

<b>PLANT NAME:</b> Mail Well Envelope Company	<b>ENGINEERING EVALUATION</b>	<b>APPLICATION NO.:</b> 006355
<b>STREET ADDRESS:</b> 1021 Cotton Street		<b>PLANT NO.:</b> 14279
<b>CITY, STATE, &amp; ZIP:</b> Oakland, CA 94606		<b>DATE:</b> 30 January 2003
<b>ENGINEER:</b> Sanjeev Kamboj		<b>PAGE NO.:</b> Page 1 of 7

## 1.0 BACKGROUND

Mail Well Envelope Company submitted this application for Permit to Operate the following equipment:

- S-2 Halm Jet Litho Press, JP-2**
- S-3 Halm Jet Litho Press, JP-2**
- S-4 Halm Super Jet, 2 color**
- S-5 Halm Super Jet, 2 color**
- S-6 Halm Super Jet, 2 color**

## 2.0 EMISSION CALCULATIONS

Table 2-1, Usage and Emission Calculations, summarizes the proposed usage and estimated emission calculations from application of Ink and Solvent for all the presses.

**TABLE 2-1  
Usage and Emission Calculations (S1-S6)**

MATERIAL DESCRIPTION	USAGE (gals/yr)	VOC CONTENT (lbs/gal)	POC (lbs/yr)	POC (tpy)
Wash V-120, B010003 (Roller Wash)	700	6.77	4739.00	2.369
ML-F Wetting Solution	56	6.63	371.28	0.185
Sheetfed Offset ink	148.33	0.49	72.68	0.036
<b>TOTALS:</b>			5,182.96	2.590

### Emissions for each press:

S-1: 863.83 lbs/yr; S-2: 863.83 lbs/yr; S-3: 863.83 lbs/yr; S-4: 863.83 lbs/yr; S-5: 863.83 lbs/yr; S-6: 863.83 lbs/yr.

### 2.1 Average Daily Emissions:

#### S-1

$$\text{POC} = (863.83 \text{ lbs/yr}) / (260 \text{ days/yr}) = 3.32 \text{ lbs/day}$$

#### S-2

$$\text{POC} = (863.83 \text{ lbs/yr}) / (260 \text{ days/yr}) = 3.32 \text{ lbs/day}$$

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**S-3**

POC= (863.83 lbs/yr) / (260 days/yr) = 3.32 lbs/day

**S-4**

POC= (863.83 lbs/yr) / (260 days/yr) = 3.32 lbs/day

**S-5**

POC = (863.83 lbs/yr) / (260 days/yr) = 3.32 lbs/day

**S-6**

POC = (863.83 lbs/yr) / (260 days/yr) = 3.32 lbs/day

**2.2 Plant Cumulative Increase:**

**POC =** 2.590 tpy (existing) + 0.000 tpy (new) = 2.590 tpy

**Note:** In previous application # 5066 for this plant, POC emissions resulting from all 6 presses were mentioned. Hence, there will be no change in previously reported POC emissions as a result of this project.

**2.3 Toxics:**

TAC	Material	Weight	(gals/yr)	VOC (lbs/gal)	Emission (lb/yr)	Trigger Limit (lb/yr)
Xylenes	Wash V-120	.01	700	6.77	47.39	58,000
2-butoxy ethanol	Sheetfed Etch	.10	56	0.7	3.92	3,900
	Wetting Solution	.54	56	6.63	200.49	
Total					204.41	

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As illustrated in Table above, the toxic compound emissions are below its toxic trigger level; therefore, a health risk screening analysis is not required pursuant Regulation 2, Rule 1, Section 316.

### 3.0 STATEMENTS OF COMPLIANCE

The Presses are subject to and in compliance with District Regulation 8, Rule 20, and Section 302 and Section 309. Regulation 8-20-302 identifies the VOC standards for inks, coatings, and adhesives, while Regulation 8-20-309 identifies the VOC standards for cleaning products. The ink proposed for use by Mail Well Envelope Company is complying (VOC<2.5 lb/gal). In addition, the cleaning products will be complying (VOC < 10 mmHg and VOC<25 mmHg). Review of Material Safety Data Sheets indicate that only complying low VOC inks and low vapor pressure solvents will be used at sources S-1 thru S-6.

The project is considered to be ministerial under the District's CEQA regulation 2-1-311 and therefore is not subject to CEQA review (PHBK Chapter 5). The engineering review for this project requires only the application of standard permit conditions and standard emissions factors and therefore is not discretionary as defined by CEQA.

As illustrated in Section 2.3 above, the toxic compound emissions are below their respective toxic trigger levels for S-1; therefore, a health risk screening analysis is not required pursuant Regulation 2, Rule 1, Section 316.

Best Available Control Technology (BACT), pursuant Reg. 2-2-301, is required for any new source, which emits more than 10 pounds of POC per highest day. Each source's annual average daily emission is calculated to be 3.32 lbs/day; therefore, BACT is not required.

Sources S-1 through S-6 are located within 1,000 feet of the nearest public school (Beacon School) and hence the project to permit these presses is subject to the public notification requirements contained in Regulation 2-1-412.

POC OFFSET requirements are not triggered since facility wide emissions are less than 15 tpy.

PSD, NSPS, and NESHAPS do not apply.

### 4.0 PERMIT CONDITIONS

#### Conditions for S-1 to S-6 (Halm Jet Litho Presses):

1. Usage of ink and cleanup solvent shall not exceed the following limits, in consecutive twelve-month period:
  - a. Sheetfed Offset ink = 1200 lbs

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- b. Wash V-120, B010003 (Roller Wash) = 700 gallons
  - c. ML-F Wetting Solution = 56 gallons
  - d. Sheetfed Etch, Product # 8539 = 56 gallons
- {Basis: Cumulative Increase}

2. Material used at S-1 to S-6 shall comply with the following standards:

- a. The VOC content of any ink shall not exceed 2.5 pounds of VOC per gallon.
  - b. The VOC content of any varnish shall not exceed 2.5 pounds per gallon.
  - c. Any fountain solution used at the offset press shall contain no more than 8 vol. VOC.
  - d. The press and roller washes used at S-1 shall not exceed any of the following:
    - 1. 2.5 pounds of VOC per gallon; or
    - 2. Vapor pressure greater than 10 mm Hg.
  - e. The metering roller cleaner shall not exceed a vapor pressure of 25 mm Hg.
- {Basis: BACT}

3. Coatings and cleanup solvents other than the materials specified in Condition 1, and/or usages in excess of those specified in Condition 1, may be used at S-1 to S-6, provided that the owner/operator can demonstrate that both the following are satisfied:

- a. Total POC emissions from sources S-1 to S-6 do not exceed 5,182.96 pounds in any consecutive twelve-month period.
  - b. The usage of these materials does not increase toxic emissions above any risk screening trigger level listed in Table 2-1-316 of Regulation 2-1.
- {Basis: Cumulative Increase, Toxic Risk Screen}

4. To determine compliance with the above conditions, the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions, including, but not necessarily limited to, the following information:

- a. Type and monthly usage of all POC containing materials used;
  - b. If a material other than those specified in Condition 1 is used or a material specified in Condition 1 is used in excess of the limit in Condition 1, POC and toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Condition 3, on a monthly basis;
  - c. Monthly usage and/or emission calculations shall be totaled for each consecutive twelve-month period.
- (Basis: Cumulative Increase, Toxic Risk Screen)

**5.0 EXEMPTIONS:**

*None*

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## 6.0 RECOMMENDATION

Issue permit to Operate for the following sources:

- S-2 Halm Jet Litho Press, JP-2**
- S-3 Halm Jet Litho Press, JP-2**
- S-4 Halm Super Jet, 2 color**
- S-5 Halm Super Jet, 2 color**
- S-6 Halm Super Jet, 2 color**

By: \_\_\_\_\_  
Sanjeev Kamboj  
Air Quality Engineer

Date: \_\_\_\_\_

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**ATTACHMENT A (PUBLIC NOTICE)**

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**ATTACHMENT B (COMMENTS & RESPONSES)**