is applicable because it is part of the approved Title V Permit Program.)
		208	Acid Rain	No - it is not a SIP approved rule.
		209	Limiting Potential to Emit	No - it is not a SIP approved rule.
		210	Synthetic Minor Source Status	No - it is not a SIP approved rule.
		211	MACT at Major Sources of Hazardous Air Pollutants	No - it is not a SIP approved rule.

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
●		213	Federal Major Modifications	No - It is not a SIP approved rule, but the requirements within it are part of EPA's NSR reform and are thus federally applicable.
●	●	214	Federal New Source Review 08-23-2012 version	Yes - Rule became effective 08-19-2011. Projects processed after the applicable date will be evaluated under this rule.
		215	Agricultural Permit Requirements and New Agricultural Permit Review	No - It is not a SIP approved rule.
●	●	217	Public Notice Requirements for Permits 08-23-2012 version	Yes - No related conditions are included in the permit because of the general nature of the rule.
		250	Sacramento Carbon Exchange Program	No - It is not a SIP approved rule.
●	*	301	Stationary Source Permit Fees	Yes - related conditions are included in the permit. (*Although this is not a SIP approved rule it is applicable because it is part of the approved Title V Permit Program.)
●		302	Hearing Board Fees	No - it is not a SIP approved rule.
		303	Agricultural Burning Permit Fees	No - it is not a SIP approved rule.
		304	Plan Fees	No - it is not a SIP approved rule.

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
		305	Environmental Document Preparation and Processing Fees	No - it is not a SIP approved rule.
●		306	Air Toxics Fees	No - it is not a SIP approved rule.
●	●	307	Clean Air Act Fees 09-26-2002 adoption	Yes - no related conditions are included in the permit.
		310	Permit Fees - Agricultural Source	No - It is not a SIP approved rule
		311	Registration Fee for Agricultural Compression Ignition Engines	No - It is not a SIP approved rule.
		350	Greenhouse Gas Program Fees	No - It is not a SIP approved rule.
●	●	401	Ringelmann Chart 04-05-1983 adoption	Yes - related conditions are included in the permit.
●		402	Nuisance	No - it is not a SIP approved rule.
●	●	403	Fugitive Dust 11-29-1983 adoption	Yes - related conditions are included in the permit.
●	●	404	Particulate Matter 11-20-1984 adoption	Yes - related conditions are included in the permit.
	●	405	Dust and Condensed Fumes 11-29-1983 adoption	No - the source does not generate dust and condensed fumes.

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
●	●	406	Specific Contaminants 11-29-1983 adoption	Yes - related conditions are included in the permit.
●	●	407	Open Burning 11-29-1983 adoption	Yes - no related conditions are included in the permit.
	●	408	Incinerator Burning 11-29-1983 adoption	No - the source does not operate an incinerator.
	●	409	Orchard Heaters 11-29-1983 adoption	No - the source does not operate orchard heaters.
	●	410	Reduction of Animal Matter 11-29-1983 adoption	No - the source does not operate equipment for the reduction of animal matter.
	●	411	Boiler NOx 08-23-2007 adoption	No - the source does not operate a boiler subject to this rule.
	●	412	Stationary IC Engines at Major Stationary Sources of NOx 06-01-1995 adoption	No - the source does not operate a stationary IC engine.
	●	413	Stationary Gas Turbines 03-24-2005 version	No - the source does not operate a gas turbine.
●	●	414	Natural Gas Fired Water Heaters 08-01-1996 adoption 03-25-2010 rule version is not SIP approved	Yes - The permit does not contain any related conditions because the rule targets the sale of water heaters, not the operation of water heaters

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
		● 417	Wood Burning Appliances	No - The source does not operate any wood burning appliances.
		419	NOx from Miscellaneous Combustion Units	No - It is not a SIP approved rule.
●	●	420	Sulfur Content of Fuels 11-29-1983 adoption	Yes - related conditions are included in the permit.
		● 421	Mandatory Episodic Curtailment of Wood and Other Solid Fuel Burning	No - The source does not operate any equipment subject to this rule
●	●	441	Organic Solvents 11-29-1983 adoption	Yes - no related conditions are included in the permit because of limited applicability.
●	●	442	Architectural Coatings 09-24-2015 adoption	Yes - related conditions are included in the permit.
		● 443	Leaks from Synthetic Organic Chemical and Polymer Manufacturing 09-05-1996 adoption	No - the source does not operate synthetic organic chemical or polymer manufacturing equipment.
		● 444	Petroleum Solvent Dry Cleaning 08-13-1981 adoption	No - the source does not operate petroleum solvent dry cleaning equipment.
		● 446	Storage of Petroleum Products 11-16-1993 adoption	No - the source only stores petroleum products in tanks that are exempt from the rule requirements (< 40,000 gallons).

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
●		447	Organic Liquid Loading 04-02-1998 adoption	No - the source does not operate organic liquid loading equipment.
●		448	Gasoline Transfer into Stationary Storage Containers 02-26-2009 adoption	No - the source does transfer gasoline into storage tanks subject to the rule requirements (≥250 gallons).
●		449	Transfer of Gasoline into Vehicle Fuel Tanks 02-26-2009 adoption	No - the source is exempt from this rule because it is exempt from SMAQMD Rule 448.
●		450	Graphic Arts Operations 10-/23-2008 adoption	No - the source does not operate a graphic arts process as defined in the rule.
●	●	451	Surface Coating of Miscellaneous Metal Parts and Products 10-28-2010 version	Yes - no related conditions are included in the permit.
●	●	452	Can Coating 09/25/2008 adoption	Yes - related conditions are included in the permit.
●		453	Cutback and Emulsified Asphalt Paving Materials 11-29-1983 adoption	No - the source does not manufacture or apply cutback or emulsified asphalt paving materials.
●		454	Degreasing Operations 09-25-2008 adoption	No - the source uses exempt solvents as defined in the rule.

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
●		455	Pharmaceuticals Manufacturing 11-29-1983 adoption	No - the source does not manufacture pharmaceuticals.
●		456	Aerospace Coating Operations 10-23-2008 adoption	No - the source does not coat aerospace parts.
●		458	Large Commercial Bread Bakeries 09-05-1996 adoption	No - the source does not produce bread products.
●		459	Automotive, Truck and Heavy Equipment Refinishing Operations 08-05-2011 adoption	No - the source does not refinish vehicles.
●		460	Adhesives and Sealants	No - it is not a SIP approved rule.
●		463	Wood Products Coatings 09/25/2008 adoption	No - the source does not coat wood products.
●		464	Organic Chemical Manufacturing Operations 09-25-2008 adoption	No - the source does not manufacture organic chemicals.
●		465	Polyester Resin Operations 09-25-2008 version	No - the source does not have a polyester resin operation
●		466	Solvent Cleaning 10-28-2010 version	No - the source does not conduct solvent cleaning.
		468	Surface Coating of Plastic Parts and Products	No - It is not a SIP approved rule.

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
		485	Municipal Landfill Gas	No - it is not a SIP approved rule.
		496	Large Confined Animal Facilities	No - It is not a SIP approved rule.
●		501	Agricultural Burning 12-06-1978 adoption 04-03-1997 version is not SIP approved	No - the source does not conduct agricultural burning.
●		601	Procedure before the Hearing Board	No - it is not a SIP approved rule.
●		602	Breakdown Conditions: Emergency Variance	No - it is not a SIP approved rule.
●		701	Emergency Episode Plan 05-27-1999 adoption	No - the source's actual emissions are less than 50 tons/year of ROC and NOx and less than 100 tons/year of CO and PM10.
●		801	New Source Performance Standards	No - it is not a SIP approved rule. Note: there is an equivalent federal regulation.
		901	General Requirements	No - it is not a SIP approved rule. Note: there is an equivalent federal regulation.
		902	Asbestos	No - it is not a SIP approved rule. Note: there is an equivalent federal regulation.
		903	Mercury	No - it is not a SIP approved rule. Note: there is an equivalent federal regulation.

Rule is Applicable	Rule is SIP Approved	Rule No.	Rule Title	Is the Rule an "Applicable Federally Enforceable Requirement"?
		904	Airborne Toxic Control Measures	No - it is not a SIP approved rule. Note: there are equivalent federal regulations for some of the listed ATCMs.
		1002	Fleet Inventory	No - it is not a SIP approved rule.
		1003	Reduced-Emission Fleet Vehicles/Alternative Fuels	No - it is not a SIP approved rule.
		1005	Mobile Source Emission Reduction Credits/Banking	No - it is not a SIP approved rule.
		1006	Transportation Conformity	No - it is not a SIP approved rule.

ATTACHMENT C

SMAQMD Rule 201 Permits to Operate



PERMIT TO OPERATE

ISSUED TO: SILGAN CAN COMPANY

EQUIPMENT LOCATION: 6200 FRANKLIN BLVD., SACRAMENTO, CA 95824

PERMIT NO.	EQUIPMENT DESCRIPTION
23454	DRAWN AND IRONED CAN MANUFACTURING LINE CONSISTING OF: A. VARIOUS BODY MAKING EQUIPMENT B. WASHCOAT APPLICATION EQUIPMENT C. INSIDE SPRAY COATING EQUIPMENT VENTED TO THERMAL OXIDIZER (P/O 22884)
13712	WASHCOAT OVEN, CINCINNATI MACHINERY, WCS-C46S, 6.4 MMBTU/HR, VENTED TO THERMAL OXIDIZER (P/O 22884)
13713	INSIDE BAKE OVEN, ROSS/SOMERSET, 14 MMBTU/HR, VENTED TO THERMAL OXIDIZER (P/O 22884)
22884	THERMAL OXIDIZER, MAKE: SOMMERSET ROSS, MODEL: RI-3-15000-95, EQUIPPED WITH ONE 4.0 MMBTU/HR BURNER AND TWO 0.4 MMBTU/HR BURNERS; ALSO EQUIPPED WITH A PULSE JET CARTRIDGE DUST COLLECTOR, MAKE: MICRO AIR, MODEL: RP-42, 7.5 HP FAN

DATE ISSUED: 12-05-2014 (P/O 23454)
06-30-2011 (P/O 22884)
07-27-2000 (P/O 13712 & 13713)

ALBERTO AYALA, PH.D., M.S.E
AIR POLLUTION CONTROL OFFICER

DATE REVISED: 03-06-2019

DATE EXPIRES: 02-24-2020 (UNLESS RENEWED)

BY: 

SACRAMENTO METROPOLITAN
AIR QUALITY MANAGEMENT DISTRICT

SUBJECT TO THE FOLLOWING CONDITIONS:

GENERAL

1. The permit holder agrees to indemnify and defend SMAQMD, its officers, agents, and employees if this permit or CEQA or NEPA is challenged in state or federal court. This indemnification includes attorney fees awarded against SMAQMD, as well as attorney fees, court costs, legal fees, and other expenses incurred in defending the challenge. The District will provide written notice to the permit holder within 5 days if it receives a petition, complaint or other legal notice by a third party challenging this Permit to Operate or CEQA or NEPA. The permit holder may, within 10 days of notification, request cancellation of the Permit to Operate. If the permit holder requests cancellation, SMAQMD will cancel the permit within 5 days, and will notify the plaintiffs of the cancellation and request dismissal of the litigation.
[Basis: SMAQMD Rule 201, Section 405]
2. The equipment must be properly maintained and operated in accordance with the manufacturer's recommendations at all times.
[Basis: SMAQMD Rule 201, Section 405 and Rule 202, Section 408.1]
3. The Air Pollution Control Officer and/or authorized representatives, upon the presentation of credentials must be permitted:
 - A. To enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this Permit to Operate, and
 - B. At reasonable times to have access to and copy any records required to be kept under terms and conditions of this Permit to Operate, and
 - C. To inspect any equipment, operation, or method required in this Permit to Operate, and
 - D. To sample emissions from the source or require samples to be taken.**[Basis: SMAQMD Rule 201, Section 405]**
4. This Permit to Operate does not authorize the emission of air contaminants in excess of those allowed by Division 26, Part 4, Chapter 3, of the California Health and Safety Code or the Rules and Regulations of the Sacramento Metropolitan Air Quality Management District (SMAQMD).
[Basis: SMAQMD Rule 201, Sections 303.1, 405]
5. The coating operation must not discharge such quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
[Basis: SMAQMD Rule 402, Section 301]
6. A legible copy of this Permit to Operate must be maintained on the premises with the equipment.
[Basis: SMAQMD Rule 201, Section 401]

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

EMISSIONS LIMITATIONS

7. The equipment must not discharge into the atmosphere any visible air contaminant other than uncombined water vapor for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than Ringelmann No. 1 or equivalent to or greater than 20% opacity.

[Basis: SMAQMD Rule 401, Section 301]

8. The emissions from Drawn and Ironed can manufacturing process must not exceed the following limits:

[Basis: SMAQMD Rules 201, Section 405 and 202, Section 301]

Equipment	Pollutant	Emission Limits				
		Daily (lb/day)	Quarterly (lb/quarter)			
			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
D and I Line: (A)	VOC	158.0	10,320	8,303	8,832	10,438
Fugitives	VOC	71.2	4,644	3,736	3,974	4,698
Non-fugitives (B)						
Washcoat Oven (C)	PM10	0.8	70	56	60	70
	SOx	0.04	4	3	3	4
(Natural gas	NOx	7.0	609	490	525	616
combustion only)	CO	1.5	131	105	113	132
	VOC	0.5	44	36	38	45
Inside Bake Oven (C)	PM10	2.5	218	175	188	220
	SOx	0.1	9	7	8	9
(Natural gas	NOx	26.0	2,262	1,820	1,950	2,288
combustion only)	CO	6.5	566	455	488	572
	VOC	0.5	44	35	38	44
Thermal Oxidizer (D)	PM10 (E)	4.7	414	358	377	419
	SOx (E)	0.2	19	16	17	19
(Natural gas	NOx (F)	102.0	8,491	6,832	7,120	8,589
combustion and	CO (F)	50.0	4,116	3,311	3,547	4,162
coating process)	VOC (F)	72.5	4,736	3,810	4,054	4,791

(A) Emissions based on calculation method outlined below:

The VOC emissions from **each** coating process must be based on the following:

$$\text{Fugitive VOC} = \text{Gallons of Coating Sprayed} \times \text{Coating VOC content} \times \% \text{ Fugitives}$$

$$\text{Non-Fugitive VOC} = \text{Gallons of Coating Sprayed} \times \text{Coating VOC content} \times \% \text{ Non-Fugitives} \times 0.05$$

Where,

Gallons of Coating Sprayed = gallons/day or gallons/quarter

Coating VOC Content = lb VOC/gallon coating

% Fugitives = 10%

% Non-Fugitives = 90%

0.05 = control efficiency factor based on 95% control

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

- (B) Non-fugitive emissions are included in the emissions from the thermal oxidizer.
(C) Emissions based on maximum allowable natural gas throughput (see Condition No. 11) and the emission factors listed below. All combustion emissions are assumed to be vented through the thermal oxidizer.

Equipment	Emission Factors for Natural Gas Combustion lb/MMcf				
	VOC	NOx	SOx	PM10	CO
Washcoat oven (a)	7.3	100	0.6	12	21
Inside bake oven (a)	2.8	140	0.6	13.7	35
Thermal oxidizer	2.8 (b)	598 (c)	0.6 (b)	11.9 (b)	364 (c)

(a) Emission factors from U.S. EPA AP-42, table 1.4.1-3 (10/93)

(b) Emission factors from U.S. EPA AP-42, table 1.4.1-3 (10/96)

(c) Emission factors correspond to a 25 ppmv NOx and a 25 ppmv CO concentration at the maximum thermal oxidizer exhaust flow rate of 16,000 dscfm.

- (D) Emissions from the thermal oxidizer include emissions from the washcoat oven, inside bake oven, and non-fugitive VOC emissions from the Drawn and Ironed can manufacturing line with a 95% destruction efficiency. Daily emission limits are based on maximum allowable natural gas throughput for the washcoat oven and inside bake oven (see Condition No. 11) and operating the thermal oxidizer at maximum capacity (4.8 MMBTU/hr), 24 hours/day and the emission factors listed above.
- (E) Quarterly PM10 and SOx emission limits are based on maximum allowable natural gas throughput for the washcoat oven and inside bake oven (see Condition No. 11) and operating the thermal oxidizer at maximum capacity (4.8 MMBTU/hr), 24 hours/day, total number of days/quarter and the emission factors listed above.
- (F) Quarterly NOx, CO and VOC emission limits are based on maximum allowable natural gas throughput for the washcoat oven, inside bake oven (see Condition No. 11), and operating the thermal oxidizer at maximum capacity (4.8 MMBTU/hr) 24 hours/day, and the emission factors listed above, plus the non-fugitive VOC emissions from the Drawn and Ironed can manufacturing line with a 95% destruction efficiency.

EQUIPMENT OPERATION

9. The VOC content of coatings used in the wash coat process must not exceed 250 grams/liter of coating (excluding water and exempt solvents) and 2.8 lb/gal of solids.
[Basis: SMAQMD Rules 202 Section 301 and 452]
10. The VOC content of coatings used in the inside spray process must not exceed 420 grams/liter of coating (excluding water and exempt solvents) and 6.9 lb/gal of solids.
[Basis: SMAQMD Rules 202 Section 301 and 452]
11. The Drawn and Ironed can manufacturing facility must not exceed the following natural gas usage limits:
[Basis: SMAQMD Rules 201 Section 405 and 202 Section 301]

Equipment	Maximum Allowable Natural Gas Usage				
	Daily (1,000 ft ³ /day)	Quarterly (1,000 ft ³ /quarter)			
		1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Washcoat oven	70	6,090	4,900	5,250	6,160
Inside bake oven	186	16,182	13,020	13,950	16,368

SACRAMENTO METROPOLITAN
AIR QUALITY MANAGEMENT DISTRICT

12. The washcoat oven, inside bake oven and thermal oxidizer must only use natural gas fuel.
[Basis: SMAQMD Rules 201 Section 405 and 202 Section 301]
13. The washcoat oven (P/O 13712), inside bake oven (P/O 13713) and thermal oxidizer (P/O 22884) must **each** be equipped with a non-resetting natural gas fuel meter to ensure compliance with Condition No. 8 and Condition No. 11.
[Basis: SMAQMD Rules 201 Section 405 and 202 Section 301]
14. A. VOC capture efficiency at the washcoat oven (P/O. 13712), inside spray process (P/O 23454) and inside bake oven (P/O 13713) must be at least 90% (Verified in the initial source test conducted on 6/8-9/95 and 8/24/95).
[Basis: SMAQMD Rules 201 Section 405 and 202 Section 301]
- B. Capture efficiency, when the APCO requires a test, must be determined by Bay Area Air Quality Management District, Manual of Procedures, Source Test Procedures ST-7, November 1, 1989, or EPA "Guidelines for Developing Capture Efficiency Protocols".
[Basis: SMAQMD Rules 201 Section 405 and 202 Section 301]
15. The washcoat oven (P/O 13712), inside spray process (P/O 23454) and inside bake oven (P/O 13713) must be vented through the thermal oxidizer (P/O 22884) except during periods of safety purging/shutdown.
[Basis: SMAQMD Rules 201 Section 405 and 202 Section 301]
16. VOC emissions from the washcoat oven (P/O 13712), inside spray process (P/O 23454) and inside bake oven (P/O 13713) that are vented through the thermal oxidizer (P/O 22884) must be destroyed by at least 95.0% by weight.
[Basis: SMAQMD Rules 201 Section 405 and 202 Section 301]
17. The Drawn and Ironed can manufacturing line (including the washcoat and inside bake ovens) must not operate unless the thermal oxidizer is fully operational and at a minimum operating temperature of 1,485°F.
[Basis: SMAQMD Rules 201 Section 405 and 202 Section 301, and 40 CFR 64]
18. The thermal oxidizer must be equipped with a temperature gauge to verify compliance with Condition No. 17.
[Basis: SMAQMD Rules 201 Section 405 and 202 Section 301, and 40 CFR 64]
19. The thermal oxidizer temperature gauge must be easily accessible, in good operating condition and calibrated at all times.
[Basis: SMAQMD Rules 201 Section 405 and 202 Section 301, and 40 CFR 64]
20. An excursion is deemed to occur when the thermal oxidizer temperature drops below 1485°F and the Drawn and Ironed can manufacturing line continues to operate. Upon detecting any excursion the permit holder must investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable.
[Basis: SMAQMD Rules 201 Section 405 and 202 Section 301, and 40 CFR 64]

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21. The permit holder must comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR 64.7.
[Basis: 40 CFR 64]
22. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permit holder must develop and implement the Quality Improvement Plan in accordance with 40 CFR 64.8.
[Basis: 40 CFR 64]
23. The permit holder must comply with the record keeping and reporting requirements of 40 CFR 64.9.
[Basis: 40 CFR 64]
24. No VOC containing material may be used for cleaning of the Drawn and Ironed can manufacturing line or any of its parts unless cleaned in a degreaser approved by the SMAQMD Air Pollution Control Officer. (Any non-vapor degreaser at the facility that uses solvent with a VOC content less than 25 grams/liter and maximum VOC emissions less than 2 lb/day is an approved degreaser.)
[Basis: SMAQMD Rules 201 Section 405 and 452]
25. The dust collector must be equipped with a pressure differential gauge to indicate the pressure drop across the filters and must be operated within the manufacturer's recommended pressure differential range.
[Basis: SMAQMD Rule 201 Section 405]
26. The dust collector must be in operation at all times during the operation of the thermal oxidizer.
[Basis: SMAQMD Rule 201 Section 405]
27. The dust collector cleaning frequency and duration must follow the manufacturer's recommendation.
[Basis: SMAQMD Rule 201 Section 405]
28. The materials collected from the dust collector must be discharged into a covered container and any transfer of this material must be performed in a manner preventing any fugitive emission.
[Basis: SMAQMD Rule 201 Section 405]
29. Tooling changes necessary to produce cans with different diameters and heights will not be considered an equipment modification pursuant to SMAQMD Rule 202 Section 222 and will not trigger New Source Review.
[Basis: SMAQMD Rule 202 Section 222 and SMAQMD Rule 207 Section 307]

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RECORD KEEPING

30. The following record must be continuously maintained on site for the most recent five year period and must be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly records must be made available for inspection within 30 days of the end of the previous quarter.

[Basis: SMAQMD Rule 201 Section 405]

Frequency	Information to be Recorded
Continuous	A. Thermal oxidizer operating temperature (degrees Fahrenheit) B. Records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan, any activities undertaken to implement a quality improvement plan, and other supporting information. [Basis: 40 CFR 64.9]
Daily	C. Types, quantities (gallons/day), and VOC content (grams/liter) of coatings used in the wash coat process and inside spray process. D. VOC emissions associated with the Drawn and Ironed can manufacturing line (fugitive and non-fugitive). (lb/day) E. Natural gas consumption of the washcoat oven and inside bake oven (cubic feet/day for each unit) F. No daily natural gas consumption records are required for the thermal oxidizer since emissions are based on operating at maximum capacity, 24 hours/day and the factors in Condition No. 8.
Quarterly	G. Types, quantities (gallons/quarter), and VOC content (grams/liter) of coatings used in the wash coat process and the inside spray process. H. VOC emissions associated with the Drawn and Ironed can manufacturing line (fugitive and non-fugitive). (lb/quarter) I. Natural gas consumption of the washcoat oven, inside bake oven, and thermal oxidizer. (cubic feet/quarter for each unit)

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REPORTING

31. The following reports must be submitted to the SMAQMD Air Pollution Control Officer. Quarterly reports must be submitted within 30 days of the end of the previous quarter. Annual reports must be submitted annually by January 31st.

[Basis: SMAQMD Rule 201 Section 405 and SMAQMD Rule 452 Section 401]

Frequency	Reports to be submitted
Quarterly	<p>A. Types and amounts of coatings used (gallons/quarter)</p> <p>B. Natural gas usage for the washcoat oven, inside bake oven and thermal oxidizer (cubic feet/quarter for each unit)</p> <p>C. VOC emissions associated with the Drawn and Ironed can manufacturing line (fugitive and non-fugitive) (lbs/quarter)</p> <p>D. Total VOC emissions from non-fugitive controlled emissions from the Drawn and Ironed can manufacturing line combined with the VOC emissions from natural gas combustion in the washcoat oven, inside spray oven and thermal oxidizer based on the emission factors outlined in Condition No. 8 (lbs/quarter).</p> <p>E. Total combined NOx and CO emissions from natural gas combustion in the washcoat oven, inside spray oven and thermal oxidizer based on the emission factors outlined in Condition No. 8 (lb/quarter).</p>
Annually	<p>F. An Operation and Maintenance Plan for the emission control device must be submitted annually to the Air Pollution Control Officer for approval. The Plan must specify operation and maintenance procedures which will demonstrate continuous operation of the emission control device during periods of emissions-producing operations. The Plan must also specify which records must be kept to document these operation and maintenance procedures.</p>

32. The permit holder must, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)

[Basis: SMAQMD Rule 201, Section 303.1]

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SOURCE TESTING

33. An emission test for VOC control efficiency of the thermal oxidizer (P/O 22884) must be conducted each calendar year. The test must conform to the following time schedule:

[Basis: SMAQMD Rule 201 Section 405]

- A. A source test plan must be submitted for SMAQMD approval at least 30 days prior to the proposed test date.
- B. The SMAQMD must be given at least seven days notice of the actual time and date of each test so that a SMAQMD representative may observe the test.
- C. The results of each test along with the actual operating parameters during the test must be submitted to the SMAQMD no later than 60 days following each test.

Your application for this air quality Permit to Operate was evaluated for compliance with Sacramento Metropolitan Air Quality Management District (SMAQMD), state and federal air quality rules. The following listed rules are those that are most applicable to the operation of your equipment. Other rules may also be applicable.

<u>SMAQMD RULE NO.</u>	<u>RULE TITLE</u>
201	GENERAL PERMIT REQUIREMENTS (8-24-06)
202	NEW SOURCE REVIEW (8-23-2012)
401	RINGELMANN CHART (4-19-83)
406	SPECIFIC CONTAMINANTS (12-6-78)
420	SULFUR CONTENT OF FUELS (8-13-81)
452	CAN COATING (9-25-08)
<u>FEDERAL</u>	<u>REGULATION TITLE</u>
40 CFR 64	COMPLIANCE ASSURANCE MONITORING

In addition, the conditions on this Permit to Operate may reflect some, but not all, requirements of these rules. There may be other conditions that are applicable to the operation of your equipment. Future changes in prohibitory rules may establish more stringent requirements which may supersede the conditions listed here.

For further information please consult your SMAQMD rulebook or contact the SMAQMD for assistance.