



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Engineering and Compliance Office

APPLICATION PROCESSING AND CALCULATIONS

Pages 13	Page 1
A/N see below	Date 9-19-07
Processed by RNL	Checked by

Deminimus Significant Title V Permit Revision
Section D (PO)
Flow Coating Systems

Legal Owner
or Operator:

SIERRACIN/SYLMAR CORP
12780 SAN FERNANDO RD.
SYLMAR, CA 91342

ID: 149814

Equipment

Location: 12780-82 SAN FERNANDO RD, SYLMAR, CA 91342

Equipment Description:

A/N 468415
Title V Permit Revision (non RECLAIM)

A/N 468416 (Admin C/D, Regular C/C, Previous Permit No. F16564, A/N 342167)

DEVICE NO. D4,
~~COATER, FLOW, MULLIPORE FLOW COATING GUN, WITH TWO 1.2 KW UV~~
~~CURING LAMPS, INSIDE 96 W. X 559 L. X 108. (INCH) ROOM~~
~~COATER, PLANT 1, ROOM NO. 1, WITH ONE 5-GAL MILLIPORE FLOW~~
~~COATER. WITH ONE 45-KW IR-LAMP CURING BANK, AND FIVE ROBOTIC UV~~
~~CURING SYSTEMS (7.2 KW TOTAL) COMMON TO ROOMS NOS 1 THROUGH 6.~~

A/N 468417 (Admin C/D, Regular C/C, Previous Permit No. D87835, A/N 298865)

DEVICE NO. D19,
~~SPRAY COATING OPERATION, UV ROOM NO. 2, 8 FT X. 12 FT L. X 11 FT~~
~~H.~~
~~COATER, PLANT 1, ROOM NO. 2, WITH ONE 5-GAL MILLIPORE FLOW~~
~~COATER. WITH ONE 45-KW IR-LAMP CURING BANK, AND FIVE ROBOTIC UV~~
~~CURING SYSTEMS (7.2 KW TOTAL) COMMON TO ROOMS NOS 1 THROUGH 6.~~

A/N 468418 (Admin C/D, Regular C/C, Previous Permit No. D88416, A/N 297550)

DEVICE NO. D13,
~~COATER, FLOW, WITH 2 UV CURING LAMPS~~
~~COATER, PLANT 1, ROOM NO. 3, WITH ONE 5-GAL MILLIPORE FLOW~~
~~COATER. WITH ONE 45-KW IR-LAMP CURING BANK, AND FIVE ROBOTIC UV~~
~~CURING SYSTEMS (7.2 KW TOTAL) COMMON TO ROOMS NOS 1 THROUGH 6.~~

A/N 468419 (PO no PC)

DEVICE NO. D60, COATER, PLANT 1, ROOM NO. 4, WITH ONE 5-GAL
MILLIPORE FLOW COATER. WITH ONE 45-KW IR-LAMP CURING BANK, AND
FIVE ROBOTIC UV CURING SYSTEMS (7.2 KW TOTAL) COMMON TO ROOMS NOS
1 THROUGH 6.

A/N 468420 (Admin C/D, Regular C/C, Previous Permit No. F46787, A/N 330913)

DEVICE NO. D44,
~~COATER, FLOW, WITH IR LAMPS, 45 KW~~
~~COATER, PLANT 1, ROOM NO. 5, WITH ONE 5-GAL MILLIPORE FLOW~~
~~COATER. WITH ONE 45-KW IR-LAMP CURING BANK, AND FIVE ROBOTIC UV~~
~~CURING SYSTEMS (7.2 KW TOTAL) COMMON TO ROOMS NOS 1 THROUGH 6.~~



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Engineering and Compliance Office

APPLICATION PROCESSING AND CALCULATIONS

Pages 13	Page 2
A/N see below	Date 9-19-07
Processed by RNL	Checked by

A/N 468421 (PO no PC)
DEVICE NO. D61, COATER, PLANT 1, ROOM NO. 6, WITH ONE 5-GAL MILLIPORE FLOW COATER. WITH ONE 45-KW IR-LAMP CURING BANK, AND FIVE ROBOTIC UV CURING SYSTEMS (7.2 KW TOTAL) COMMON TO ROOMS NOS 1 THROUGH 6.

A/N 468422 (PO no PC)
DEVICE NO. D62, CONVEYOR, PLANT 1, ROOM NO. 7, ONE 28.8-KW UV CURING CONVEYOR, MODEL C48-300-2.

History

The company manufactures clear acrylic military/commercial aircraft canopies and windows. Protective transparent films are flow coated on to these clear acrylic substrates inside six HEPA treated clean rooms, Nos. 1 to 6, with a dedicated Millipore flow coater in each room. Coated parts are cured by air drying, a portable IR-lamp curing bank, three portable UV-robotic curing systems, or by a UV curing conveyor. The IR-lamp curing bank and the five UV-robotic curing systems are portable, and thus can be operated inside any one of the six clean rooms. The curing conveyor is located permanently inside clean room No. 7. The conveyor was previously located in the No. 1 clean room.

Flow coating and curing operations conducted inside clean rooms, Nos. 1, 2, 3 and 5, are permitted under Devices IDs Nos. D4, D13, D19, and D44. Coating/curing operations inside clean rooms, Nos. 4 & 6, have been recently added to Plant 1 and being proposed in this project.

In addition to the two new flow coating/curing operations, the applicant is also proposing:

1. To revise administratively the equipment descriptions of the existing coating/curing operations, under devices IDs Nos. D4, D13, D19 and D44, and
2. To modify equipment limits in the existing permit conditions to ensure that the net emissions from all flow coating/curing operations inside all six clean rooms (No. 1 through 6) in Plant 1 will be under 90 pounds of VOC per day, less than the current combined limit of 95 pounds of VOC per day.

The company also conducts similar flow coating/curing operations in Plant 3, under Device ID Nos. D12 and D57. The company is not proposing any changes to this operation.

A review of District compliance records indicates that the facility has had no citizen complaints filed, Notices to Comply, or Notices of Violation issued in the last two years. The facility is



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Engineering and Compliance Office

APPLICATION PROCESSING AND CALCULATIONS

Pages 13	Page 3
A/N see below	Date 9-19-07
Processed by RNL	Checked by

currently operating in compliance with all applicable rules and regulations.

Process Description

Parts to be coated are manually placed inside a clean room, rested on a rack, which is equipped with a collection reservoir at the bottom to capture run-off flow of coating materials. A continuous stream of liquid coatings is applied on parts using a Millipore flow coater. Only 10% of applied coatings stay on the parts. The remaining 90% of applied coatings is run-off and collected in the reservoir. The collected run-off materials cannot be reused because of product quality concerns. At the end of each flow coating process, the run-off materials are transferred to a vapor tight storage container for later hazardous disposal.

Coated parts are either allowed to cure by air drying, by using the IR-lamp curing bank, by the conveyor in the No. 7 clean room, or by one of the five UV-robotic curing systems. The robotic system passes UV light across entire surfaces in a configured pattern allowing a more consistent and uniform cure.

The following is the proposed operating schedule of the equipment:

<u>hr/dy</u>	<u>dy/wk</u>	<u>wk/yr</u>	
16	6	50	<-- <u>average</u>
24	7	52	<-- <u>maximum</u>

ROG Emission Limits

The company is subject to a facility limit of 3510 pounds of ROG in any one month (Condition No. F2.1). It is also subject to a Rule 442 limit of 833 pounds of ROG in any one month (Condition No. F2.2). All new emissions resulting from the additional two flow coating/curing emission sources in UV Rooms No. 4 and 5 will be bubbled into the above emission limit of 833 pounds of VOC in any one month. Therefore, there will be no ROG emission increase from the facility.

The company is also proposing to accept a daily equipment limit of 15 pounds of ROG emissions from each of the UV rooms Nos. 4 and 5 in order not to be subject to Rule 212 public notice (not more than 30 lb/dy). At the same time, all other ROG emission limits from the other UV rooms in plant 1 are also being proposed to be changed to the same daily limit of 15 pounds per day for simplicity. Therefore, the following table summarizes the existing ROG limits and the new proposed limits for each piece of equipment:



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Engineering and Compliance Office

APPLICATION PROCESSING AND CALCULATIONS

Pages 13	Page 4
A/N see below	Date 9-19-07
Processed by RNL	Checked by

UV Room No.	Device ID No.	Existing Limit (lb/dy)	Proposed Limit (lb/dy)
1	D4	15	15
2	D19	25	15
3	D13	25	15
4	D60	-	15
5	D44	30	15
6	D61	-	15
7	D62	-	-
TOTAL =		95	90

No flow coatings are conducted inside the No. 7 UV room, which is used for curing of flow coatings conducted elsewhere in UV rooms, Nos. 1 through 6. Therefore, a separate permit condition limit is not needed for the No. 7 UV room. A new condition No. E193.1 is being proposed where only curing operations with the UV conveyor is allowed to be conducted inside the room.

Emission Calculations

Based on multiple tests conducted by the company and observed by a District representative on 7-25-03 & 8-27-03, the amount of run-off materials collected in the run-off reservoirs were determined to be ranging from 92.64% to 94.18% by weight. Therefore, an emission factor of 0.10 (1-90%) is used in the following equation to determine ROG emissions from flow coating and curing operations:

$$\text{ROG (lb/day)} = \text{Usage (gal/day)} \times \text{VOC (lb/gal)} \times 0.10$$

The applicant is required to use the same emission factor of 0.10 in their calculations even though the actual flow coatings being recovered are greater than 90% (Condition No. A63.8).

For AEIS Data Entry:

About eight gallons of various flow coating materials are applied inside each room per company projection, with a maximum VOC content of 7.24 lb/gal. The following are ROG emissions to be entered in AEIS:

$$\text{ROG (R1)} = ((8 \text{ gal/dy})(7.24 \text{ lb/dy})(0.1))/(16 \text{ hr/dy}) = 0.36 \text{ lb/hr}$$

$$\text{ROG (R2)} = 0.36 \text{ lb/hr}$$



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Engineering and Compliance Office

APPLICATION PROCESSING AND CALCULATIONS

Pages 13	Page 5
A/N see below	Date 9-19-07
Processed by RNL	Checked by

For NSR Data Entry:

Based on a maximum daily emission limit of 15 pounds of VOC per day, the following are VOC emissions to be entered in NSR:

$$\text{ROG (R1)} = (15 \text{ lb/dy}) / (24 \text{ hr/dy}) = 0.63 \text{ lb/hr}$$

$$\text{ROG (R2)} = 0.63 \text{ lb/hr}$$

However, since all new emissions are being bubbled into the monthly facility wide emission limits of 3510 pounds, the 30DA are entered with the same values as previous NSR values.

Rule 1401 Compliance Determination

UV Rooms, Nos. 1, 2, 3 & 5 (D4, D19, D13 & D44):

The proposed changes to the permit and proposed reduction in VOC emission caps will not result in any increases of TAC emission. Therefore, compliance with Rule 1401 is expected.

UV Room, No. 7 (D62):

No flow coatings will be conducted inside the No. 7 UV room. An existing UV conveyor was moved from the No. 1 UV room to the No. 7 UV room. Any emissions of VOC/TAC associated with this UV conveyor have already been accounted for in other UV rooms (Nos. 1 through 6). Since no additional emissions are expected from this relocation of the UV conveyor, Rule 1401 compliance is expected inside the No. 7 UV room.

UV Rooms, No. 4 (D60) and No. 6 (D61):

The applicant is proposing to use a maximum of 0.1 gallon per day inside this No. 4 UV room of each of the following coating materials: FX-178-F, FX-313, FX-317 and FX-369. Based on MSDS provided by the applicant, FX-178-F contains 60% by weight of isopropyl alcohol (CAS No. 67-63-0) and FX-317 contains 12% by weight propylene glycol methyl ether (CAS No. 107-98-2).

The applicant is also proposing to use a maximum of 0.1 gallon per day inside this No. 6 UV room of each of the following coating materials: FX-177, FX-313, and FX-317. Based on MSDS provided by the applicant, FX-177 contains 80% by weight of isopropyl alcohol (CAS No. 67-63-0) and FX-317 contains 12% by weight propylene glycol methyl ether (CAS No. 107-98-2).

The following are estimated TAC emission increases resulting from both rooms Nos. 4 and 6:

$$\text{IPA (lb/dy)} = [(0.1)(60\%)+(0.1)(80\%)](1.1)(8.33) = 1.28 \text{ lb/dy}$$



Pages 13	Page 7
A/N see below	Date 9-19-07
Processed by RNL	Checked by

increases exceeding any of the daily maximums as specified by Rule 212(g).

	Maximum Daily Controlled Emissions					
	ROG	NO _x	PM ₁₀	SO ₂	CO	Pb
Total Increase (lb/dy)	0	0	0	0	0	0
MAX Limit (lb/dy)	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): There will increases in TACs in UV Rooms Nos. 4 and 6. However, the calculated MICR is less than 1E-6 for both receptors. Therefore, a public notice will not be required.

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

Emission increases per equipment are expected from the proposed new construction. The following summarizes the emission from the equipment and the rule limits:

	Maximum Daily Controlled (MDC) Emissions					
	ROG	NO _x	PM ₁₀	SO ₂	CO	Pb
Emission Increase	30	0	0	0	0	0
MAX MDC Limit (lb/dy)	30	40	30	60	220	3
Compliance Status	Yes	Yes	Yes	Yes	Yes	yes

No public notice is required since the MDC is not more than the limits.

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.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Engineering and Compliance Office

APPLICATION PROCESSING AND CALCULATIONS

Pages 13	Page 8
A/N see below	Date 9-19-07
Processed by RNL	Checked by

Rule 442: Since coatings used in these clean rooms are exempt from Rule 1124 VOC requirements, they are subject to Rule 442. The facility is subject to a monthly maximum ROG limit of 833 pounds in any one month from all emission sources that are subject to Rule 442. By complying with facility condition F2.2, the company is expected to be in compliance with this rule.

Rule 1124: since coatings used are translucent and applied on transparent substrates, per Rule 1124(1)(5), the coatings used are exempted from Rule 1124(c)(1) VOC content requirement.

The use of flow coater complies with Rule 1124(c)(3) transfer efficiency requirement.

IPA is used to clean miscellaneous polycarbonate substrates as surface preparation, in compliance with Rule 1124(c)(1)—the VOC composite partial pressure is 31.5 mm Hg, less than 44 mm Hg.

Rule 1171: Acetone is used as application equipment clean-up solvent, in compliance with Rule 1171(c)(1)(C).

REGULATION XIII: The proposed project will result in an increase in ROG emissions. The increase in ROG emissions is as follows:

ROG (lb/day)
30.0 new flow coaters

Rule 1303(a): Each flow coater is considered BACT for emitting not more than 15 pounds of ROG per day, less than the BACT limit of 36 pounds of ROG per day.

Rule 1303(b)(1): Further air quality modeling analysis will not be needed since negligible PM₁₀ emissions are expected from this project. Further, no modeling is required for ROG emissions.

Rule 1303(b)(2): Emissions from this project (30 lbs/day) are bubbled into the facility cap of 3510 pounds of ROG per month. Therefore, external emission



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Engineering and Compliance Office

APPLICATION PROCESSING AND CALCULATIONS

Pages 13	Page 9
A/N see below	Date 9-19-07
Processed by RNL	Checked by

offsets will not be needed. See ROG Emission Limits Section for more details.

- Rule 1303(b)(4): The facility is expected to be in full compliance with all applicable rules and regulations of the District.
- Rules 1303(b)(5)(A) & 1303(b)(5)(D): The proposed project does not qualify as a major modification at a major polluting facility. Further, the proposed project is exempt from CEQA according to the responses Sierracin/Sylmar provided on Form 400-CEQA for this project. Their responses in "Review of Impacts Which May Trigger CEQA" on Form 400-CEQA were all marked "No".
- Rule 1303(b)(5)(B): The Increase in emissions associated with the proposed project does not qualify as a major modification at an existing major polluting facility.
- Rule 1303(b)(5)(C): A modeling analysis for plume visibility is not required since the net emission increase from the proposed project does not exceed 15 ton/yr of PM10 or 40 ton/yr of NOx.
- Rule 1401: Toxics: Rule 1401 contains the following requirements:
- 1)(d)(1) *MICR and Cancer Burden* - The cumulative increase in MICR which is the sum of the calculated MICR values for all toxic air contaminants emitted from the new, relocated or modified permit unit will not result in any of the following:
 - (A) an increased MICR greater than one in one million (1.0×10^{-6}) at any receptor location, if the permit unit is constructed without T-BACT;
 - B) an increased MICR greater than ten in one million (1.0×10^{-5}) at any receptor location, if the permit unit is constructed with T-BACT;
 - C) a cancer burden greater than 0.5.
 - 2)(d)(2) *Chronic Hazard Index* - The cumulative increase in total chronic HI for any target organ system due to total emissions from the new, relocated or modified permit unit will not exceed 1.0 at any receptor location.



Pages 13	Page 10
A/N see below	Date 9-19-07
Processed by RNL	Checked by

3)(d)(3) *Acute Hazard Index* - The cumulative increase in total acute HI for any target organ system due to total emissions from the new, relocated or modified permit unit will not exceed 1.0 at any receptor location.

The calculated MICRs is less than 1E-6 and the calculated HIAs and HICs is less than 1.0. Compliance.

The equipment will be conditioned such that no toxic air contaminant will be used that are listed in 1401 amended 3/04/05 except for IPA and Propylene glycol methyl ether.

Regulation XXX Evaluation

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
NOx	40
PM ₁₀	30
SOx	60
CO	220

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 renewal Title V permit shall be accumulated and compared to the above threshold levels. This proposed project is the 2nd permit revision to the Title V renewal permit issued to this facility on 5-9-05. The following table summarizes the cumulative emission increases resulting from all permit revisions since the initial Title V permit was issued:



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Engineering and Compliance Office

APPLICATION PROCESSING AND CALCULATIONS

Pages 13	Page 11
A/N see below	Date 9-19-07
Processed by RNL	Checked by

	HAP	VOC	NOx	PM10	SOx	CO
Current Revision	0	0	0	0	0	0
1 st Revision, Change of Ownership	0	0	0	0	0	0
Cumulative Total	0	0	0	0	0	0
Maximum Daily	30	30	40	30	60	220

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 minimus significant permit revision" for non-RECLAIM pollutants or HAPs.

Recommendation

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a "de minimus significant permit revision", 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 permit will be issued to this facility.

Conditions:

Facility Conditions

F2.1 THE OPERATOR SHALL LIMIT EMISSIONS FROM THIS FACILITY AS FOLLOWS:

CONTAMINANT	EMISSIONS LIMIT
VOC	LESS THAN OR EQUAL TO 3510 LBS IN ANY ONE MONTH

To ensure compliance with the monthly Volatile Organic Compound (VOC) emission limit(s) of this condition, the operator shall comply with the following recordkeeping requirements:

- (1) The operator shall comply with Rule 109 (Recordkeeping for Volatile Organic Compound Emissions).
- (2) Within 14 calendar days after the end of each month, the operator shall total and record VOC emissions for the month from all equipment and operations covered by the monthly emission limit(s). The record shall include any procedures used to account for control device efficiencies and/or waste disposal. It shall be signed and certified for accuracy by the highest ranking individual responsible for compliance with District rules.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Engineering and Compliance Office

APPLICATION PROCESSING AND CALCULATIONS

Pages 13	Page 12
A/N see below	Date 9-19-07
Processed by RNL	Checked by

(3) The operator shall maintain a single list which includes only the name and address of each person from whom the facility acquired VOC-containing material regulated by the District that was used or stored at the facility during the preceding 12 months.

(4) The operator shall retain all purchase invoices for all VOC-containing material used or stored at the facility, and all waste manifests for all waste VOC-containing material removed from the facility, for five years.

For the purpose of this condition, the VOC emission limit shall be from all equipment and operations that are required to have written permits or are exempt from written permits pursuant to rule 219.

F2.2 THE OPERATOR SHALL LIMIT EMISSIONS FROM THIS FACILITY AS FOLLOWS:

CONTAMINANT	EMISSIONS LIMIT
VOC	LESS THAN OR EQUAL TO 833 LBS IN ANY ONE MONTH

For the purpose of this condition, the VOC emission limit shall be from all equipment and operations that are subject to rule 442.

To ensure compliance with the VOC Volatile Organic Compound(VOC) emission limit(s) of this condition, the operator shall comply with the following recordkeeping requirements:

(1) The operator shall comply with Rule 109 (Recordkeeping for Volatile Organic Compound Emissions).

(2) Within 14 calendar days after the end of each month, the operator shall total and record VOC emissions for the month from all equipment and operations covered by the monthly emission limit(s). The record shall include any procedures used to account for control device efficiencies and/or waste disposal. It shall be signed and certified for accuracy by the highest ranking individual responsible for compliance with District rules.

Device Conditions:

A63.8 THE OPERATOR SHALL LIMIT EMISSIONS FROM THIS EQUIPMENT AS FOLLOWS:

CONTAMINANT	EMISSIONS LIMIT
VOC	LESS THAN 15 LBS IN ANY ONE DAY

The operator shall calculate the emission limit(s) in this device for coating usage based on total collection efficiency of 90 % by weight. [Devices Subject to this condition: D4, D13, D19, D44, D60, D61]

B27.1 THE OPERATOR SHALL NOT USE MATERIALS CONTAINING ANY COMPOUNDS IDENTIFIED IN THE SCAQMD RULE 1401, AS AMENDED 12/07/1990.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Engineering and Compliance Office

APPLICATION PROCESSING AND CALCULATIONS

Pages 13	Page 13
A/N see below	Date 9-19-07
Processed by RNL	Checked by

For the purposes of this condition, compounds are those in Table I of the above mentioned rule, with an effective date of 12/07/1990 or earlier.
 [Devices Subject to this condition: D4, D12, D13, D14, D15, D18, D19, D20, D22, D23, D35, D44, D53, D54, D55]

B59.2 THE OPERATOR SHALL NOT USE THE FOLLOWING MATERIAL(S) IN THIS DEVICE: Materials containing any toxic air contaminants (TAC) listed in Table 1 of Rule 1401, with an effective date of March 4, 2005, or earlier, except isopropyl alcohol (CAS No. 67-63-0) and propylene glycol methyl ether (CAS No. 107-98-2).
 [Devices Subject to this condition: D60, D61]

E193.1 THE OPERATOR SHALL RESTRICT THE OPERATION OF THIS EQUIPMENT AS FOLLOWS:
 Only curing operations with the UV conveyor shall be conducted in this equipment.
 [Devices Subject to this condition: D62]

H23.7 THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES OR REGULATIONS:

CONTAMINANT	RULE	RULE/SUBPART
VOC	DISTRICT RULE	109
VOC	DISTRICT RULE	442

[Devices Subject to this condition: D4, D13, D19, D44, D57, D60, D61, D62]

K67.1 THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

Daily usage of coatings and solvents
 [Devices Subject to this condition: D2, D4, D6, D9, D10, D11, D13, D16, D19, D44, D53, D54, D60, D61]

K67.2 THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

Material safety data sheets for all coatings and solvents used at this facility shall be kept current and made available to district personnel.
 [Devices Subject to this condition: D4, D13, D14, D15, D18, D19, D44, D55, D57, D60, D61]

K67.3 THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

daily usage of coatings and solvents and daily emissions in a manner approved by the District according to Rule 109. These records shall be kept on file for a period of five years and be made available to District personnel upon request.
 [Devices Subject to this condition: D44]

TIER 2 SCREENING RISK ASSESSMENT

A/N: 468419 & 468421
Fac: SIERRACIN/SYLMAR CORP.

Application deemed complete date: 05/26/07

2. Tier 2 Data

MET Factor	0.50
4 hr	0.87
6 or 7 hrs	0.77

Dispersion Factors

2	3A & 3B For Chronic X/Q
6	For Acute X/Q

Dilution Factors (ug/m3)/(tons/yr)

Receptor	X/Q	X/Qmax
Residential	51.18	2000
Commercial	51.18	2000

Adjustment and Intake Factors

	Afann	DBR	EVF
Residential	1	302	0.96
Worker	3	149	0.38

A/N: 468419 & 468421

Date: 05/26/07

TIER 2 RESULTS

5. MICR

$MICR = CP \text{ (mg/(kg-day))}^{-1} * Q \text{ (ton/yr)} * (X/Q) * Afann * Met * DBR * EVF * 1.E-6 * MP$

Compound	Residential	Commercial
Isopropyl alcohol		
Propylene glycol monomethyl ether		
Total	Pass	Pass

No Cancer Burden, MICR<1.E=-6

5a. Cancer Burden		no
X/Q for one-in-a-million:		
Distance (meter)		
Area (km2):		
Population:		
Cancer Burden:		

6. Hazard Index

HIA = [Q(lb/hr) * (X/Q)max] * AF / Acute REL

HIC = [Q(ton/yr) * (X/Q) * MET * MP] / Chronic REL

Target Organs	Acute	Chronic
Alimentary system (liver) - AL		1.60E-04
Bones and teeth - BN		
Cardiovascular system - CV		
Developmental - DEV		8.52E-04
Endocrine system - END		
Eye	1.00E-01	
Hematopoietic system - HEM		
Immune system - IMM		
Kidney - KID		8.52E-04
Nervous system - NS		
Reproductive system - REP		
Respiratory system - RES	1.00E-01	
Skin		

A/N: 468419 & 468421

Date: 05/26/07

6a. Hazard Index Acute

HIA = [Q(lb/hr) * (X/Q)max] * AF/ Acute REL

HIA - Residential										
Compound	AL	CV	DEV	EYE	HEM	IMM	NS	REP	RESP	SKIN
Isopropyl alcohol				1.00E-01					1.00E-01	
Propylene glycol monomethy										
Total				1.00E-01					1.00E-01	

HIA - Commercial										
Compound	AL	CV	DEV	EYE	HEM	IMM	NS	REP	RESP	SKIN
Isopropyl alcohol Propylene glycol monomethy				1.00E-01					1.00E-01	
Total				1.00E-01					1.00E-01	

6b. Hazard Index Chronic

$$HIC = [Q(\text{ton/yr}) * (X/Q) * MET * MP] / \text{Chronic REL}$$

Compound	HIC - Residential												
	AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP	RESP	SKIN
Isopropyl alcohol				8.52E-04					8.52E-04				
Propylene glycol monomethy	1.60E-04												
Total	1.60E-04			8.52E-04					8.52E-04				

A/N: 468419 & 468421

Date: 05/26/07

HIC - Commercial													
Compound	AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP	RESP	SKIN
Isopropyl alcohol				8.52E-04					8.52E-04				
Propylene glycol monomethy	1.60E-04												
Total	1.60E-04			8.52E-04					8.52E-04				