

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**ENGINEERING AND COMPLIANCE**  
 Coating, Printing and Aerospace Operations Team  
**PERMIT APPLICATION EVALUATION**

Page 1 of 6  
 App. number(s) 483695-6, 484164-5  
 Processed by Jason Aspell  
 Reviewed by Hamed Mandilawi  
 Date 10/22/08

**PERMIT TO CONSTRUCT/OPERATE EVALUATION**  
**Inkjet Printer (2) (new construction), Printing Press (Admin Change)**

**Applicant's Name:** Vertis, Inc.  
**Company ID No.:** 37881  
**Mailing Address:** 250 W. Pratt St., 18<sup>th</sup> Floor, Baltimore, MD 21201  
**Equipment Address:** 3200 Pomona Blvd., Pomona, CA 91768

**EQUIPMENT DESCRIPTION:**

Equipment	ID No.	Connected To	Source Type/ Monitoring Unit	Emissions	Conditions
<b>Process 1: Printing, Drying and Control Systems</b>					
PRINTING PRESS, LITHOGRAPHIC, NO. 701, GOSS, HEATSET  A/N 483695 (Formerly under A/N 281130)	D6			VOC: (9) [RULE 1130, 10-8-1999; RULE 1171, 11-7-2003; RULE 1171, 7-14-2006]	B27.1, H23.2, K67.2
OVEN, DRYING, NO. 3, NATURAL GAS, 8.726 MMBTU/HR  A/N 483695 (Formerly under A/N 281130)	D7	C3 C23		CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; PM: (9) [RULE 404, 2-7-1986]	
PRINTING PRESS, INKJET PRINTER, VIDEOJET, MODEL NO. BX6500, SHEET-FED, AIR-DRY.  A/N 483696	D24			VOC: (9) [RULE 1171, 11-7-2003; RULE 1171, 2-4-2008]	A63.1, B59.1, H23.4, K67.3
PRINTING PRESS, INKJET PRINTER, VIDEOJET, MODEL NO. BX6500, SHEET-FED, AIR-DRY.  A/N 484165	D25			VOC: (9) [RULE 1171, 11-7-2003; RULE 1171, 2-4-2008]	A63.1, B59.1, H23.4, K67.3

**A/N 484164**  
 TITLE V REVISION

**HISTORY:**

The company submitted the applications listed above on 6/05/08 for Permits to Construct two inkjet printers and for an administrative change to split two printing press lines, incorrectly permitted as one unit, into two permit units. The facility is a Title V facility but is not in the RECLAIM program. The company is located in

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b> <b>ENGINEERING AND COMPLIANCE</b> Coating, Printing and Aerospace Operations Team  <b>PERMIT APPLICATION EVALUATION</b>	Page	2 of 6
	App. number(s)	483695-6, 484164-5
	Processed by	Jason Aspell
	Reviewed by	Hamed Mandilawi
	Date	10/22/08

an industrial area. There have been no recent complaints filed against the facility within the past 3 years. During their last inspection in 2008, the company received a notice of violation for failing to submit their Title V reports on time.

**PROCESS DESCRIPTION:**

The facility is a large lithographic printing business that primarily prints newspaper advertising inserts and news flyers. At this facility, there are six heatset presses that are vented to afterburners. Two of these lines, D4/D5 and D6/D7 are currently permitted as one permit unit and will be split. D4 and D5 will remain under Application No. 281130. To perform an administrative change on the other line an initial permit was required, D6/D7 will be assigned to A/N 483695.

The new inkjet printers will be coldset and will not be vented to any control equipment. They will be used to imprint finished products before they leave the facility. A low VOC cleaner and make up solution will also be used in this equipment. The maximum ink usage for each unit is expected to be 3 gal/day, with 5 gal/day of thinner and 1.5 gallons of cleanup solvent. The equipment will be operated for 52 wks/yr, 7 days/week, 24 hr/day.

**EMISSION CALCULATIONS:**

The facility currently operates under facility wide limits of 590 lb VOC/day. Each inkjet printer will be limited to 15 lb VOC/day which will each be included under the facility limit. This limit will allow sufficient room for the facility to operate these printers at the expected maximum usage. No ink retention factor is used for inkjet printing. No PM emissions will result from the operation of this equipment since the inkjet printer does not atomize the inks and 100% transfer efficiency can be assumed. The administrative change to split the two lines will not affect emissions from the equipment. The emissions entered under A/N 281130 which includes both printing lines will remain the same. No new emissions will be entered under A/N 483695.

VOC Emissions

$$R1 = 15 \text{ lb VOC/day} \div 24 \text{ hr/day} = 0.625 \text{ lb VOC/hr}$$

**RULES/REGULATION EVALUATION:**

**RULE 212, PUBLIC NOTIFICATION**

**PARAGRAPH 212(c)(1):**

This paragraph requires a public notice for all new or modified permit units that may emit air contaminants located within 1,000 feet from the outer boundary of a school. According to the Google Maps, there is no school within the 1,000 feet of the permit unit. Therefore, a public notice will not be required by this paragraph.

**PARAGRAPH 212(c)(2):**

This section requires a public notice for all new or modified facilities, which have on-site emission increases exceeding any of the daily maximums as specified in subdivision (g). The administrative change will not affect emissions from the facility. The additional emissions from the inkjet printers will be included under the existing facility VOC limit, so there will be no overall increase in VOC emissions. Therefore, these applications will not be subject to the public notice requirements under this section.

**PARAGRAPH 212(c)(3):**

The project will result in a MICR of less than one in a million (see Rule 1401 evaluation section). Therefore, a public notice will not be required under this section.

**PARAGRAPH 212(g):**

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

Pollutant	Increases (lb/day)			Max. 212(g) Daily Emission Increase (lb/day)
	Inkjet #1	Inkjet #2	Press Admin Change	
CO	0	0	0	220
NOx	0	0	0	40
PM10	0	0	0	30
ROG	15	15	0	30
SOx	0	0	0	60

**RULE 402, NUISANCE**

With the proper operation of the inkjet printers, printing press and associated control equipment, no nuisance problems are expected at this facility. The facility is located within an industrial area. There are no adjacent residences to the facility. There have been no recent complaints filed against the facility within the past 3 years. Compliance with this rule is expected.

**RULE 442, USAGE OF SOLVENTS**

Inks applied in the inkjet printer will be subject to the requirements of this rule. This rule will require the facility to limit ink emissions from the inkjet printers to less than 833 lb VOC/month since the printers are not vented to control equipment. Facility wide condition F2.1 limits all equipment at the facility subject to Rule 442 to less than 833 lb VOC/month. There are no other processes at the facility that are subject to this rule, so the inkjet printers are expected to meet this facility VOC limit.

**RULE 1130, GRAPHIC ARTS**

The administrative change to the printing press will not affect the operation of the equipment. The press will continue to use the same inks, coatings and solvents as previously evaluated. Refer to the evaluation for A/N 281130 for further details. This rule will not apply to the inkjet printers and Rule 442 will be applicable to the inks applied in this equipment. Compliance with this rule is expected.

**RULE 1171, SOLVENT CLEANING OPERATIONS**

The cleaning solvent used in this equipment will be subject to the requirements of this rule. The limit for General Cleaning of Ink Application Equipment is 25 g VOC/L. The facility will be using a solvent consisting mostly of acetone, which will have a material VOC content of 15.8 g VOC/L. Compliance with this rule is expected.

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

The administrative change to the printing press will not affect emissions from the permit unit and therefore will not trigger any new BACT requirements. Currently there is no BACT determination listed for inkjet printers. The inkjet printers are subject to Rule 442 and as a result are subject to the 833 lbs/month VOC facility limit. Further, each inkjet printer is limited to 15 lbs/day. Compliance with this rule is expected.

**RULE 1303(b)(1), MODELING**

The administrative change to the printing press will not affect emissions from the permit unit and therefore will not trigger any new modeling requirements. The inkjet printers will only result in VOC emissions and there are presently no modeling requirements for VOC emissions. Therefore, there will be no modeling requirements for the inkjet printers. Compliance with this rule is expected.

**RULE 1304(c)(1), OFFSET EXEMPTIONS**

The facility will continue to operate under a facility limit for VOC of 590 lb VOC/day. The administrative change to the printing press will not affect emissions and the new emissions from the inkjet printers will be included under the facility VOC limit. Therefore, the facility potential to emit will remain the same and no emission offsets is required.

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

The administrative change to the printing press under A/N 483695 will not affect emissions and therefore will be exempt from the requirements of subsection (d) rule pursuant to 1401(g)(1)(B).

According to the Material Safety Data Sheets (MSDS) for materials used in the inkjet printer, Vertis will be using some materials that contain toxic air contaminants identified in Table 1 of Rule 1401, with an effective date of March 7, 2008 or earlier. The ink will contain IPA and chromium. The ink thinner and the cleaning solvent will not contain any toxic compounds. The chromium is listed as Chromium III, but will not be emitted from this process since there will be no particulate emissions. The ink is applied as small droplets that are typically 60 microns in diameter. Any uncontrolled atomization or overspray from this process would damage the product. Therefore 100% transfer efficiency will be assumed. The IPA in the ink will still evaporate. The maximum VOC emissions from each of the printers will each be limited to 15 lb VOC per day (0.625 lb/hr, 5475 lb/yr). The lowest screening emission levels for IPA are 1.06 lb/hr and 231,000 lb/yr. Pursuant to 1401(f)(5), since the maximum emissions are less than the de minimus values shall be deemed in compliance with subdivision (d) of this rule. Therefore, since, IPA is the only toxic compound emitted from the equipment, compliance with this rule is expected. A permit condition disallowing the use of materials that contain toxic air contaminants identified in Rule 1401, with an effective date of March 7, 2008 or earlier, except for Isopropyl Alcohol and Chromium will be added.

**REGULATION XXX: TITLE V PERMITS**

This facility is not in the RECLAIM program. The proposed project is considered as a “de minimis significant permit revision” to the Title V permit for 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 (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
PM10	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 **Title V renewal permit** shall be accumulated and compared to the above threshold levels. This proposed project is the **second** permit revision to the **Title V renewal permit** issued to this facility on September 22, 2004. The following table summarizes the cumulative emission increases resulting from all permit revisions since the **Title V renewal permit** was issued:

Revision	HAP	VOC	NOx	PM <sub>10</sub>	SOx	CO
1 <sup>st</sup> Permit Revision: Replace A/B C3 with new A/B C23	0	0	0	0	0	0
2 <sup>nd</sup> Permit Revision: Installation of two inkjet printers	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 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 have any objections within the review period, a revised Title V permit will be issued to this facility.

**PERMIT CONDITIONS:**

The equipment will be subject to the permit conditions listed below;

Inkjet Printers

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

This limit shall only apply to VOC emissions from processes subject to District Rule 442

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

A63.1  
 THE OPERATOR SHALL LIMIT EMISSIONS FROM THIS EQUIPMENT AS FOLLOWS:

CONTAMINANT	EMISSIONS LIMIT
VOC	LESS THAN OR EQUAL TO 15 LBS PER DAY

B59.1  
 THE OPERATOR SHALL NOT USE THE FOLLOWING MATERIAL(S) IN THIS DEVICE :  
 Materials containing toxic air contaminants identified in Rule 1401, Table I, with an effective date of March 7, 2008 or earlier, except for isopropyl alcohol and chromium.

H23.4  
 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

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

Usage of inks, solvents and any other VOC-containing materials, in gallons or pounds per day of each material

Density of inks, in pounds per gallon.

Emissions in pounds of VOC per day

Material Safety Data Sheets shall be kept current for all materials used in this equipment.