

APPLICATION PROCESSING AND CALCULATION

Weyerhaeuser Co.
601 E. Ball Rd.
Anaheim, CA 92805

Equipment Location:
19615 South Susana Road
Compton, CA 90221

Facility ID: 132451

EQUIPMENT DESCRIPTION

APPLICATION NO. 479389 (New construction)

FLEXOGRAPHIC PRINTING PRESS/FOLDER/GLUER, AIR DRY TYPE, HAMADA, MODEL MINERVA-M FFG, SERIAL NO. RA-160, SHEET FED, 3 COLOR, 98" SHEET WIDTH.

A/N 479388: Tile V permit revision

BACKGROUND

Weyerhaeuser Co. submitted application no. 479389 for a new flexographic printing press to replace two existing flexographic printing presses (P/N F82457 (a/n 456423) and F82458 (a/n 456424)). The new press will be used similarly to the old presses, i.e. to print color and graphic images onto coated or uncoated corrugated paper sheets. The new press will operate under the existing facility VOC emission cap of 2,900 pounds per month. Emission offsets are not required. Weyerhaeuser Co. also submitted application no. 479388 to revise the facility permit for the change requested with application no. 479389.

Weyerhaeuser Co. is a Title V facility. A Title V permit was issued to this facility on February 5, 2007. Weyerhaeuser Co. has proposed to replace two existing printing presses with a new printing press. This permit revision is considered as a "minor permit revision" to the initial Title V permit, as described in the Regulation XXX evaluation.

PROCESS DESCRIPTION

Weyerhaeuser manufactures corrugated sheets for the construction of cardboard boxes used for consumer packaging. They manufacture a variety of boxes ranging from food boxes to dry goods boxes. Some boxes are printed with colored designs. The press will apply more than 200 different colors of low-VOC inks to corrugated sheets. The inks are air dried. Printed sheets are slotted, scored and dicut. A glued lap adhesive is then applied as a thin bead onto the

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corrugated sheet via an applicator roll, just prior to the folding operation. The adhesive is a water-based, polyvinyl emulsion, chemically and functionally similar to Elmer's glue. The adhesive is applied at ambient temperature and is air dried. The adhesive contains low level of VOC and trace amounts of hazardous air pollutants.

Antifoam, transfer and mottling agents may also be used in rare occasions and in small quantities. Cleanup will be performed with water and occasionally with water-based cleaners. Weyerhaeuser operates up to 24 hr/day, 7 day/wk and 52 wk/yr.

EMISSION ESTIMATES

Ink usage with the press will range from approximately 30 gals/day (average) to 60 gals/day (maximum). The VOC content of the inks range from <10 g/l to 134 g/l, less water and exempt compounds. VOC emissions are calculated as follows:

Ink usage = 30-60 gals/day

Coating VOC content = 0-1.1 lb/gal

Material VOC content = 0.08-0.35 lb/gal

Max daily VOC emissions = 60 gal x 0.35 lb/gal = 21 lb/day

Max hourly VOC emissions = 21 lb/day ÷ 24 hr/day = 0.87 lb/hr

Weyerhaeuser will be operating this equipment under the existing facility VOC emission limit of 2,900 lbs/month. As a result, offset for VOC emission is not required and 30-day average for NSR entry will be "0" for this equipment.

RULE 1401 ANALYSIS

Five toxic air contaminants, acetaldehyde, formaldehyde, vinyl acetate, isopropyl alcohol and ammonia, will be emitted from the use of adhesives, inks and ink additives in the new press. The expected emissions of these TACs are below the Tier 1 Screening Emission Levels of Rule 1401 and a Tier 2 Analysis is not required. A cancer risk equal or greater than one in a million and an acute and chronic health hazard risks are not expected from the use of the new press.

Further, the proposed printing press will be used to replace two existing presses without resulting in any increase in emissions. As a result, the proposed project is exempt from the risk assessment requirements pursuant to Rule 1401 (g)(1)(C).

RULE ANALYSIS

RULE 212: Public notification is not required since the proposed project is a functional identical replacement of existing lithographic printing presses with no emission increase.

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Additionally, the proposed project will not cause a cancer risk equal or greater than one in a million and the facility is not located within 1,000 feet of a school.

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

RULE 402: Operation of this equipment is not expected to create a nuisance.

RULE 1130: The inks used in this press comply with the VOC content limits of this rule. The VOC content for the inks are under the 2.5 lb/gal limit. Compliance with this rule is achieved.

RULE 1171: Water will be primarily used for cleaning purposes in this press. On an occasional use, water-based cleaners may be used which are all less than 25 g/l. Compliance is achieved.

RULE 1303:

(a): Weyerhaeuser will use water-based inks that have a VOC content less than 1.5 lbs/gal, less water/exempt compounds. Compliance with BACT is achieved.

(b)(1): This application is exempt for modeling requirements under the Rule 1304 (a)(1) "replacement" exemption.

(b)(2): Emission offsets are not required since there will not be an increase in emissions with the proposed replacement press. The press will operate under the same facility wide condition No. 2, which limits VOC emissions from the facility to less than or equal to 2,900 lbs/month.

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

RULE 1401: The proposed project is a functional identical replacement with no emission increase and therefore is exempt from the requirements of this rule pursuant to Rule 1401 (g)(1)(C). For background information, a few toxic air contaminant emissions will be emitted from operating the press. Expected emissions do not exceed Tier 1 Screening Emission Levels. 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 expected.

REGULATION XXX

The replacement of the printing press is considered as a "minor permit revision" pursuant to Rule 3000(b)(12)(A)(vi) since the proposed project does not result in an increase in emissions of a pollutant subject to Regulation XIII - New Source Review or a hazardous air pollutant.

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Rule 3003(j) specifies that for minor permit revision, the proposed Title V permit revisions shall be submitted to EPA for review. This proposed revision is the first permit revision to the Title V permit issued to this facility on February 5, 2007. The cumulative emission increases resulting from the proposed permit revision are summarized as follows:

Revision	HAP	VOC	NOx	PM₁₀	SOx	CO
1 st Permit Revision; add printing press to replace two existing printing presses	0	0	0	0	0	0
Cumulative Total	0	0	0	0	0	0
Maximum Daily	30	30	40	30	60	220

RECOMMENDATION

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a “minor 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:

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 VOC CONTENT OF THE INKS USED IN THIS EQUIPMENT SHALL NOT EXCEED 1.5 LBS/GAL, LESS WATER AND EXEMPT COMPOUNDS.
[RULE 1303(a)(1)-BACT]
4. MATERIALS USED IN THIS EQUIPMENT SHALL NOT CONTAIN ANY TOXIC AIR CONTAMINANTS IDENTIFIED IN RULE 1401, TABLE 1 EXCEPT ISOPROPYL ALCOHOL, ACETALDEHYDE, AMMONIA, FORMALDEHYDE, AND VINYL ACETATE, WITH AN EFFECTIVE DATE OF MARCH 4, 2005 OR EARLIER.
[RULE 1401]
5. IN ADDITION TO THE RECORDKEEPING REQUIREMENTS OF RULE 109, THE OPERATOR SHALL KEEP ADEQUATE RECORDS FOR THIS EQUIPMENT TO VERIFY THE DAILY AND

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MONTHLY VOC EMISSIONS IN POUNDS AND THE VOC CONTENT OF EACH MATERIAL AS APPLIED (INCLUDING WATER AND EXEMPT COMPOUNDS).
[RULE 109, 1303(b)(2)-OFFSET]

Emissions And Requirements:

6. 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