

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE Coating, Printing and Aerospace Operations Team PERMIT APPLICATION EVALUATION	Page	1 of 12
	App. number(s)	477406, 477411
	Processed by	Jason Aspell
	Reviewed by	Hamed Mandilawi
	Date	06/13/08

PERMIT TO CONSTRUCT EVALUATION
Lithographic Printing Press, Oven/Afterburner (new construction)

Applicant's Name: Vertis, Inc.
Company ID No.: 115130
Mailing Address: 250 W. Pratt St., 18th Floor, Baltimore, MD, 21201
Equipment Address: 7190 Jurupa Ave., Riverside, CA 92504

EQUIPMENT DESCRIPTION:

Application 477411:

Equipment	ID No.	Connected To	Source Type/ Monitoring Unit	Emissions	Conditions
Process 1: Printing Presses					
System 2: Heatset					
PRINTING PRESS, PRESS #704, LITHOGRAPHIC, GOSS, MODELNO C-700,WEB FED, 4 COLOR,66 INCH WIDTH A/N 477411	D33	C35		VOC: (9) [RULE 1130,10-8-1999;RULE 1171,11-7-2003;RULE 1171,2-1-2008]	B59.1, B59.3, H23.5, K67.2, K67.3
AFTERBURNER, INTEGRATED OVEN/AFTERBURNER,MEGTEC, MODELNO DUAL DRY TNV, NATURALGAS, 5.977 MMBTU/HR GAS A/N 477411	C35	D33	NOx: PROCESS UNIT	CO: 2000 PPMV NATURAL GAS (5) [RULE 407,4-2-1982] ; NOX: 130 LB/MMCF NATURAL GAS (1) [RULE 2005-BACT,5-6-2005; PM: (9) [RULE 404,2-7-1986] ; PM: 0.1 GR/SCF NATURAL GAS (5) [RULE 409,8-7-1981]	A72.4, C1.1, D28.4, D182.2, E193.2

Application 477406:
 RECLAIM/TITLE V REVISION

HISTORY:

The company submitted Application No. 477411 on 1/22/08 for a Permit to Construct a lithographic printing press and an oven with an integrated recuperative oxidizer. A/N 477406 was submitted as the RECLAIM/Title V Permit Revision Application. The application was not accepted until 2/27/08 due to outstanding fees due for the facility. The company requested and submitted fees for Rule 301(u) expedited permit processing. The facility is a Title V and NOx Reclaim facility. The company is located in an industrial area. There have been no recent complaints filed against the facility within the past 3 years. During their last inspection in 2006, the company received a notice of violation for failing to submit their Title V semi-annual monitoring reports on time for the period of 1/1/05 to 6/30/05. The company also received a notice to comply in April 2008 to submit reports and data related to Rule 1415 compliance for refrigerant emissions.

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PROCESS DESCRIPTION:

The facility is a large lithographic printing business that primarily prints newspaper advertising inserts. There are several lithographic printing presses and ovens vented to two afterburners. This new printing press, like existing press D30 and associated oven C31, has an integrated recuperative oxidizer (A/N 377895). After printing, the web is passed through and dried in the oven. Solvent laden air from the oven passes through a shell and tube heat exchanger and enters the combustion chamber where the VOC is destroyed by a 5.977 MMBTU/hr natural gas burner. Some of the hot air is returned to the oven where it provides most of the heat for drying. The retention factor for heatset inks is 20%, so 80% of VOC emissions from the inks will be vented from the dryers to the APC. The temperature range of the oxidizer is 1400 to 1500°F with a retention time of 1 second. The equipment will be operated for 52 wks/yr, 7 days/week, 24 hr/day.

EMISSION CALCULATIONS:

The facility currently operates under facility wide limit of 7020 lb VOC/month. The company's VOC emissions are currently allocated to a separate application so the 30 Day Avg. NSR entry for this application will be entered as 0 lb/day.

Assuming the facility's maximum allowable VOC emissions are used in this equipment, it will result in the following:

VOC Emissions

Controlled Emissions (R_{2, hr}) = 7020 lb VOC/month = 234 lb VOC/day = 9.75 lb VOC/hr = 84,240 lb VOC/yr.,

Uncontrolled Emissions (R_{1, hr}) = 9.75 / [(1-0.95)] = 195 lb/hr

(The VOC emissions are split among 10 presses)

A source test will be conducted after the equipment has been constructed to establish NOx and CO emissions. The test will also confirm the control efficiency of the equipment in meeting the BACT requirements for VOC.

The emission factors for VOC, PM10, and SOx were obtained from AQMD's Emission Fee Billing guidelines. PM10 emissions will be assumed equal to PM emissions. Until the source test results are obtained, the default emission factors for NOx and CO will be used. The CO factor will be taken from the Emission Fee Billing Guidelines. The default emission factor of 130 lb/mmcf for NOx in Rule 2012 will result in an emission rate of 0.71 lb NOx/hr. Since this will exceed the Rule 2005 modeling screening limit of 0.47 lb NOx/hr, a natural gas usage limit of 100,000 cubic feet per day (4.1667 x 10⁻³ mmcf/hr) will be imposed, based on the applicant's requested needs. This natural gas usage limit will ensure that the company remains below the NOx modeling emission limits of Rule 2005 (see Rule 2005 evaluation for additional details).

Emission Factors

Equipment	VOC	NOx	SOx	CO	PM	PM10
Oven/ Afterburner	7.0 lb/mmcf	130 lb/mmcf	0.6 lb/mmcf	35 lb/mmcf	7.6 lb/mmcf	7.6 lb/mmcf

The burner has a fuel usage limit of 4166.67 cubic feet of natural gas per hour. Using the emission factors in the table above, these fuel usage rates yield the following emissions:

Maximum Emissions

Equipment	VOC*	NOx	SOx	CO	PM	PM10

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Press Dryer	0.029 lb/hr	0.54 lb/hr	0.0025 lb/hr	0.146 lb/hr	0.03 lb/hr	0.03 lb/hr
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*-Included under facility bubble

Afterburner Calculations

Design Gas Flow = 8991 cfm

Retention Time = 1 sec > 0.3 sec.

Burner Capacity:

Chamber Temperature(Tc): 1400°F

Emission Stream Temperature(Te): 770°F (from previous source test)

Heat Exchanger Temperature,(T_{he}) (90% assumed efficiency) = (% efficiency) (Tc)+ (1- % eff.)(Te)
 =0.9(1400)+0.1(770) = 1337°F

Enthalpy of Air @ 1400°F= 26.13 BTU/scf (linearly interpolated from Table D4, Appendix D, AP 40)

Enthalpy of Air @ 1337°F= 23.30 BTU/scf (linearly interpolated from Table D4, Appendix D, AP 40)

Net Enthalpy = 26.13-24.82= 1.31 BTU/scf

Assuming the flow rate at start-up is 50% of maximum capacity

Net Heat (Q_{net})= 2787 scfm (60min/hr)(1.31 BTU/scf)= 219,058 BTU/hr

From Appendix C, Table C1, AP 40 the hypothetical available heat from gas stream @1400°F with 50% primary air through burner (worst case)= (Qa) = 804 BTU/scf

Assuming heat loss is 10% the total heat required for the start-up of the process is :

Q_{total} = Qnet x (1+ %heat loss)x(1050 BTU/scf) (1/Qa)= 314,692 BTU/hr.

Since the burner capacity is greater than Q_{total}, sufficient heat will be available at startup.

Heat from VOC:

Assume the VOCs collected are 100% alcohol.

Lower range of heating values for alcohols is 10,000 BTU/lb.

If a R_{1,VOC,max}= 195 lb/hr, then the heat from the combustion of the alcohol is 1.950 mmBTU/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 MSN Yellow Pages, 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 undergo construction or modifications resulting in an emissions increase exceeding any of the daily maximum specified in the table below. There will be no increases for the facility due to this modification, because the VOC emissions will continue to be limited by the same facility bubble. There will be no other increases of criteria pollutants that exceed the thresholds of this section. Therefore, a public notice will not be required under this section of the rule.

Pollutant	Emission	Emission	Δ	Max. 212(g)
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	Increases (lb/day)	Decreases (lb/day)		Daily Emission Increase (lb/day)
CO	3.5	0	+4	220
NOx	13.01	0	+13	40
PM10	0.76	0	+1	30
ROG	234	0	+234	30
SOx	0.06	0	0	60

PARAGRAPH 212(c)(3):

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

PARAGRAPH 212(g):

The operation of this unit will result in an emission of greater than 30 lb ROG/day. Therefore, a public notice will be required to be distributed pursuant to subsection (g). The emission of the other criteria pollutants will remain below the thresholds listed under subsection (g).

Pollutant	Emission Increases (lb/day)	Emission Decreases (lb/day)	Δ	Max. 212(g) Daily Emission Increase (lb/day)
CO	3.5	0	+4	220
NOx	13	0	+13	40
PM10	0.76	0	+1	30
ROG	234	0	+234	30
SOx	0.06	0	0	60

RULE 401, VISIBLE EMISSIONS

With the proper use and operation of this printing press, oven and afterburner, no visible emissions are expected.

RULE 402, NUISANCE

With the proper operation of the printing press, oven and afterburner, 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 404, PARTICULATE MATTER - CONCENTRATION

The unit will be exhausted at a rate of 8991 cubic feet per min. In the table in this rule, this interpolates to a concentration limit of 0.081 grains per cubic foot. Based on the PM emissions calculated above, the concentration of PM exhausted will be well below the limits of this rule.

$$\text{Exhaust Gas PM Concentration} = 0.03 \text{ lb PM/hr} \times 7.00 \text{ gr/lb} / (8991 \text{ cfm} \times 60\text{min}) = 3.89 \times 10^{-7} \text{ gr/dscf}$$

RULE 1130, GRAPHIC ARTS

The company will be using inks that have VOC contents of 3.06 to 3.40 lb VOC/gal (367.2 to 408 g VOC/L). This rule requires inks to have a VOC content less than 300 g VOC/L unless they have an approved emission control system. The equipment will have an integrated afterburner that will need to meet the control efficiency set by the following equation or 75% whichever is greater:

$$C.E. = \left[1 - \left\{ \frac{VOC_{LWC}}{VOC_{LWn, \max}} \times \frac{1 - \left(\frac{VOC_{LWn, \max}}{D_n} \right)}{1 - \left(\frac{VOC_{LWC}}{D_c} \right)} \right\} \right] \times 100$$

$$C.E. = \left[1 - \left\{ \frac{300}{408} \times \frac{1 - \left(\frac{408}{983} \right)}{1 - \left(\frac{300}{880} \right)} \right\} \right] \times 100 = 65.3\%$$

Since this is the lesser of the two values, at least a 75% overall control efficiency will be required. The efficiency of the afterburner is greater than this value due to BACT requirements.

The fountain solution will be mixed in a ratio of 5 oz of concentrate to one gallon of water. The company uses three different solutions and the highest VOC content is 0.77 lb/gal in the Platinum Plus fountain solution. This results in a VOC content of the Platinum fountain solution is 0.2 lb VOC/gal. The resulting VOC content of the mixture is 3.47 g VOC/L which is less than both limits of this rule (refrigerated and non-refrigerated). Compliance with this rule is expected.

RULE 1171, SOLVENT CLEANING OPERATIONS

Vertis is using C & W Autowash for a blanket and roller wash that has a material VOC content of 0.38 lb VOC/gal (45.6 g VOC per liter). This VOC content will comply with the VOC limit of 100 g/L in this rule. Compliance with this rule is expected.

REGULATION XIII

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

The present BACT guidelines require that the lithographic printing press operations use of low-VOC fountain solution (<8% by volume VOC), washes with low vapor pressure (<10 mmHg). After mixing, the fountain solution contains less than 8% VOC by volume (see calculation below). The blanket/roller wash has a vapor pressure of 5 mm Hg. The afterburner shall be maintained at 1400°F, a minimum residence time of > 0.3 seconds, and an overall control efficiency of 95%. A source test will be conducted to determine the collection efficiency and destruction efficiency of the equipment. Since the facility is a NOx RECLAIM facility, it is not subject to the requirements of this section for NOx emissions. Compliance with this rule is expected.

$$\text{Volume VOC} = 5 \text{ oz sol'n} \cdot \frac{1 \text{ gal}}{128 \text{ oz}} \cdot \left(\frac{0.77 \frac{\text{lb VOC}}{\text{gal}}}{9.09 \frac{\text{lb}}{\text{gal}}} \right) = 0.003 \text{ gal VOC}$$

$$\% \text{ VOC Fountain Soln} = \frac{\text{Gal VOC}}{\text{Gal Material}} = \frac{0.003 \text{ gal VOC}}{0.04 \text{ gal sol'n} + 1.0 \text{ gal water}} = 0.003 = 0.3\%$$

RULE 1303(b)(1), MODELING

There are presently no modeling requirements for VOC emissions or SOx emissions. CO has been declared to be in attainment and therefore the requirements of this subsection are not applicable to CO emissions. The emissions for this equipment are listed in the table below. The emissions from this equipment will be less than the corresponding Screening Analysis values in Table A-1 in Rule 1303. Since the facility is a NOx Reclaim facility, it is not subject to the requirements of this rule for NOx emissions. Compliance with this rule is expected.

Equipment	PM10 lb/hr
Press Dryer/Afterburner	0.03
Allowable Emissions	2.8

RULE 1303(b)(2), OFFSET

The facility operates under a facility VOC limit of 7020 lb VOC/month. The operation of the equipment is bubbled under this limit; therefore, there will be no increases of VOC emissions at this facility. The facility is not a major source for PM and SOx emissions and will remain below the Rule 1304 Offset Exemption threshold. CO has been declared to be in attainment and therefore any increase in CO emissions will not require any offsets. Since the facility is a RECLAIM facility, Regulation XIII does not apply to NOx emissions

RULE 1401, NEW SOURCE REVIEW OF TOXIC AIR CONTAMINANTS

According to the Material Safety Data Sheets (MSDS) that were submitted with this application, Vertis will be using some materials that contain toxic air contaminants identified in Table 1 of Rule 1401, with an effective date of March 4, 2005 or earlier. In addition, the combustion of natural gas in the dryer and the afterburner will result in the emission of toxic compounds. The fountain solution will contain ethylene glycol (10% by wt.) and ethylene glycol monobutyl ether (5% by wt). These are the only toxic compounds emitted from materials used in the press portion of the equipment. The company expects to use a maximum of 45 gal/day (1.88 gal/hr) of the fountain solution concentrate. At density of 9.09 lb/gal, this results in the following emissions of these compounds:

Ethylene Glycol

$$R1_{,hr} = R2_{,hr} = 1.88 \text{ gal/hr} \times 9.09 \text{ lb/gal} \times 0.1 \text{ lb/lb} = 1.71 \text{ lb EG/hr}$$

Ethylene Glycol Monobutyl Ether

$$R1_{,hr} = R2_{,hr} = 1.88 \text{ gal/hr} \times 9.09 \text{ lb/gal} \times 0.05 \text{ lb/lb} = 0.85 \text{ lb EGME/hr}$$

The fountain solution and wash emissions will not be carried into the dryer and afterburner, therefore will not be controlled (R1 = R2)

Calculations for the toxic emissions from the combustion of natural gas will be based on the AB2588 Ventura County APCD Emission factors.

Tier II health risk assessment was completed for the equipment. The results, located at the end of this evaluation, show that the maximum emissions will cause a MICR that will be less than one in a million, and the HIA and HIC will both be less than one for this equipment. In addition, there will be a permit condition disallowing the use of materials that contain toxic air contaminants identified in Rule 1401, with an effective date of March 4, 2005 or earlier, except for ethylene glycol (CAS No. 107-21-1), and ethylene glycol monobutyl ether (CAS No. 111-76-2). Compliance with this rule is expected.

REGULATION XX: REGIONAL CLEAN AIR INCENTIVE MARKET (RECLAIM)

RULE 2005(b)(1)(B), MODELING

The Screening Analysis limit was taken from the values in Table A-1 of this rule. The NOx limit for a 5.977 MMBTU burner is 0.47 lb/hr. Since the default emission factor for this equipment will exceed

this amount, modeling was completed to determine compliance. Modeling using the Screen3 program was completed based on the parameters provided by the applicant. The applicant has stated that the equipment will require at least 100,000 cubic feet of natural gas per day. This usage rate will result in a NOx emission of 0.5421 lb/hr (0.06836 g/sec). According to the results of the model, the maximum offsite concentration occurs at 80 m. Based on an emission rate of 1 g/sec, the maximum NOx concentration at any receptor will be 86.69 µg/m³. Corrected to the actual NOx emission rate 0.06836 g/sec, the maximum NOx concentration will be 5.9 µg/m³. This is less than the level considered as a significant change in air quality concentration, 20 µg/m³, in this rule. Therefore, the equipment will comply with this section when limited to a natural gas usage of 100,000 cubic feet per day.

Source type, orientation	Point, vertical
Emission rate (model)	1 g/sec
Actual emission rate	0.06836 g/sec
Stack Diameter	0.711 m
Stack height	12.19 m
Stack flow	10.69 m/s
Stack temp	477.4 K
Building Height	8.08 m
Building Dimensions	109.7 m x 79.2 m

RULE 2005(g)(1) - ADDITIONAL REQUIREMENTS FOR MAJOR STATIONARY SOURCES

The facility does not qualify as a major stationary source pursuant to the applicable definition and is not subject to the requirements of this subsection.

40 CFR PART 64: COMPLIANCE ASSURANCE MONITORING

The VOC emissions from the printing press and drying oven are vented to air pollution control equipment thermal oxidizer. The uncontrolled VOC emissions to the oxidizer is greater than the major source threshold for VOC of 10 tons per year. As a result, the thermal oxidizer is subject to the Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64. Permit conditions have been added to satisfy the CAM requirements. Such permit conditions were developed using the design criteria and other pertinent requirements identified in 40 CFR 64- Compliance Assurance Monitoring and Technical Guidance Document and in the August 1998 Revised Draft CAM.

REGULATION XXX: TITLE V PERMITS

This facility is in the RECLAIM program. The proposed project is considered as a “de minimis significant permit revision” for non-RECLAIM pollutants or hazardous air pollutants (HAPs), and a “minor permit revision” for RECLAIM pollutants to the RECLAIM/Title V permit for this facility.

Non-RECLAIM Pollutants or HAPs

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 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
NO _x *	40
PM ₁₀	30
SO _x *	60
CO	220

* Not applicable if this is a RECLAIM pollutant

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 May 9, 2005. The following table summarizes the cumulative emission increases resulting from all permit revisions since the Title V renewal permit revision was issued:

Revision	HAP	VOC	NO _x *	PM ₁₀	SO _x	CO
1 st Permit Revision; Alter A/B 32 exhaust system to vent oven D2. Remove A/B C3	0	0	0*	0	0	0
2 nd Permit Revision; [addition of lithographic press with oven and integrated afterburner (Device D33,C35)]	0	0	13*	1	0	4
Cumulative Total	0	0	13*	1	0	4
Maximum Daily	30	30	40*	30	60	220

* RECLAIM pollutant, not subject to emission accumulation requirements

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” for non-RECLAIM pollutants or HAPs.

RECLAIM Pollutants

Rule 3000(b)(12)(A)(v) defines a “minor permit revision” as any Title V permit revision that does not result in an emission increase of RECLAIM pollutants over the facility starting Allocation plus nontradeable Allocations, or higher Allocation amount which has previously undergone a significant permit revision process.

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Since NOx is a RECLAIM pollutant for this facility, a separate analysis shall be made to determine if the proposed permit revision is considered a “minor permit revision” for RECLAIM pollutants. Section B of the Title V permit shows that this facility’s NOx starting Allocation plus the non-tradable Allocation is 10,296 pounds. The proposed project is expected to result in an increase of 13 lbs/day (4745 lbs/year) of NOx emissions from this permit revision, less than the starting Allocation plus the non-tradable Allocations of 10,296 pounds. As a result, this proposed project is considered as a “minor permit revision” for RECLAIM pollutants.

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” for non-RECLAIM pollutants or hazardous air pollutants (HAPs), and a “minor permit revision” for RECLAIM pollutants, 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/RECLAIM permit will be issued to this facility.

PERMIT CONDITIONS:

The equipment will be subject to the permit conditions listed below. Wording will be added to the facility condition for the VOC limit to clarify that the control efficiency for the APCs shall not be applied to fountain solution and washes in accordance with the current permitting procedures.

F2.1- Facility Condition

THE OPERATOR SHALL LIMIT EMISSIONS FROM THIS FACILITY AS FOLLOWS:

CONTAMINANT	EMISSIONS LIMIT
VOC	LESS THAN OR EQUAL TO 7020 LBS IN ANY ONE MONTH

To ensure compliance with the monthly Volatile Organic Compound(VOC) emission limit(s) of this condition, the operator shall comply with the following recordkeeping requirements:

- (1) The operator shall comply with Rule 109 (Recordkeeping for Volatile Organic Compound Emissions).
- (2) Within 14 calendar days after the end of each month, the operator shall total and record VOC emissions for the month from all equipment and operations covered by the monthly emission limit(s). The record shall include any procedures used to account for control device efficiencies and/or waste disposal. It shall be signed and certified for accuracy by the highest ranking individual responsible for compliance with District rules.
- (3) The operator shall maintain a single list which includes only the name and address of each person from whom the facility acquired VOC-containing material regulated by the District that was used or stored at the facility during the preceding 12 months.
- (4) The operator shall retain all purchase invoices for all VOC-containing material used or stored at the facility, and all waste manifests for all waste VOC-containing material removed from the facility, for 36 months.

The control efficiency of the air pollution control equipment shall not be applied to the calculation of the VOC emissions from the usage of fountain solution, blanket and roller washes and any other cleaning solvents.

D33-Printing Press

B59.1

THE OPERATOR SHALL NOT USE THE FOLLOWING MATERIAL(S) IN THIS DEVICE :

Fountain solution with a VOC content greater than 8 percent by volume.

Clean-up solvents (roller and blanket wash) with a VOC composite partial pressure greater than 10 mmHg at 68 degrees F.

B59.3
 THE OPERATOR SHALL NOT USE THE FOLLOWING MATERIAL(S) IN THIS DEVICE :

Materials containing toxic air contaminants identified in Rule 1401, Table 1 with an effective date of March 4, 2005 or earlier, except for ethylene glycol (CAS No. 107-21-1), and ethylene glycol monobutyl ether (CAS No. 111-76-2).

H23.5
 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	1130
VOC	DISTRICT RULE	1171

K67.2
 THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

- A. Usage of inks, fountain solution including water, roller wash, blanket wash, and any other material containing volatile organic compounds.
- B. Density of inks, in pounds/gallon, and percentage by weight of oils in the ink.
- C. Ink absorption factor as specified by current SCAQMD guidelines.
- D. VOC emissions in pounds per day.

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

Monthly voc emissions from inks, solvents and coatings consumed in this equipment shall be calculated using the required control efficiency as specified by condition no. A72.4 for the APC unit in operation serving this equipment.

C35- Oven/Afterburner
A72.4

THE OPERATOR SHALL MAINTAIN THIS EQUIPMENT TO ACHIEVE A MINIMUM OVERALL CONTROL EFFICIENCY OF 95.5 PERCENT FOR VOC DURING THE NORMAL OPERATION OF THE EQUIPMENT IT VENTS.

C1.1
 THE OPERATOR SHALL LIMIT THE NATURAL GAS FUEL USAGE TO NO MORE THAN 100,000 CUBIC FEET IN ANY ONE DAY.

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

To comply with this condition, the operator shall install and maintain a(n) non-resettable totalizing fuel meter to accurately indicate the fuel usage being supplied to the device.

D28.4
 THE OPERATOR SHALL CONDUCT SOURCE TEST(S) IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:

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The test shall be conducted to determine the ROG emissions using District method 25.1 measured over a 60 minute averaging time period.

The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the destruction efficiency of the air pollution control system and the total non-methane organic gases emissions to the atmosphere.

The test shall be conducted at least once during the life of the permit.

D182.2

THE OPERATOR SHALL TEST THIS EQUIPMENT IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:

Source testing shall be conducted within 180 days after the initial start-up unless otherwise approved in writing by the Executive Officer.

A source test protocol shall be submitted to the District no later than 60 days after the initial start-up of this equipment unless otherwise approved in writing by the District. The test protocol shall be approved in writing by the district before the test commences.

The test protocol shall include the completed District forms ST-1 and ST-2 specifying the proposed operating conditions of the equipment during the test, the identity of the testing laboratory, a statement from the testing laboratory certifying it meets the criteria in District Rule 304(k), and a description of the sampling and analytical procedures to be used.

The source tests shall consist of, but may not be limited to, testing at the inlet and the exhaust of the afterburner for: 1) VOC in PPMV and LBS/HR, 2) NOx (exhaust only), 3) CO (exhaust only), 4) VOC collection efficiency, 5) VOC destruction efficiency, 6) usage of all VOC-containing materials during the test, 7) oxygen content, 8) moisture content, 9) flow rate, 10) temperature, 11) natural gas usage.

The test shall be conducted during start-up of the equipment and during normal operation. Start-up shall be considered as the period of time after the burner is fired up and before the process air stream containing VOC from the printing operation is introduced into the afterburner. During start-up, the test shall only include items 2, 3, 7, 8, 9, 10 and 11 listed in this condition. During normal operation, the test shall include all of the items, 1 through 11, listed in this condition.

During the normal operation portion of the source test, the source test shall be conducted while the oxidizer is operating at a temperature of not less than the minimum operating temperature specified in this permit. If the operating temperature during the source test is greater than the minimum operating temperature specified in this permit, the minimum operating temperature may be increased to reflect the operating temperature during the source test.

Written notice of the source tests shall be submitted to the District at least 14 days prior to the source testing date so that an observer from the District may be present.

Two complete copies of the source test reports shall be submitted to the District within 45 days after the source testing date. The source test report shall include, but not be limited to, all testing data required by this condition.

A testing laboratory certified by the California Air Resources Board in the required test methods for criteria pollutants to be measured, and in compliance with District Rule 304 (no conflict of interest) shall conduct the test.

Sampling facilities shall comply with the District guidelines for construction of sampling and testing facilities, pursuant to Rule 217.

E193.2

THE OPERATOR SHALL OPERATE AND MAINTAIN THIS EQUIPMENT ACCORDING TO THE FOLLOWING REQUIREMENTS:

The combustion chamber temperature shall be maintained at a minimum of 1,400 degrees Fahrenheit whenever the equipment it serves is in operation.

The operator shall operate and maintain a temperature measuring and recording system to continuously measure and record the combustion chamber temperature pursuant to the operation and maintenance requirements specified in 40 CFR Part 64.7. Such a system shall have an accuracy within 1% of the temperature being monitored and shall be inspected, maintained, and calibrated on an annual basis in accordance with the manufacturer's specifications using an applicable AQMD or EPA approved method.

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For the purpose of this condition, a deviation shall be defined as when the combustion chamber temperature of less than 1,400 degrees Fahrenheit occurs during the normal operation of the equipment it serves. The operator shall review the records of the combustion chamber temperature on a daily basis to determine if a deviation occurs or shall install an alarm system to alert the operator when a deviation occurs.

Whenever a deviation occurs, the operator shall inspect this equipment to identify the cause of such a deviation, take immediate corrective actions to maintain the combustion chamber temperature at or above 1,400 degrees Fahrenheit, and keep records of the duration and cause (including unknown cause, if applicable) of the deviation and the corrective actions taken.

All deviations shall be reported to the AQMD on a semi-annual basis pursuant to the requirements specified in 40 CFR Part 64.9 and Condition Nos. 22 and 23 in Section K of this permit. The semi-annual monitoring report shall include the total operating time of this equipment and the total accumulated duration of all deviations for each semi-annual reporting period specified in Condition No. 23 in Section K of this permit.

The operator shall submit an application with an Quality Improvement Plan (QIP) in accordance with 40 CFR Part 64.8 to the AQMD if an accumulation of deviations exceeds 5 percent duration of this equipment's total operating time for any semi-annual reporting period specified in Condition No. 23 in Section K of this permit. The required QIP shall be submitted to the AQMD within 90 calendar days after the due date for the semi-annual monitoring report.

The operator shall inspect and maintain all components of this equipment on an annual basis in accordance with the manufacturer's specifications.

The operator shall keep adequate records in a format that is acceptable to the AQMD to demonstrate compliance with all applicable requirements specified in this condition and 40 CFR Part 64.9 for a minimum of five years.