

Pacific West Litho  
3291 E. Mira Loma Ave.  
Anaheim, CA 92806  
ID: 82608

**EQUIPMENT DESCRIPTION**

A/N 494462:

LITHOGRAPHIC PRINTING SYSTEM CONSISTING OF:

1. LITHOGRAPHIC PRINTING PRESS, KOMORI, 6-COLOR+COATER, SHEET FED, MODEL NO. LS640C, SERIAL NO. 4015, 40" SHEET WIDTH.
2. DRYER, PIERRY, MODEL NO. 2CXHA, SERIAL NO. 23754-0908, 2'-0" W. X 3'-10" L. X 5'-7" H., INFRARED HEATED WITH 40 LAMPS, 60 KW TOTAL, AND ONE 3 H.P. EXHAUST BLOWER.

A/N 494461: Title V permit revision

**CONDITIONS**

A/N 494462:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE TOTAL QUANTITY OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS DISCHARGED TO THE ATMOSPHERE FROM THIS EQUIPMENT SHALL NOT EXCEED 900 POUNDS IN ANY CALENDAR MONTH.  
[RULE 1303(b)(2)-OFFSET]
4. MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY TOXIC AIR CONTAMINANTS IDENTIFIED IN RULE 1401 TABLE 1, EXCEPT ETHYLENE GLYCOL MONOBUTYL ETHER, XYLENE, ISOPROPYL ALCOHOL, HEXANE, AMMONIA AND PHOSPHORIC ACID WITH AN EFFECTIVE DATE OF MARCH 7, 2008 OR EARLIER.  
[RULE 1401]
5. FOUNTAIN SOLUTIONS USED IN THIS EQUIPMENT SHALL BE 8% VOC BY VOLUME OR LESS.  
[RULE 1303(a)(1)-BACT]

**APPLICATION PROCESSING AND CALCULATION**

6. THE COMPOSITE VAPOR PRESSURE OF THE VOC IN THE BLANKET AND ROLLER WASHES USED ON THIS EQUIPMENT SHALL NOT EXCEED 10 mm Hg @ 20 DEGREES C.  
[RULE 1303(a)(1)-BACT]

7. PERMIT SHIELD: NOT WITHSTANDING THE OTHER REQUIREMENTS AND CONDITIONS IN THIS PERMIT, THIS EQUIPMENT IS NOT SUBJECT TO THE FOLLOWING RULE REQUIREMENTS:

RULE 1128, 3/8/1996

COMPLIANCE WITH THE CONDITIONS OF THIS TITLE V PERMIT SHALL BE DEEMED IN COMPLIANCE WITH ANY REGULATORY REQUIREMENTS APPLICABLE AS OF THE DATE OF PERMIT ISSUANCE TO THIS EQUIPMENT, PROVIDED THAT SUCH REGULATORY REQUIREMENTS ARE INCLUDED AND SPECIFICALLY IDENTIFIED IN THIS PERMIT. NOTHING IN THIS PERMIT OR IN ANY PERMIT SHIELD CAN ALTER OR AFFECT: (a) UNDER SECTION 303 OF THE FEDERAL CLEAN AIR ACT, THE PROVISIONS FOR EMERGENCY ORDERS; (b) THE LIABILITY OF THE OPERATOR FOR ANY VIOLATION OF APPLICABLE REQUIREMENTS PRIOR TO OR AT THE TIME OF PERMIT ISSUANCE; (c) THE APPLICABLE REQUIREMENTS OF THE ACID RAIN PROGRAM; (d) THE ABILITY OF EPA TO OBTAIN INFORMATION FROM THE OPERATOR PURSUANT TO SECTION 114 OF THE FEDERAL CLEAN AIR ACT; (e) THE APPLICABILITY OF STATE OR LOCAL REQUIREMENTS THAT ARE NOT "APPLICABLE REQUIREMENTS", AS DEFINED IN RULE 3000, AT THE TIME OF PERMIT ISSUANCE BUT WHICH DO NOT APPLY TO THE FACILITY, SUCH AS TOXICS REQUIREMENTS UNIQUE TO THE STATE; OR (f) THE APPLICABILITY OF REGULATORY REQUIREMENTS WITH COMPLIANCE DATES AFTER THE PERMIT ISSUANCE DATE. THIS PERMIT SHIELD SHALL NOT APPLY TO ANY OPERATIONAL CHANGE MADE PURSUANT TO THE OPERATIONAL FLEXIBILITY PROVISIONS OF DISTRICT RULE 3005.  
[RULE 3004 (c) - PERMIT SHIELD]

**APPLICATION PROCESSING AND CALCULATION**

8. IN ADDITION TO THE RECORD KEEPING REQUIREMENTS OF RULE 109, THE OPERATOR SHALL KEEP ADEQUATE RECORDS FOR THIS EQUIPMENT TO VERIFY THE FOLLOWING ON A DAILY BASIS:

A. USAGE OF INKS, COATINGS, FOUNTAIN SOLUTIONS, ROLLER WASHES, BLANKET WASHES, AND ALL OTHER MATERIALS CONTAINING VOC, IN GALLONS PER DAY OF EACH MATERIAL.

B. DENSITY OF INKS, IN POUNDS PER GALLON, AND PERCENTAGE BY WEIGHT OF LITHOGRAPHIC OILS IN THE INKS.

C. INK ABSORPTION FACTOR AS SPECIFIED BY CURRENT SCAQMD GUIDELINES.

D. EMISSIONS IN POUNDS OF VOC PER DAY AND POUNDS OF VOC PER CALENDAR MONTH.

E. VOC CONTENT OF COATINGS, FOUNTAIN SOLUTIONS, WASH MATERIALS AND ALL OTHER MATERIALS, IN POUNDS PER GALLON AS APPLIED, INCLUDING WATER AND PERCENT VOC BY VOLUME.

SUCH RECORDS SHALL BE RETAINED FOR A PERIOD OF FIVE YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

[RULE 109, 1303(b)(2)OFFSET]

**Emissions And Requirements:**

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 109

VOC: RULE 1130, SEE APPENDIX B FOR EMISSION LIMITS

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

**BACKGROUND**

Pacific West Litho submitted this application for a Permit to Operate for a lithographic printing press and associated infrared dryer which have installed without first receiving a Permit to Construct. The “new” press will operate under a facility-wide VOC emission limit of 1725 lbs/month and a 900 lb/month equipment-specific limit. A total of four presses are operated at the facility.

Pacific West Litho is a Title V facility. A Title V renewal permit was issued to this facility on April 16, 2006. Pacific West Litho has proposed to revise their Title V renewal permit by adding a lithographic printing press. This permit revision is considered as a “de minimis significant permit revision” to their Title V permit, as described in Regulation XXX evaluation.

**PROCESS DESCRIPTION**

Pacific West Litho is a commercial printer. They print a variety of products, including brochures, inserts and reports. They operate 24 hrs/day, 5 to 7 days/wk and 52 wks/yr.

**EMISSION ESTIMATES**

Pacific West Litho will use a variety of materials in the new press. All materials are compliant with Rules 1130 and 1171. The VOC emissions from the use of all materials from the proposed press are estimated to be 30 lb/day. The materials are tabulated as follows:

Material	Density (lb/gal)	VOC Content (lb/gal)	Rule Limit (lb/gal)	Max Usage (gal/day)	Max Emissions (lb/day)
Superior Litho Inks	13.35	1.7	2.5 (Rule 1130)	25.9	2.2*
Superior Varnish	8.35	2.13	2.5 (Rule 1130)	6.1	0.6*
Diamond Coat	9.12	0.18	2.5 (Rule 1130)	50.0	9.0
950 Anti-Skin Spray	6.0	5.56	**	0.125	0.7
Rycoline Ftn. Solution	8.93	1.3***	0.83 (Rule 1130)	0.625	0.8
IPA	6.58	6.55***	0.83 (Rule 1171)	0.391	2.6
Allied Blanket Cond.	7.2	7.2	(Not Rule 1171)	1	7.2
Allied Roller Lubricant	8.35	1.7	-	0.125	0.2
Allied Dynaklean	8.09	0.8	0.83 (Rule 1171)	1	0.8
Allied Plate Fix	8.6	0.2	0.83 (Rule 1171)	0.25	0.05
PS Roller Cleaner	10.26	0	0.83 (Rule 1171)	0.25	0
Ammonia	8.3	0	0.83 (Rule 1171)	1.5	0
Star Roller Cleaner	6.34	0.83	0.83 (Rule 1171)	3	2.5
Star 100 Wash	8.25	0.83	0.83 (Rule 1171)	4	3.3
<b>Total</b>					<b>30</b>

\*Ink adsorption 95%

\*\*Mixed with inks, overall VOC of inks below limit

\*\*\*Fountain solution mixture VOC lb/gal as applied = 0.306

Fountain solution mixture volume VOC % as applied = 4.36%

Composite Partial Pressures (mmHg):

Material	mmHg
Star Roller Cleaner	0.8
Star 100 Wash	0.11
Allied Plate Fix	4.0
Allied Dynaklean	3.0
Ammonia	0
PS Roller Cleaner	0

Daily VOC emissions = 30 lb/day

Hourly VOC emissions = 30 ÷ 24 hr/day = 1.25 lb/hr

## Engineering and Compliance

Appl. no. Below

Processed by Todd Iwata

Checked by

Date 02/06/2009

## APPLICATION PROCESSING AND CALCULATION

**RISK ASSESSMENT**

Materials used in the printing presses contain the following Rule 1401 toxic air contaminants, isopropyl alcohol (IPA), ethylene glycol monobutyl ether (EGME), xylene, phosphoric acid (PA), ammonia and hexane.

Estimated emissions are based on the maximum amount of TAC in any material. Based on a VOC emission level of 30 lb/day for the proposed project, there will not be a cancer risk equal or greater than one in a million and there will not be a health hazard risk. All estimated emissions are below Tier 1 Screening Emission Levels at the closest receptor distance.

Material	TAC	Wt. Percent (%)	Max. Usage (gal/day)	Emissions (lb/day)	Emissions (lb/hr)	Emissions (lb/yr)
Diamond Coat	IPA	5	50.0	22.8	0.95	8,322
Ftn Solution	EGME	10	0.625	0.56	0.023	204
IPA	IPA	99	0.391	2.56	0.1	934
Blanket Cond.	Xylene	7	1.0	0.5	0.021	184
Allied Dynaklean	Xylene	7	1.0	0.57	0.024	207
Allied Plate Fix	EGME	2.6	0.25	0.06	0.002	20
Roller Cleaner	PA	5	0.25	0.13	0.005	47
Ammonia	Ammonia	4	1.5	0.5	0.021	182
Anti-Skin Spray	Hexane	20	0.125	0.15	0.006	55
Anti-Skin Spray	IPA	20	0.125	0.15	0.006	55

TAC	Max Emissions (lb/hr)	Max Emissions (lb/day)	Max Emissions (lb/yr)	Tier 1 Level (lb/hr)	Tier 1 Level (lb/yr)
IPA	1.0	25.5	9,311	1.6	231,000
EGME	0.03	0.6	224	7.0	-
Xylene	0.04	1.1	391	11	23,100
PA	0.005	0.13	47	-	231
Ammonia	0.02	0.5	182	1.6	6,610
Hexane	0.006	0.15	55	-	231,000

**RULE ANALYSIS**

RULE 212 (c)(1): This section requires a public notice for all new or modified permit units that emit air contaminants located within 1,000 feet from the outer boundary of a school. The facility is not located within 1,000 feet of the outer boundary of a school.

RULE 212 (c)(2): This section requires a public notice for all new or modified facilities that have on-site emission increases exceeding any of the daily maximums as specified by Rule 212(g). There will not be an emission increase with the proposed project, the press will operate under the existing facility VOC emission cap.

**APPLICATION PROCESSING AND CALCULATION**

RULE 212(c)(3): This section requires a public notice for all new or modified permit units with increases in emissions of toxic air contaminants listed in Table I of Rule 1401 resulting in a cancer risk equal or greater than one in a million. There will not be a cancer risk.

RULE 212(g): This section requires a public notice for all new or modified sources that result in emission increases exceeding any of the daily maximums as specified by Rule 212(g). VOC emissions are limited to 900 lbs/month.

	Maximum Daily Emissions					
	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>CO</b>	<b>Pb</b>
Emission increase	30	0	0	0	0	0
MAX Limit (lb/day)	<b>30</b>	<b>40</b>	<b>30</b>	<b>60</b>	<b>220</b>	<b>3</b>
Compliance Status	Yes	Yes	Yes	Yes	Yes	Yes

RULES 401 & 402: AQMD database has no records of visible emissions or nuisance complaints against this facility. Compliance with these requirements is expected with the proper operation of the equipment.

RULE 1130: All materials are VOC compliant with the limits of this rule. Compliance is achieved.

RULE 1171: All cleaners meet the VOC limit of this rule. Compliance is achieved.

**REG. XIII**

1303(a): BACT for lithographic printing presses is the use of fountain solutions that are 8 percent VOC by volume or less and blanket/roller washes that have a composite partial pressure of 10 mm Hg or less. Pacific west Litho uses a fountain solution that is 4.4% VOC by volume and blanket/roller washes that are less than 10 mm Hg. Compliance with applicable BACT requirements is achieved.

1303(b)(1): Modeling is not required for VOC emissions, the only criteria pollutant emitted from this process.

1303(b)(2): Emissions offsets are not required since this equipment will be placed under the existing facility VOC cap of 1,725 lb/month.

1303(b)(4): The facility is expected to be in full compliance with all applicable rules and regulations of the District.

RULE 1401: A few toxic air contaminant emissions will be emitted from the operation of the press. Expected emissions are small and do not exceed Tier 1 Screening Emission Levels. See

RISK ASSESSMENT section. There will not be a cancer risk equal or greater than one in a million or a health hazard risk from operating the press as intended. Compliance is achieved.

### **REGULATION XXX**

The proposed project is considered as a “de minimis significant permit revision” to the Title V permit issued to this facility. 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 hazardous air pollutants (HAP) from these permit revisions during the term of the permit are not greater than any of the following emission threshold levels:

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

To determine if a project qualifies for a “de minimis significant permit revision”, emission increases resulting from all permit revisions shall be accumulated and compared to the above threshold levels. The Title V renewal permit was issued to this facility on April 16, 2006. The proposed issuance of a Permit to Operate for a lithographic printing press is the first permit revision requested by the facility since the issuance of the Title V renewal permit. The cumulative emission increases resulting from this proposed permit revision are summarized as follows:

<b>Revision</b>	<b>HAP</b>	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>SO<sub>x</sub></b>	<b>CO</b>
1 <sup>st</sup> Permit Revision: Permit existing lithographic printing press	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 minimis significant permit revision”.

**RECOMMENDATION**

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a “de minimis significant permit revision”, 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 raise any objections within the review period, a revised Title V permit will be issued to this facility.