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| | APP. NUMBER | 524696 |
| | PROCESSED BY | SMP |
| | REVIEWED BY | |
| | DATE | 07/24/11 |

**PERMIT TO CONSTRUCT/OPERATE EVALUATION
COATING LINE**

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|--------------------------|---|
| Applicant's Name | ARLON GRAPHICS LLC |
| Company I.D. | 167066 |
| Mailing Address | 2811 S. HARBOR BLVD., SANTA ANA, CA 92704 |
| Equipment Address | SAME AS ABOVE |

EQUIPMENT DESCRIPTION

Application No. 524696 (New Construction)

FILM COATING LINE NO. 4 CONSISTING OF:

1. UNWIND ROLLER STAND WITH ONE 0.5 H.P. WEB GUIDE.
2. FAUSTEL, GRAVURE COATING HEAD WITH ROLLERS AND TWO 2 H.P. DRIVES. (D26)
3. COATING APPLICATION CHAMBER WITH A DOCTOR BLADE.
4. OVEN, RADIAN ENERGY SYSTEM, 5'-8" W. X 5'-4" L. X 1'-4" H., 77.5 KW INFRARED HEATER, WITH A 2 H.P. SUPPLY BLOWER AND A 2 H.P. EXHAUST BLOWER. (D27)
5. SPLICE STAND, WITH A 5 H.P. MAIN DRIVE.
6. REWIND ROLLER STAND WITH A 10 H.P.MOTOR.

Application No.: 524698

TITLE V/RECLAIM DE-MINIMIS PERMIT REVISION

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| HISTORY |
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Arlon Graphics, LLC submitted above permit application to install a new coating line at their Santa Ana location. The company recently acquired this business from Arlon Adhesive Systems (RECLAIM facility; ID No. 11640).

Arlon Graphics, LLC is a major decorative film manufacturer and the plant has been at this location for a number of years. The manufacturing process involves casting of a vinyl film and application of adhesive on the film. This adhesive-backed digital printable vinyl film is used for graphics (number, logos, pictures, etc.) by the customers, and applied to their vehicles or other surfaces. The company is now going to apply a water-based primer coating on the vinyl film prior to adhesive application using the above described equipment, so that it will help the adhesive to adhere to the vinyl film. This will ensure that the adhesive will come off with the film when the customer removes the film, and not to stick to the customer's surface.

The company currently has active permits to operate two coating lines, one solvent reclaim still, two blending equipment, one solvent drum cleaning equipment, and one afterburner under I.D. # 167066. A facility-wide VOC emission limit of 931 pounds per day has also been established for Arlon Graphics, LLC. The applicant did not request any net facility-wide VOC emission increase under this project. The facility has permanent total enclosure (PTE) for their two coating lines. However, they are planning to operate the above described coating line outside of the PTE. District Rules 1128 and 1171 apply to this facility.

The applicant is proposing to use a super low VOC (<5% VOC by weight) material in this equipment, which will comply with the current BACT requirements. The extremely low VOC content of the coating (0.03479 lb/gal) is a better control than the BACT guidelines. A permit condition will prohibit usage of a coating containing VOC exceeding 5% VOC by weight.

The District database shows that the previous operator has not received any odor nuisance or visible emission complaints from the public in the last two years. The database also indicated that no Notice to Comply or the Notice of Violation was issued to this facility in the last two years.

The facility is located within an industrial area. It is not located within 1000 feet from any school and the equipment emissions will not exceed any emission threshold under this project, hence, this application will not require a public notice.

Arlon Graphics, LLC is a Title V/RECLAIM facility. A Title V permit was issued to this facility on February 3, 2011. This proposed first permit revision is considered a "de-minimis permit revision" to the Title V permit, as described in Regulation XXX evaluation.

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PROCESS DESCRIPTION

The company is proposing to install a new coating application line with gravure rollers to apply a primer coating on the vinyl substrate. The company currently has one vinyl casting line and one coating (adhesive) application line at this plant. Both these lines are vented to an air pollution control equipment (RTO) to control the VOC emissions. However, this new coating line will not be vented to the RTO, as VOC emissions are expected to be low.

The coating enters the bottom of the application chamber via a pump and fills the chamber. This in turn fills thousands of tiny cells engraved on the gravure roll. Doctor blades wipe away excess coating which is recycled back into the pump. The gravure roll rotates until it touches the web. The coating then exits the cells via capillary action and coats the vinyl substrate. The vinyl then proceeds to the dryer to be dried. The gravure coating application is almost similar to roller coating. It just applies a thinner coating layer compare to the roller coating.

The VOC content of the material as applied is 0.03479 lbs/gallon (see material mixing data in the file). The VOC content of the coating less water and less exempt compounds is 37 grams per liter, which complies with the Rule 1128 requirements. Copy of the MSDS of the coating is also in the file. The average/maximum material usage will be 23 gallons per hour.

OPERATING HOURS

Average : 8 hour/day, 3 day/week, 50 weeks/year
Maximum: 24 hour/day, 7 days/week, 52 weeks/year

EMISSION CALCULATIONS

Emissions from this equipment are mostly ROG. No particulate emissions are expected from the operation of gravure coating (similar to roller-coating). The VOC of the coating material HP 1035 is 15 g/l (0.125 lb/gal). The material is mixed with water (56.2 lb HP1035 and 140.4 lb water). So the final material VOC is 0.035 lb/gal. There are no emissions from the clean-up material, as no VOC containing materials will be used in this equipment

Average/Maximum gallons of coating usage is 23 gal/hr.

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▼ **SECTION 212(c)(3):**

This application is not subject to this section because there are no carcinogenic toxic compounds subject to Rule 1401 present in the coating to be used in this equipment.

▼ **SECTION 212(g):**

This section requires a public notice for all new or modified sources which undergo construction or modifications resulting an emissions increase exceeding any of the daily maximum specified in the table below. As shown in the following table, the emission increases are below the daily maximum limits specified by Rule 212(g). Therefore, this application will not be subject to this section.

| LB/DAY | CO | NOX | PM₁₀ | ROG | Lead | SOX |
|-------------------|-----------|------------|------------------------|------------|-------------|------------|
| MAX. LIMIT | 220 | 40 | 30 | 30 | 3 | 60 |
| INCREASES | 0 | 0 | 0 | 19.44 | 0 | 0 |

▣ **RULES 401 & 402, VISIBLE EMISSIONS & NUISANCE**

AQMD database has no records of any visible emissions or nuisance complaints against this company.

▣ **RULE 1128 PAPER, FABRIC, AND FILM COATING OPERATIONS**

▼ **SECTION (c)(2), VOC CONTENT OF COATINGS**

The usage of coating with super low VOC content (37 g/l, less water and less exempt compounds) will provide compliance with these provisions.

▼ **SECTION (c)(6), TRANSFER EFFICIENCY**

The usage of material low VOC content (37 g/l, less water and exempt compounds) will provide compliance with these provisions, per subparagraph (i)(3). Also, gravure coating application process is similar to roller coating application method.

▣ **RULE 1171, SOLVENT CLEANING OPERATIONS**

Acetone (exempt VOC) and water will be used for the equipment clean-up operation. Compliance with this rule is expected.

▣ **RULE 1401, NEW SOURCE REVIEW OF TOXIC CONTAMINANTS**

As described above in the evaluation report, this equipment is excepted to comply with these requirements.

REGULATION XIII

▣ **RULE 1303(a), BEST AVAILABLE CONTROL TECHNOLOGY (BACT)**

(a) VOC EMISSIONS

This project will comply with BACT requirements by using a super low VOC coating with <5% VOC content by weight and zero VOC clean-up materials.

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▣ **RULE 1303(b)(1), MODELING**

No detailed modeling analysis is required for VOC emissions only.

▣ **RULE 1303 (b)(2), EMISSION OFFSETS**

Emission offsets are not required for this project as the applicant has not requested any VOC emission increases in the facility-wide VOC emission cap under this project.

▣ **RULE 1401, NEW SOURCE REVIEW OF TOXIC CONTAMINANTS**

As described above in the evaluation report, this equipment is expected to comply with these requirements.

REGULATION XXX

The proposed project is considered as a de minimis significant permit revision. Rule 3000(b)(6) defines a “de minimis significant permit revision” as any Title V permit revision where the cumulative emission increases on 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:

| Air Contaminant | Daily Maximum (lbs/day) |
|------------------------|--------------------------------|
| HAP | 30 |
| VOC | 30 |
| NO _x | 40 |
| PM ₁₀ | 30 |
| SO _x | 60 |
| CO | 220 |

Rule 3003(j) specifies that the proposed permit for the initial Title V permit shall be submitted to EPA for review. To determine if a project qualifies for a “de minimis significant permit revision”, emission increases resulting from all permit revisions that are made after the submittal of proposed permit to EPA shall be accumulated and compared to the above threshold levels. This is the first permit revision to the Title V Permit. The cumulative emission increases resulting from this proposed permit revision are summarized as follows:

| Revision | HAP | VOC | NO_x | PM₁₀ | SO_x | CO |
|---|------------|------------|-----------------------|------------------------|-----------------------|-----------|
| 1 st Permit Revision, Add devices D26 and D27. | 0 | 19.44 | 0 | 0 | 0 | 0 |
| Cumulative Total | 0 | 19.44 | 14 | 6 | 0 | 8 |
| Maximum Daily | 30 | 30 | 40 | 30 | 60 | 220 |

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Since NOx is a RECLAIM pollutant for this facility, an analysis must be made to ensure that the proposed permit revision is not considered a “significant permit revision” even though the cumulative increase in NOx emissions is less than the threshold level of 40 lbs/day. Rule 3000(b)(28)(D) defines a “significant permit revision” as any modification at a RECLAIM facility that results in an emission increase of RECLAIM pollutants over the facility’s starting Allocation plus the non-tradeable Allocations. Since this project has no NOx emissions associated, it is not considered as a “significant permit revision”.

CONCLUSIONS/RECOMMENDATIONS

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) in conjunction with the Rule 212 public notice. If EPA does not raise any objections within the review period and upon completion of the Rule 212 public notice period, a revised Title V permit will be issued to this facility.