



JAN 09 2013

Frieder de Biasi
Worldcolor (USA) LLC
2201 Cooper Ave
Merced, Ca 95348

**Re: Proposed Authorities to Construct / Certificate of Conformity (Minor Mod)
District Facility # N-1646
Project # N-1122453**

Dear Mr. de Biasi:

Enclosed for your review is the District's analysis of your application for Authorities to Construct for the facility identified above. You have requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project would increase the daily VOC emission limits for three of the printing lines and reduce the daily VOC emission limits for five other printing lines.

After addressing any EPA comments made during the 45-day comment period, the Authorities to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authorities to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

Enclosures

cc: George Heinen, Permit Services

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
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Southern Region
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Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585



JAN 09 2013

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St
San Francisco, CA 94105

Re: **Proposed Authorities to Construct / Certificate of Conformity (Minor Mod)**
District Facility # N-1646
Project # N-1122453

Dear Mr. Rios:

Enclosed for your review is the District's engineering evaluation of an application for Authorities to Construct for Worldcolor (USA) LLC, located at 2201 Cooper Ave, Merced, which has been issued a Title V permit. Worldcolor (USA) LLC is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. The project would increase the daily VOC emission limits for three of the printing lines and reduce the daily VOC emission limits for five other printing lines.

Enclosed is the engineering evaluation of this application, a copy of the current Title V permit, and proposed Authorities to Construct # N-1646-6-5, '-16-5, '-23-5, '-25-4, '-36-4, '-37-4, '-38-5 and '-39-5 with Certificate of Conformity. After demonstrating compliance with the Authorities to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

Enclosures
cc: George Heinen, Permit Services

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**Authority to Construct (ATC)
Application Review
(Heatset Offset Lithographic Printing Operations
served by Regenerative Thermal Oxidizers)**

Date: January 7, 2013

Facility Name: Worldcolor (USA) LLC
Mailing Address: 2201 Cooper Avenue
Merced, CA 95348

Contact Name: Mike Hauptman
Phone: (209) 354-5223

Engineer: G. Heinen
Lead Engineer: Sheraz Gill
Project Number: N-1122453
Permit Number: N-1646-6-5, '-16-5, '-23-5, '-25-4, '-36-4, '-37-4, '-38-5 and '-39-5
Deemed Complete: August 23, 2012

I. Proposal:

Worldcolor (USA) LLC is requesting Authority to Construct (ATC) permits to increase the daily VOC emissions from three printing presses (-36, -37 and -38) and reduce the daily VOC emissions from five other presses (-6, -16, -23, -25 and -39). No change is proposed to the current facility-wide VOC emissions limit of 235.6 lb/day. The following table summarizes the proposed VOC emission limit changes:

Proposed VOC Limit Changes			
Permit #	Pre-project Limit (lb VOC/day)	Post-project Limit (lb VOC/day)	Change (lb VOC/Day)
-6	69.1	37.5	- 31.6
-16	69.1	27.0	- 42.1
-23	69.1	37.5	- 31.6
-25	74.1	60.0	- 14.1
-36	50.0	95.5	45.5
-37	50.0	95.5	45.5
-38	50.0	95.5	45.5
-39	50.0	27.5	- 22.5
Totals	481.4	476.0	-5.4

Worldcolor (USA) LLC is an existing major stationary source and has received their Title V permit on July 26, 2004. This modification can be classified as a Title V minor modification pursuant to Rule 2520, Section 3.20, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. Worldcolor (USA) LLC has applied to administratively amend their Title V Operating Permit to include the requirements of the ATCs issued with this project.

II. Applicable Rules:

Rule 2010: Permits Required (12/17/92)
Rule 2201: New and Modified Stationary Source Rule (04/21/11)
Rule 2520: Federally Mandated Operating Permits (6/21/01)
Rule 4101: Visible Emissions (2/17/05)
Rule 4102: Nuisance (12/17/92)
Rule 4201: Particulate Matter Concentration (12/17/92)
Rule 4301: Fuel Burning Equipment (12/17/92)
Rule 4309: Dryers, Dehydrators, and Ovens (12/15/05)
Rule 4607: Graphic Arts and Paper, Film, Foil, and Fabric Coatings (12/18/08)
Rule 4801: Sulfur Compounds (12/17/92)
California Health & Safety Code 41700 - Health Risk Assessment
California Health & Safety Code 42301.6 - School Notice
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location:

The equipment will be operated at 2201 Cooper Avenue in Merced, CA. This facility and its associated equipment are not located within 1,000 feet of a K-12 School. Therefore, the public noticing requirement of California Health and Safety Code 42301.6 is not required for this project.

IV. Process Description:

Worldcolor (USA) LLC is a publication printing facility. The facility utilizes heatset offset lithographic printing presses, non-heatset offset lithographic printing presses, and flexographic printing presses to print TV Guides, phone directories, magazines, and pamphlets.

These permit units are heatset offset lithographic web-fed printing presses. Heatset offset printing utilizes a rotary press to print an image on a continuous web of paper. These printing presses will utilize separate printing units to transfer color images onto the web. Each printing unit has a series of vertically arranged rollers and cylinders above and below the web of paper. Rollers transfer the fountain solution and the ink to the plate cylinder. The image is then transferred from the plate to a rubber covered blanket cylinder and then to the web. After the printing operation, the printed web enters a drying oven. Heated air in the dryer is used to quickly evaporate the solvent component in the ink. The ovens are vented to regenerative thermal oxidizers (RTO) which control the VOC in the evaporated solvent, before it enters the atmosphere. The printed web then passes over a series of chilled rollers, which cools the printed web prior to being slit, folded, cut, and stacked for delivery to the printed material binders.

V. Equipment Listing:

Pre-Project Permit Description:

- N-1646-6-3:** GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE HARRIS MODEL 1000B HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS #514 SERVED BY TWO TEC NATURAL GAS FIRED DRYING OVENS (TOTAL OF 1.366 MMBTU/HR) ALL VENTED TO THE 9.5 MMBTU/HR MEG TEC ENTERPRISE II OR 18 MMBTU/HR REECO RETHERM MODEL E REGENERATIVE THERMAL OXIDIZERS
- N-1646-16-3:** GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE HARRIS MODEL 1000 HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS #517 SERVED BY TWO TEC NATURAL GAS FIRED DRYING OVENS (TOTAL OF 1.366 MMBTU/HR) ALL VENTED TO THE 9.5 MMBTU/HR MEG TEC ENTERPRISE II OR 18 MMBTU/HR REECO RETHERM MODEL E REGENERATIVE THERMAL OXIDIZERS
- N-1646-23-3:** GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE HEIDELBERG HARRIS MODEL M-1000B HEATSET OFFSET PRINTING PRESS #519 SERVED BY ONE 9.2 MMBTU/HR THERMAL ELECTRON MODEL A3406E DRYING OVEN VENTED TO THE 9.5 MMBTU/HR MEG TEC ENTERPRISE II OR 18 MMBTU/HR REECO RETHERM MODEL E REGENERATIVE THERMAL OXIDIZERS
- N-1646-25-3:** GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE (1) KOENIG & BAUER COMMANDER HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #508) AND ONE (1) 31.5 MMBTU/HR (3 BURNERS @ 10.5 MMBTU/HR EACH) NATURAL GAS FIRED MEGTEC MODEL DUAL DRY III 119 DRYING OVEN SERVED BY THE 9.5 MMBTU/HR MEGTEC ENTERPRISE II OR THE 18 MMBTU/HR REECO RETHERM MODEL E NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZERS
- N-1646-36-3:** GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMANS 57.5" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #520) AND TWO 9.9 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135 DRYING OVENS (EACH CONSISTS OF AN 8.4 MMBTU/HR MAXON OVENPAK 400 BURNER AND A 1.5 MMBTU/HR MAXON APX BURNER) SERVED BY THE SHARED 9.5 MMBTU/HR MEGTEC ENTERPRISE II OR THE 18 MMBTU/HR REECO RETHERM MODEL E NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZERS
- N-1646-37-2:** GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN S 64" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #522) WITH ONE 9.4 MMBTU/HR NATURAL GAS MEGTEC MODEL DD III-135-2080 DRYING OVEN #1 AND ONE 9.0 MMBTU/HR NATURAL GAS FIRED MODEL DD III-135-2080 DRYING OVEN #2 EACH VENTED TO

THE SHARED 5.728 MMBTU/HR MEGTEC CLEANSWITCH MODEL CS-300-95 NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZER

- N-1646-38-4:** GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN S 64" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #523) WITH ONE 9.4 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135-2080 DRYING OVEN #1 (WITH MAXON LOW NOX BURNERS) AND ONE 9.0 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135-2080 DRYING OVEN #2 (WITH MAXON LOW NOX BURNERS) EACH SERVED BY THE SHARED 9.5 MMBTU/HR MEGTEC ENTERPRISE II OR THE 18 MMBTU/HR REECO RETHERM MODEL E NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZERS
- N-1646-39-2:** GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN N 38" WIDE 5-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #524) WITH ONE 4.587 MMBTU/HR NATURAL GAS FIRED THERMO WISCONSIN MODEL APOLLO A3100 DRYING OVEN SERVED BY THE SHARED 5.728 MMBTU/HR MEGTEC CLEANSWITCH MODEL CS-300-95 NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZER

Proposed Modification:

- N-1646-6-5:** MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE HARRIS MODEL 1000B HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS #514 SERVED BY TWO TEC NATURAL GAS FIRED DRYING OVENS (TOTAL OF 1.366 MMBTU/HR) ALL VENTED TO THE 9.5 MMBTU/HR MEG TEC ENTERPRISE II OR 18 MMBTU/HR REECO RETHERM MODEL E REGENERATIVE THERMAL OXIDIZERS: DECREASE DAILY VOC LIMIT FROM 69.1 TO 37.5 LB/DAY
- N-1646-16-5:** MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE HARRIS MODEL 1000 HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS #517 SERVED BY TWO TEC NATURAL GAS FIRED DRYING OVENS (TOTAL OF 1.366 MMBTU/HR) ALL VENTED TO THE 9.5 MMBTU/HR MEG TEC ENTERPRISE II OR 18 MMBTU/HR REECO RETHERM MODEL E REGENERATIVE THERMAL OXIDIZERS: DECREASE DAILY VOC LIMIT FROM 69.1 TO 27.0 LB/DAY
- N-1646-23-5:** MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE HEIDELBERG HARRIS MODEL M-1000B HEATSET OFFSET PRINTING PRESS #519 SERVED BY ONE 9.2 MMBTU/HR THERMAL ELECTRON MODEL A3406E DRYING OVEN VENTED TO THE 9.5 MMBTU/HR MEG TEC ENTERPRISE II OR 18 MMBTU/HR REECO RETHERM MODEL E REGENERATIVE THERMAL

OXIDIZERS: DECREASE DAILY VOC LIMIT FROM 69.1 TO 37.5 LB/DAY

- N-1646-25-4:** MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE (1) KOENIG & BAUER COMMANDER HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #508) AND ONE (1) 31.5 MMBTU/HR (3 BURNERS @ 10.5 MMBTU/HR EACH) NATURAL GAS FIRED MEGTEC MODEL DUAL DRY III 119 DRYING OVEN SERVED BY THE 9.5 MMBTU/HR MEGTEC ENTERPRISE II OR THE 18 MMBTU/HR REECO RETHERM MODEL E NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZERS: DECREASE DAILY VOC LIMIT FROM 74.1 TO 60.0 LB/DAY
- N-1646-36-4:** MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN S 57.5" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #520) AND TWO 9.9 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135 DRYING OVENS (EACH CONSISTS OF AN 8.4 MMBTU/HR MAXON OVENPAK 400 BURNER AND A 1.5 MMBTU/HR MAXON APX BURNER) SERVED BY THE SHARED 9.5 MMBTU/HR MEGTEC ENTERPRISE II OR THE 18 MMBTU/HR REECO RETHERM MODEL E NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZERS: INCREASE DAILY VOC LIMIT FROM 50.0 TO 95.5 LB/DAY
- N-1646-37-3:** MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN S 64" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #522) WITH ONE 9.4 MMBTU/HR NATURAL GAS MEGTEC MODEL DD III-135-2080 DRYING OVEN #1 AND ONE 9.0 MMBTU/HR NATURAL GAS FIRED MODEL DD III-135-2080 DRYING OVEN #2 EACH VENTED TO THE SHARED 5.728 MMBTU/HR MEGTEC CLEANSWITCH MODEL CS-300-95 NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZER: INCREASE DAILY VOC LIMIT FROM 50.0 TO 95.5 LB/DAY
- N-1646-38-5:** MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN S 64" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #523) WITH ONE 9.4 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135-2080 DRYING OVEN #1 (WITH MAXON LOW NOX BURNERS) AND ONE 9.0 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135-2080 DRYING OVEN #2 (WITH MAXON LOW NOX BURNERS) EACH SERVED BY THE SHARED 9.5 MMBTU/HR MEGTEC ENTERPRISE II OR THE 18 MMBTU/HR REECO RETHERM MODEL E NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZERS: INCREASE DAILY VOC LIMIT FROM 50.0 TO 95.5 LB/DAY

N-1646-39-5: MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN N 38" WIDE 5-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #524) WITH ONE 4.587 MMBTU/HR NATURAL GAS FIRED THERMO WISCONSIN MODEL APOLLO A3100 DRYING OVEN SERVED BY THE SHARED 5.728 MMBTU/HR MEGTEC CLEANSWITCH MODEL CS-300-95 NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZER: DECREASE DAILY VOC LIMIT FROM 50.1 TO 27.5 LB/DAY

Post-Project Permit Description:

N-1646-6-5: GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE HARRIS MODEL 1000B HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS #514 SERVED BY TWO TEC NATURAL GAS FIRED DRYING OVENS (TOTAL OF 1.366 MMBTU/HR) ALL VENTED TO THE 9.5 MMBTU/HR MEG TEC ENTERPRISE II OR 18 MMBTU/HR REECO RETHERM MODEL E REGENERATIVE THERMAL OXIDIZERS

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N-1646-23-5: GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE HEIDELBERG HARRIS MODEL M-1000B HEATSET OFFSET PRINTING PRESS #519 SERVED BY ONE THERMAL ELECTRON MODEL A3406E DRYING OVEN VENTED TO THE 9.5 MMBTU/HR MEG TEC ENTERPRISE II OR 18 MMBTU/HR REECO RETHERM MODEL E REGENERATIVE THERMAL OXIDIZERS

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N-1646-36-4: GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN S 57.5" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #520) AND TWO 9.9 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135 DRYING OVENS (EACH CONSISTS OF AN 8.4 MMBTU/HR MAXON OVENPAK 400 BURNER AND A 1.5 MMBTU/HR MAXON APX BURNER) SERVED BY THE SHARED 9.5 MMBTU/HR MEGTEC

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NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZERS

- N-1646-37-3:** GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN S 64" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #522) WITH ONE 9.4 MMBTU/HR NATURAL GAS MEGTEC MODEL DD III-135-2080 DRYING OVEN #1 AND ONE 9.0 MMBTU/HR NATURAL GAS FIRED MODEL DD III-135-2080 DRYING OVEN #2 EACH VENTED TO THE SHARED 5.728 MMBTU/HR MEGTEC CLEANSWITCH MODEL CS-300-95 NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZER
- N-1646-38-5:** GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN S 64" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #523) WITH ONE 9.4 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135-2080 DRYING OVEN #1 (WITH MAXON LOW NOX BURNERS) AND ONE 9.0 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135-2080 DRYING OVEN #2 (WITH MAXON LOW NOX BURNERS) EACH SERVED BY THE SHARED 9.5 MMBTU/HR MEGTEC ENTERPRISE II OR THE 18 MMBTU/HR REECO RETHERM MODEL E NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZERS
- N-1646-39-5:** GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN N 38" WIDE 5-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #524) WITH ONE 4.587 MMBTU/HR NATURAL GAS FIRED THERMO WISCONSIN MODEL APOLLO A3100 DRYING OVEN SERVED BY THE SHARED 5.728 MMBTU/HR MEGTEC CLEANSWITCH MODEL CS-300-95 NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZER

VI. Emission Control Technology Evaluation:

VOCs will be emitted from the application and heat drying of the printing inks utilized in the heatset offset lithographic printing press. The applicant will continue to capture and control these VOCs with the facility shared RTOs. There will not be a change to the VOC emission control method due to this proposed project. The applicant will be retaining the originally proposed minimum VOC capture efficiency of 90% and VOC destruction efficiency of 98%.

Products of combustion will be emitted from the combustion of a natural gas in the drying ovens and the RTOs. The drying ovens and associated RTOs will be fired exclusively on natural gas, which results in cleaner emissions than other hydrocarbon fuels. The drying ovens will continue to utilize the existing low NOx burner system to reduce NOx emissions.

VII. General Calculations:

A. Assumptions:

1. VOC will be emitted from the application and heat drying of the printing inks.
2. NO_x, CO, SO_x, VOC, and PM₁₀ will be emitted from the combustion of natural gas in the associated drying ovens and RTOs.
3. Natural gas heating value of 1,000 Btu/ft³ (District Practice).
4. EPA F-Factor for Natural Gas of 8,578 dscf/MMBtu at 60°F.
5. No change is proposed to the Facility-wide limits of 150 lb NO_x/day and 235.6 lb VOC/day.

B. Emission Factors:

1. There will not be any changes to the current inks, fountain solutions, blanket wash, or solvents utilized at these graphic arts printing operations.
2. For the drying ovens and the regenerative thermal oxidizers (RTO), the applicant is not proposing to change any of the emission factors on the current permits, as summarized in the following table:

Curing Oven and RTO Emission Factors	
Pollutant	EF2
NO _x	4.3 ppmvd @ 19% O ₂ or 0.0492 lb/MMBtu
CO	25 ppmvd @ 19% O ₂ or 0.174 lb/MMBtu
VOC	0.0055 lb/MMBtu
PM ₁₀	0.0076 lb/MMBtu
SO _x	0.00285 lb/MMBtu

3. Four of the existing permits contain limits to the fuel input to the drying ovens and/or the RTOs. The applicant is not proposing to change any of the fuel use limits on the current permits, which are summarized in the following table:

Fuel Use Limits			
Permit #	Drying ovens		RTOs
-36		18.7 Million scf/yr	
-37	137,000 scf/day	50 Million scf/yr	25,000 million scf/yr
-38	137,000 scf/day	50 Million scf/yr	
-39		11,651 Million scf/yr	25,000 million scf/yr

C. Calculations

1. Pre-Project Potential to Emit (PE1):

A Daily and Annual PE1 Calculations:

The emissions from the presses are derived from two main sources: VOC from the ink and coating solvents and NO_x, CO, SO_x, PM₁₀ and VOC from the natural gas combustion by the drying ovens and RTO.

- Daily PE1_{ink} was based on the daily VOC limit in the respective permit.
- Annual PE1_{ink} was calculated as the Daily PE1_{ink} times 365 days/year, except for -36 to -39, which have annual fuel limits.
- Daily and annual PE1_{oven} were taken from the post-project emissions in projects N-1093258 and N-1074543.
 - Emission = equipment rating x EF x 24/hr per day or 365 days per year.
 - Where fuel input limit conditions exist (permits-36 to -39), the emissions were calculated using those limits times the EF. The fuel use limits are noted below.

Pre-project Emissions for C-1646-6-2 and -16-3		
Pollutant	Daily PE1 (lb/day)	Annual PE1 (lb/year)
VOC _{ink}	69.1	25,222
NO _x _{oven}	1.6	584
CO _{oven}	5.7	2,081
VOC _{oven}	0.2	73
PM ₁₀ _{oven}	0.2	73
SO _x _{oven}	0.1	37
VOC _{total}	69.3	25,295

Pre-project Emissions for C-1646-23-3		
Pollutant	Daily PE1 (lb/day)	Annual PE1 (lb/year)
VOC _{ink}	69.1	25,222
NO _x _{oven}	10.9	3,979
CO _{oven}	38.4	14,016
VOC _{oven}	1.2	438
PM ₁₀ _{oven}	1.7	621
SO _x _{oven}	0.6	219
VOC _{total}	70.3	25,650

Pre-project Emissions for C-1646-25-3		
Pollutant	Daily PE1 (lb/day)	Annual PE1 (lb/year)
VOC _{ink}	74.1	27,047
NOx _{oven}	37.2	13,578
CO _{oven}	131.6	48,034
VOC _{oven}	4.2	1,533
PM _{10 oven}	5.7	2,081
SOx _{oven}	2.2	803
VOC _{total}	78.3	28,580

Pre-project Emissions for C-1646-36-3		
Pollutant	Daily PE1 (lb/day)	Annual PE1* (lb/year)
VOC _{ink}	50.0	18,250
NOx _{oven}	23.4	920
CO _{oven}	82.7	3,255
VOC _{oven}	2.6	103
PM _{10 oven}	3.6	142
SOx _{oven}	1.4	53
VOC _{total}	52.6	18,353

* The annual emissions are based on the current limit of 18,700 MMBtu/yr.

Pre-project Emissions for C-1646-37-2 and -38-4		
Pollutant	Daily PE1 (lb/day)	Annual PE1* (lb/year)
VOC _{ink}	50.0	18,250
NOx _{oven}	6.7	2,460
CO _{oven}	23.8	8,700
VOC _{oven}	0.8	275
PM _{10 oven}	1.0	380
SOx _{oven}	0.4	143
VOC _{total}	50.8	18,525

* The annual emissions are based on the current limit of 50,000 MMBtu/yr.

Pre-project Emissions for C-1646-39-2		
Pollutant	Daily PE1 (lb/day)	Annual PE1* (lb/year)
VOC _{ink}	50.0	18,250
NOx _{oven}	5.4	573
CO _{oven}	19.2	2,027
VOC _{oven}	2.2	233
PM _{10 oven}	1.1	117
SOx _{oven}	0.3	33
VOC _{total}	52.2	18,483

* The annual emissions are based on the current limit of 11,651 MMBtu/yr.

Pre-project Emissions for MecTec Enterprise II RTO		
Pollutant	Daily PE1 (lb/day)	Annual PE1 (lb/year)
NO _x RTO	11.2	4,088
CO RTO	39.7	14,491
VOC RTO	1.3	475
PM ₁₀ RTO	1.7	621
SO _x RTO	0.6	219

Pre-project Emissions for Reeco Retherm RTO		
Pollutant	Daily PE1 (lb/day)	Annual PE1 (lb/year)
NO _x RTO	21.2	7,738
CO RTO	75.2	27,448
VOC RTO	2.4	876
PM ₁₀ RTO	3.3	1,205
SO _x RTO	1.2	438

Pre-project Emissions for MecTec Cleanswitch RTO		
Pollutant	Daily PE1 (lb/day)	Annual PE1* (lb/year)
NO _x RTO	6.8	1,230
CO RTO	23.9	4,351
VOC RTO	2.7	500
PM ₁₀ RTO	1.4	250
SO _x RTO	0.4	71

* The annual emissions are based on the current limit of 25,000 MMBtu/yr.

The total pre-project annual PE for PM₁₀, CO, and SO_x for these permit units due to this project will be the combined annual PE2 from the drying ovens and the three shared RTOs. The RTO emissions are proportioned among the associated presses as follows:

- The MecTec Enterprise II and Reeco Retherm are equally shared between six permit units (-6, -16, -23, -25, -36, & -38) so the proportioned emissions from these units will be the combined RTO emissions divided by six.

Proportioned Emissions for MecTec Enterprise II & Reeco RTOs				
Pollutant	MecTec (lb/day)	Reeco (lb/day)	Combined (lb/day)	Combined / 6 (lb/day)
NO _x RTO	11.2	21.2	32.4	5.4
CO RTO	39.7	75.2	114.9	19.2
VOC RTO	1.3	2.4	3.7	0.6
PM ₁₀ RTO	1.7	3.3	5.0	0.8
SO _x RTO	0.6	1.2	1.8	0.3

Proportioned Emissions for MecTec Enterprise II & Reeco RTOs				
Pollutant	MecTec (lb/year)	Reeco (lb/year)	Combined (lb/year)	Combined / 6 (lb/year)
NO _X RTO	4,088	7,738	11,826	1,971
CO RTO	14,491	27,448	41,939	6,990
VOC RTO	475	876	1,351	225
PM ₁₀ RTO	621	1,205	1,826	304
SO _X RTO	219	438	657	110

- The MecTec Cleanswitch RTO is shared equally by two permit units (-37 and -39) so the proportioned emissions from these units will be the combined emissions RTO divided by two.

Proportioned Emissions for MecTec Cleanswitch RTO		
Pollutant	Daily PE2 (lb/day)	Daily PE2 / 2 (lb/day)
NO _X RTO	6.8	3.4
CO RTO	23.9	12.0
VOC RTO	2.7	1.4
PM ₁₀ RTO	1.4	0.7
SO _X RTO	0.4	0.2

Proportioned Emissions for MecTec Cleanswitch RTO		
Pollutant	Annual PE2* (lb/year)	Annual PE2 / 2 (lb/year)
NO _X RTO	1,230	615
CO RTO	4,351	2,178
VOC RTO	500	250
PM ₁₀ RTO	250	125
SO _X RTO	71	36

* The annual emissions are based on the current limit of 25,000 MMBtu/yr.

Adding the proportional emissions to the presses produces the following total pre-project emission (ink + oven +RTO) results:

Total Pre-project Emissions for C-1646-6-2 and -16-3		
Pollutant	Daily PE1 (lb/day)	Annual PE1 (lb/year)
NO _x	7.0	2,555
CO	24.9	9,071
VOC	69.9	25,520
PM ₁₀	1.0	377
SO _x	0.4	147

Total Pre-project Emissions for C-1646-23-3		
Pollutant	Daily PE1 (lb/day)	Annual PE1 (lb/year)
NOx	16.3	5,950
CO	57.6	21,006
VOC	70.9	663
PM ₁₀	2.5	925
SOx	0.9	329

Total Pre-project Emissions for C-1646-25-3		
Pollutant	Daily PE1 (lb/day)	Annual PE1 (lb/year)
NOx	42.6	15,549
CO	150.8	55,042
VOC	78.9	28,805
PM ₁₀	6.5	2,385
SOx	2.5	913

Total Pre-project Emissions for C-1646-36-3		
Pollutant	Daily PE1 (lb/day)	Annual PE1* (lb/year)
NOx	28.8	2,891
CO	101.9	10,245
VOC	53.2	18,578
PM ₁₀	4.4	446
SOx	1.7	163

* The annual emissions are based on the current limit of 18,700 MMBtu/yr.

Total Pre-project Emissions for C-1646-37-2		
Pollutant	Daily PE1 (lb/day)	Annual PE1* (lb/year)
NOx	10.1	3,075
CO	35.8	10,878
VOC	6.2	19,000
PM ₁₀	1.7	505
SOx	0.6	179

* The annual emissions are based on the current limit of 50,000 MMBtu/yr.

Total Pre-project Emissions for C-1646-38-4		
Pollutant	Daily PE1 (lb/day)	Annual PE1* (lb/year)
NOx	12.1	4,431
CO	43.0	15,690
VOC	51.4	18,750
PM ₁₀	1.8	684
SOx	0.7	253

Total Pre-project Emissions for C-1646-39-2		
Pollutant	Daily PE1 (lb/day)	Annual PE1* (lb/year)
NOx	8.8	1,188
CO	31.2	4,205
VOC	53.6	18,733
PM ₁₀	1.8	242
SOx	0.5	69

* The annual emissions are based on the current limit of 11,651 MMBtu/yr.

2. Post-Project Potential to Emit (PE2):

a. Daily and Annual PE2 Calculations:

The applicant is proposing to increase the daily VOC emissions from three printing presses (-36, -37 and -38) and reduce the daily VOC emissions from five other presses (-6, -16, -23, -25 and -39). No change is proposed to the current facility-wide VOC emissions limit of 235.6 lb/day or natural gas limits.

- Daily PE2_{ink} was based on the proposed VOC limit in the respective permit.
- Annual PE2_{ink} was calculated as the Daily PE2_{ink} times 365 days/year.
- Daily and annual PE2_{oven} and PE2_{RTO} are unchanged from the previously calculated values, which reflected 24 hr/day daily operation and annual operation of either 365 days/year or the annual fuel limits.

Post-project Emissions for C-1646-6-5 and -16-5		
Pollutant	Daily PE2 (lb/day)	Annual PE2 (lb/year)
VOC _{ink}	37.5	13,688
NOx _{oven}	1.6	584
CO _{oven}	5.7	2,081
VOC _{oven}	0.2	73
PM ₁₀ _{oven}	0.2	73
SOx _{oven}	0.1	37
VOC _{total}	37.7	13,761

Post-project Emissions for C-1646-23-5		
Pollutant	Daily PE2 (lb/day)	Annual PE2 (lb/year)
VOC _{ink}	27.0	9,855
NOx _{oven}	10.9	3,979
CO _{oven}	38.4	14,016
VOC _{oven}	1.2	438
PM _{10 oven}	1.7	621
SOx _{oven}	0.6	219
VOC _{total}	28.2	10,293

Post-project Emissions for C-1646-25-4		
Pollutant	Daily PE2 (lb/day)	Annual PE2 (lb/year)
VOC _{ink}	60.0	21,900
NOx _{oven}	37.2	13,578
CO _{oven}	131.6	48,034
VOC _{oven}	4.2	1,533
PM _{10 oven}	5.7	2,081
SOx _{oven}	2.2	803
VOC _{total}	64.2	23,433

Post-project Emissions for C-1646-36-4		
Pollutant	Daily PE2 (lb/day)	Annual PE2* (lb/year)
VOC _{ink}	95.5	34,858
NOx _{oven}	23.4	920
CO _{oven}	82.7	3,255
VOC _{oven}	2.6	103
PM _{10 oven}	3.6	142
SOx _{oven}	1.4	53
VOC _{total}	98.1	34,961

* The annual oven emissions are based on the current limit of 18,700 MMBtu/yr.

Post-project Emissions for C-1646-37-3 and -38-5		
Pollutant	Daily PE2 (lb/day)	Annual PE2* (lb/year)
VOC _{ink}	95.5	34,858
NOx _{oven}	6.7	2,460
CO _{oven}	23.8	8,700
VOC _{oven}	0.8	275
PM _{10 oven}	1.0	380
SOx _{oven}	0.4	143
VOC _{total}	96.3	35,133

* The annual oven emissions are based on the current limit of 50,000 MMBtu/yr.

Post-project Emissions for C-1646-39-5		
Pollutant	Daily PE2 (lb/day)	Annual PE2* (lb/year)
VOC _{ink}	27.5	10,038
NOx _{oven}	5.4	573
CO _{oven}	19.2	2,027
VOC _{oven}	2.2	233
PM _{10 oven}	1.1	117
SOx _{oven}	0.3	33
VOC _{total}	29.7	10,271

* The annual oven emissions are based on the current limit of 11,651 MMBtu/yr.

Post-project Emissions for MecTec Enterprise II RTO		
Pollutant	Daily PE2 (lb/day)	Annual PE2 (lb/year)
NOx _{RTO}	11.2	4,088
CO _{RTO}	39.7	14,491
VOC _{RTO}	1.3	475
PM _{10 RTO}	1.7	621
SOx _{RTO}	0.6	219

Post-project Emissions for Reeco Retherm RTO		
Pollutant	Daily PE2 (lb/day)	Annual PE2 (lb/year)
NOx _{RTO}	21.2	7,738
CO _{RTO}	75.2	27,448
VOC _{RTO}	2.4	876
PM _{10 RTO}	3.3	1,205
SOx _{RTO}	1.2	438

Post-project Emissions for MecTec Cleanswitch RTO		
Pollutant	Daily PE2 (lb/day)	Annual PE2* (lb/year)
NO _x _{RTO}	6.8	1,230
CO _{RTO}	23.9	4,351
VOC _{RTO}	2.7	500
PM ₁₀ _{RTO}	1.4	250
SO _x _{RTO}	0.4	71

* The annual emissions are based on the current limit of 25,000 MMBtu/yr.

The post-project annual PE for PM₁₀, CO, and SO_x for these permit units due to this project will be the combined annual PE2 from the drying ovens and the three shared RTOs. The RTO emissions are proportioned among the associated presses as previously calculated for the pre-project PE. Adding the proportional emissions to the presses produces the following total emission (ink + oven +RTO) results:

Total Post-project Emissions for C-1646-6-5 and -16-5		
Pollutant	Daily PE2 (lb/day)	Annual PE2 (lb/year)
NO _x	7.0	2,555
CO	24.9	9,071
VOC	38.3	13,986
PM ₁₀	1.0	377
SO _x	0.4	147

Total Post-project Emissions for C-1646-23-5		
Pollutant	Daily PE2 (lb/day)	Annual PE2 (lb/year)
NO _x	16.3	5,950
CO	57.6	21,006
VOC	28.8	10,518
PM ₁₀	2.5	925
SO _x	0.9	329

Total Post-project Emissions for C-1646-25-4		
Pollutant	Daily PE2 (lb/day)	Annual PE2 (lb/year)
NO _x	42.6	15,549
CO	150.8	55,024
VOC	64.8	23,658
PM ₁₀	6.5	2,385
SO _x	2.5	913

Total Post-project Emissions for C-1646-36-4		
Pollutant	Daily PE2 (lb/day)	Annual PE2* (lb/year)
NOx	28.8	2,891
CO	101.9	10,245
VOC	98.7	32,186
PM ₁₀	4.4	446
SOx	1.7	163

* The annual oven emissions are based on the current limit of 18,700 MMBtu/yr.

Total Post-project Emissions for C-1646-37-3		
Pollutant	Daily PE2 (lb/day)	Annual PE2* (lb/year)
NOx	10.1	3,075
CO	35.8	10,878
VOC	97.7	35,383
PM ₁₀	1.7	505
SOx	0.6	179

* The annual oven emissions are based on the current limit of 50,000 MMBtu/yr.

Total Post-project Emissions for C-1646-38-5		
Pollutant	Daily PE2 (lb/day)	Annual PE2* (lb/year)
NOx	12.1	4,431
CO	43.0	15,690
VOC	96.9	35,358
PM ₁₀	1.8	684
SOx	0.7	253

* The annual oven emissions are based on the current limit of 50,000 MMBtu/yr.

Total Post-project Emissions for C-1646-39-5		
Pollutant	Daily PE2 (lb/day)	Annual PE2* (lb/year)
NOx	8.8	1,188
CO	31.2	4,205
VOC	31.1	10,521
PM ₁₀	1.8	242
SOx	0.5	69

* The annual oven emissions are based on the current limit of 11,651 MMBtu/yr.

3. Pre-Project Stationary Source Potential to Emit (SSPE1):

Pursuant to Section 4.9 of District Rule 2201, the Pre-project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

Pre-Project Annual PE (lb/year)					
Permit Unit	NOx	CO	VOC	PM10	SOx
-2	54,750	0	85,994	37	0
-6		9,071		377	147
-16		9,071		377	147
-19		0		0	0
-23		21,006		925	329
-25		55,042		2,385	913
-34		549		39	18
-36		10,245		446	163
-37		10,878		505	179
-38		15,690		684	253
-39		4,205		242	69
Total		54,750		135,757	85,994

4. Post-Project Stationary Source Potential to Emit (SSPE2):

Pursuant to Section 4.10 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

Despite the changes proposed to the daily VOC limits on the individual presses, there are no changes proposed to the facility-wide SLC for NOx and VOC, so those values are unchanged from pre-project amounts. Similarly, the operation of the drying ovens and RTO are unchanged so their emissions also remain at pre-project levels.

Post-Project Annual PE (lb/year)					
Permit Unit	NOx	CO	VOC	PM10	SOx
-2	54,750	0	85,994	37	0
-6		9,071		377	147
-16		9,071		377	147
-19		0		0	0
-23		21,006		925	329
-25		55,042		2,385	913
-34		549		39	18
-36		10,245		446	163
-37		10,878		505	179
-38		15,690		684	253
-39		4,205		242	69
Total		54,750		135,757	85,994

5. Major Source Determination

Rule 2201 Major Source Determination:

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in
- 40 CFR 51.165

This source is an existing Major Source for NOx and VOC emissions and will remain a Major Source for NOx and VOC. No change in other pollutants are proposed or expected as a result of this project.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the PSD Major Source thresholds, shown in the table below, are applicable.

The CO2e emissions are calculated as follows:

EPA has established default GHG emission factors for combustion sources in 40 CFR Part 98, Subpart A, Tables C-1 and C-2 as shown:

CO2: 116.5 lb/MMBtu
CH4: 0.002 lb/MMBtu
N2O: 0.0002 lb/MMBtu

As detailed in Section X Billing Information, seven units in this project have a combined rating of 133.5 MMBtu/hr. They are allowed to operate 24 hours/day and 7 days/week (8,760 hours per year). Therefore, the CO2e emissions are calculated as

$$\begin{aligned} \text{CO}_2 &= 133.5 \text{ MMBtu/hr} \times 8,760 \text{ hr/yr} \times 116.5 \text{ lb-CO}_2/\text{MMBtu} \\ &\quad \times 1 \text{ lb CO}_2\text{e}/1 \text{ lb CO}_2 \times 1 \text{ ton}/2,000 \text{ lb} \\ &= 68,121 \text{ tons CO}_2\text{e} \end{aligned}$$

$$\begin{aligned} \text{CH}_4 &= 133.5 \text{ MMBtu/hr} \times 8,760 \text{ hr/yr} \times 0.002 \text{ lb-CH}_4/\text{MMBtu} \\ &\quad \times 21 \text{ lb CO}_2\text{e}/1 \text{ lb CH}_4 \times 1 \text{ ton}/2,000 \text{ lb} \\ &= 25 \text{ tons CO}_2\text{e} \end{aligned}$$

$$\begin{aligned} \text{N}_2\text{O} &= 133.5 \text{ MMBtu/hr} \times 8,760 \text{ hr/yr} \times 0.0002 \text{ lb- N}_2\text{O}/\text{MMBtu} \\ &\quad \times 310 \text{ lb CO}_2\text{e}/1 \text{ lb N}_2\text{O} \times 1 \text{ ton}/2,000 \text{ lb} \\ &= 36 \text{ tons CO}_2\text{e} \end{aligned}$$

$$\begin{aligned} \text{CO}_2\text{e} &= (68,121 + 25 + 36) \text{ tons CO}_2\text{e/yr} \\ &= 68,182 \text{ tons CO}_2\text{e/yr} \end{aligned}$$

PSD Major Source Determination (tons/year)							
	NO2	VOC	SO2	CO	PM	PM10	CO2e
Estimated Facility PE before Project Increase	27	43	1	68	3	3	68,182
PSD Major Source Thresholds	250	250	250	250	250	250	100,000
PSD Major Source ? (Yes/No)	No	No	No	No	No	No	No

As shown in the table above, the facility is not an existing major source for PSD for at least one pollutant. Therefore the facility is not an existing major source for PSD.

6. Baseline Emissions:

Pursuant to Rule 2201, Section 3.7, the Baseline Emissions (BE) for a given pollutant is the sum of the following:

BE = Pre-project Potential to Emit for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

Otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to Rule 2201, Section 3.22

Based on the SSPE1 and SSPE2 calculations in the above section, the facility is a major source for VOC and NOx.

Pursuant to Rule 2201, Section 3.7.1.2, for a major source, the Baseline Emissions (BE) for a given pollutant is equal to the sum of the pre-project Potential to Emit for any Highly-Utilized Emissions Unit, provided that if the unit has a Specific Limiting Condition (SLC), all units combined under the SLC have an average combined annual Actual Emissions during the two consecutive years immediately prior to filing of an application for an ATC were equal to or greater than 80% of the pre-project SLC limit.

The Historic Actual Emissions (HAE), based on 2009 and 2010 Emissions Inventory data (the most recent data available) are shown in the following table. The HAE calculations for SO_x, CO and PM₁₀ are included as they will be used for later calculations in this evaluation.

Highly Utilized Determination					
	NO_x (tons/year)	VOC (tons/year)	SO_x (tons/year)	CO (tons/year)	PM₁₀ (tons/year)
2009 Inventory	9.1	21.9	0.0	2.5	0.9
2010 Inventory	7.5	18.2	0.03	1.9	0.4
Two-year Average (HAE)	8.3	20.0	0.015	2.2	0.65
Facility-wide SLC	27.3	43.0			
% Utilization	30.4%	46.5%			
Highly Utilized?	No	No			

Based on that data, the permit units are not considered highly utilized.

For high-end graphics printing using a heatset offset lithographic printing press with a drying oven, the District's current BACT Clearinghouse Guideline 4.7.1. (See Appendix D), lists the achieved-in-practice BACT for NO_x emissions from the combustion of natural gas fuel in the drying ovens. According to the referenced BACT analysis, the drying ovens meet the achieved-in-practice BACT requirements for NO_x emissions as identified under BACT Guideline 4.7.1. The drying ovens are therefore Clean Emission Units for NO_x.

Similarly, the Achieved in Practice control standard for that BACT guideline is use of low-VOC fountain solutions and inks compliant with District Rule 4607 (Graphic Arts). The capture and control system on the presses and drying ovens result in equal or lower emissions than the use of the low-VOC products, as required by Rule 4607. Therefore, the presses and drying ovens are Clean Emission Units for VOC.

The regenerative thermal oxidizers are utilized as a control device to reduce the VOC emissions from the printing operation and would not need to qualify as a clean emissions unit.

The emission units under the SLC are Clean Emission Units for NO_x and VOC and the BE for NO_x and VOC will be equal to the sum of the pre-project PE for all emission units effected by this proposed project.

Pursuant to Rule 2201, Section 3.7.1.1, for a non-major source, the Baseline Emissions (BE) for a given pollutant is equal to the sum of the pre-project Potential to Emit for all emission units. Since this facility is a non-major source for CO, PM₁₀ and

SO_x, the BE for these pollutants will be equal to the sum of the pre-project PE for all emission units effected by this proposed project.

7. SB288 Major Modification:

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

Since this facility is a major source for NO_x and VOC, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if the SB 288 Major Modification calculation is required.

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
NO _x	54,750	50,000	Yes
SO _x	2,218	80,000	No
PM ₁₀	6,017	30,000	No
VOC	85,994	50,000	Yes

Since the project's PE2 surpasses the SB 288 Major Modification Thresholds for NO_x and VOC, the Net Emissions Increase (NEI) will be compared to the SB 288 Major Modification thresholds in order to determine if this project constitutes an SB 288 Major Modification.

The NEI is the total of emission increases for every permit unit addressed in this project and is calculated as follows:

$$NEI = PE2 - BAE$$

Where:

- PE2 = the sum of all the PE2s for each permit unit in this project
- BAE = PE1 for units that are fully offset, otherwise
- BA = actual annual emissions averaged over the baseline period.

The baseline period is the two year period preceding the application (or another time period within the previous 5 or 10 yrs. (5 yrs. for electric utility steam generating unit) determined by the District to be more representative of normal operation.

As previously shown in the Baseline Emissions calculations section, the actual emission two-year-average emissions were 8.3 tons NO_x/year (16,600 lb/yr) and 20.0 tons VOC/yr (40,000 lb/yr). Using these values as the BAE, the NEI can be calculated and the SB 288 Major Modification determination made as shown in the following table.

SB 288 Major Modification Calculation and Determination					
Pollutant	PE2 (lb/yr)	BAE (lb/yr)	NEI (lb/yr)	Thresholds (lb/yr)	SB 288 Major Modifications?
NO _x	54,750	16,600	38,150	50,000	No
VOC	85,994	40,000	45,994	50,000	No

As demonstrated in the preceding table, this project does not constitute an SB 288 Major Modification.

8. Federal Major Modification:

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

Since this source is not included in the 28 specific source categories specified in 40 CFR 51.165, the increases in fugitive emissions are not included in the Federal Major Modification determination.

The determination of Federal Major Modification is based on a two-step test. For the first step, only the emission *increases* are counted. Emission decreases may not cancel out the increases for this determination.

Step 1

All of the units in this project are existing emissions units. For existing emissions units, the increase in emissions is calculated as follows.

$$\text{Emission Increase} = \text{PAE} - \text{BAE} - \text{UBC}$$

Where:

PAE = Projected Actual Emissions, and
 BAE = Baseline Actual Emissions
 UBC = Unused baseline capacity

If there is no increase in design capacity or potential to emit, the PAE is equal to the annual emission rate at which the unit is projected to emit in any one year, selected by the operator, within 5 years after the unit resumes normal operation (10 years for existing units with an increase in design capacity or potential to emit). If detailed PAE are not provided, the PAE is equal to the PE2 for each permit unit.

The BAE is calculated based on historical emissions and operating records for any 24 month period, selected by the operator, within the previous 10 year period (5 years for electric utility steam generating units). The BAE must be adjusted to exclude any non-compliant operation emissions and emissions that are no longer allowed due to lower applicable emission limits that were in effect when this application was deemed complete. For this project, BAE = HAE, which were previously calculated.

Since this project does not result in an increase in design capacity or potential to emit, and it does not impact the ability of the emission unit to operate at a higher utilization rate, the UBC is the portion of PAE that the emission units could have accommodated

during the baseline period. For this project, the UBC = PE1 – BAE and is calculated as shown in the following table:

Unused Baseline Capacity (UBC) Calculations			
Pollutant	PE1 (lb/year)	BAE (lb/year)	UBC (lb/year)
NO _x	54,750	16,600	38,150
VOC	85,994	40,000	45,994
PM ₁₀	6,017	1,300	4,717
PM _{2.5}	6,017	1,300	4,717
SO _x	2,218	30	2,188

The following table shows the Emissions Increase calculated according to the formula

$$\text{Emission Increase} = \text{PAE} - \text{BAE} - \text{UBC}$$

Federal Major Modification Calculations				
Pollutant	PAE (lb/year)	BAE (lb/year)	UBC (lb/year)	Emissions Increase (lb/year)
NO _x *	54,750	16,600	38,150	0
VOC*	85,994	40,000	45,994	0
PM ₁₀	6,017	1,300	4,717	0
PM _{2.5}	6,017	1,300	4,717	0
SO _x	2,218	30	2,188	0

*If there is any emission increases in NO_x or VOC, this project is a Federal Major Modification and no further analysis is required.

The project's combined total emission increases are calculated above and compared to the Federal Major Modification Thresholds in the following table:

Federal Major Modification Thresholds for Emission Increases			
Pollutant	Total Emissions Increases (lb/yr)	Thresholds (lb/yr)	Federal Major Modification?
NO _x *	0	0	No
VOC*	0	0	No
PM ₁₀	0	30,000	No
PM _{2.5}	0	20,000	No
SO _x	0	80,000	No

*If there is any emission increases in NO_x or VOC, this project is a Federal Major Modification and no further analysis is required.

Since none of the Federal Major Modification Thresholds are being surpassed with this project, this project does not constitute a Federal Major Modification and no further analysis is required.

9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to pollutants for which the District is in attainment or for unclassified, pollutants. The pollutants addressed in the PSD applicability determination are listed as follows:

- NO2 (as a primary pollutant)
- SO2 (as a primary pollutant)
- CO
- PM
- PM10
- Greenhouse gases (GHG): CO2, N2O, CH4, HFCs, PFCs, and SF6

The first step of this PSD evaluation consists of determining whether the facility is an existing PSD Major Source or not (See Section VII.C.5 of this document).

In the case the facility is NOT an existing PSD Major Source but is an existing source, the second step of the PSD evaluation is to determine if the project, by itself, would be a PSD major source.

I. Potential to Emit for New or Modified Emission Units vs PSD Major Source Thresholds

As a screening tool, the project potential to emit from all new and modified units is compared to the PSD major source threshold, and if total project potential to emit from all new and modified units is below this threshold, no further analysis will be needed.

Project PE (lb/year)					
Permit Unit	NOx	CO	VOC	PM10	SOx
-6	54,750	9,071	85,994	377	147
-16		9,071		377	147
-23		21,006		925	329
-25		55,042		2,385	913
-36		10,245		446	163
-37		10,878		505	179
-38		15,690		684	253
-39		4,205		242	69
Total		54,750		135,208	85,994

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

PSD Major Source Determination: Potential to Emit (tons/year)							
	NO2	VOC	SO2	CO	PM	PM10	CO2e
Total PE from New and Modified Units	27	43	1	68	3	3	68,182
PSD Major Source threshold	250	250	250	250	250	250	100,000
New PSD Major Source?	No	No	No	No	No	No	No

As shown in the table above, the project potential to emit, by itself, does not exceed any of the PSD major source thresholds. Therefore Rule 2410 is not applicable and no further discussion is required.

10. Stationary Source Project Increase in Permitted Emissions (SSIPE):

SSIPE is used to determine if a project triggers public notification (Ref. District Rule 2201, Section 5.4.5). For the proposed project:

SSIPE (for any one pollutant) = SSPE2 – SSPE1

SSIPE			
Pollutant	SSPE2 (lb/yr)	SSPE1 (lb/yr)	SSIPE (lb/yr)
NOx	54,750	54,750	0
CO	135,757	135,757	0
VOC	85,994	85,994	0
PM ₁₀	6,017	6,017	0
SOx	2,218	2,218	0

VIII. Compliance

Rule 2201 - New and Modified Stationary Source Review Rule:

A. Best Available Control Technology (BACT):

1. BACT Applicability:

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

- a. Any new emissions unit with a potential to emit exceeding two pounds per day,
- b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or

d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. New emissions units – PE > 2 lb/day

As discussed in Section I above, there are no new emissions units associated with this project. Therefore BACT for new units with PE > 2 lb/day purposes is not triggered.

b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore BACT is not triggered.

c. Modification of emissions units – AIPE > 2 lb/day

$$\text{AIPE} = \text{PE}_2 - \text{HAPE}$$

Where,

- AIPE = Adjusted Increase in Permitted Emissions (lb/day)
- PE₂ = The emissions units post project potential to emit (lb/day)
- HAPE = The emissions units Historically Adjusted Potential to Emit (lb/day)

$$\text{HAPE} = \text{PE}_1 \times (\text{EF}_2/\text{EF}_1)$$

Where,

- PE₁ = The emission unit's Potential to Emit prior to modification.
- EF₂ = The emission unit's permitted emission factor for the pollutant after modification. If EF₂ is greater than EF₁ then EF₂/EF₁ shall be set equal to 1.
- EF₁ = The emission unit's permitted emission factor for the pollutant before the modification.

There is no change to the operation of and emissions from the ovens or the RTO. The applicant is proposing a change the daily VOC limits of the printing presses. Therefore the AIPE can be calculated as shown in the following table:

$$\text{EF}_{2\text{VOC}} = \text{EF}_{1\text{VOC}} = 1$$

$$\begin{aligned} \text{AIPE}_{\text{printing presses}} &= \text{PE}_{2\text{VOC}} - \text{HAPE}_{\text{VOC}} \\ &= \text{PE}_{2\text{VOC}} - (\text{PE}_1 \times (\text{EF}_2/\text{EF}_1)) \\ &= \text{PE}_{2\text{VOC}} - \text{PE}_1 \end{aligned}$$

Proposed VOC Limit Changes			
Permit #	PE1 (lb VOC/day)	PE2 (lb VOC/day)	AIPE (lb VOC/Day)
-6	69.1	37.5	- 31.6
-16	69.1	27.0	- 42.1
-23	69.1	37.5	- 31.6
-25	74.1	60.0	- 14.1
-36	50.0	95.5	45.5
-37	50.0	95.5	45.5
-38	50.0	95.5	45.5
-39	50.0	27.5	- 22.5

As demonstrated above, the AIPE is greater than 2.0 lb/day for VOC emissions from -36, -37, and -38. Therefore BACT is triggered for those units.

2. BACT Guidance:

The District's BACT Clearinghouse Guideline 4.7.1 applies to high-end graphics printing using a heatset offset lithographic printing press with a drying oven for all equipment ratings (See Appendix D).

3. BACT Analysis for VOC Emissions:

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

Pursuant to the attached Top-Down BACT Analysis (see **Appendix D**), BACT has been satisfied with the following:

VOC: VOC capture and incineration using high-end graphics heatset inks with a VOC content < 45% by weight (less water & exempt compounds) and fountain solutions with a VOC content of < 15% by volume.

The applicant is proposing the use of the most stringent control technique, therefore, BACT is being proposed and no further analysis is required for VOC emissions.

B. Offsets

1. Offset Applicability

Pursuant to Section 4.5.3, offset requirements shall be triggered on a pollutant-by-pollutant basis, unless exempt per Section 4.6. Offsets are required if the post-project SSPE2 totals equals or exceeds the following offset thresholds for any pollutant:

Pollutant	Offset Thresholds (lb/yr)	SSPE2 (lb/yr)	SSPE1 (lb/yr)	Offset Calculations Triggered
NOx	20,000	54,750	54,750	Yes
CO	200,000	135,757	135,757	No
VOC	20,000	85,994	85,994	Yes
PM ₁₀	29,200	6,017	6,017	No
SOx	54,750	2,218	2,218	No

2. Quantity of Offsets Required

The SSPE2 for NOx and VOC emissions exceed the offset threshold and offsets are triggered only for NOx and VOC. According to Section 4.7.1 and 4.7.3, for pollutants with a pre-project Stationary Source Potential to Emit (SSPE1) greater than the emission offset threshold levels, the quantity of emission offsets is calculated as follows:

$$\text{Offset Quantity (lb/yr)} = [\Sigma(\text{PE2} - \text{BE})] \times \text{Offset Ratio}$$

Where,

$$\text{Offset Ratio} = \text{Distance or interpollutant ratio of Sections 4.8 and 4.13.3}$$

As indicated in Section VII.E.3 of this document, the BE for the existing emission units are equal to the pre-project PE (PE1). Therefore, for this stationary source project:

$$\text{Offset Quantity (lb/yr)} = \Sigma(\text{PE2}_{\text{SLC}} - \text{BE}_{\text{SLC}}) = \text{Annual PE2}_{\text{SLC}} - \text{Annual PE1}_{\text{SLC}}$$

Pollutant	Annual PE2 _{SLC} (lb/yr)	Annual PE1 _{SLC} (lb/yr)	Offset Quantity (lb/yr)
NOx	54,750	54,750	0
VOC	85,994	85,994	0

The offset trigger level for NOx and VOC are exceeded, but offsets are not required.

C. Public Notification

1. Applicability

District Rule 2201, section 5.4, requires a public notification for the affected pollutants from the following types of projects:

- New Major Sources
- Major Modifications
- New emission units with a PE > 100 lb/day of any one pollutant
- Modifications with SSPE1 below an offset threshold and SSPE2 above an offset threshold on a pollutant by pollutant basis
- New stationary sources with SSPE2 exceeding offset thresholds
- Any permitting action with a SSPE1 exceeding 20,000 lb/yr for any one pollutant. (SSPE1 Notice)

a. New Major Source Notice Determination:

A New Major Source is a new facility, which is also a major source. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

b. Major Modification Notice Determination:

As indicated in Section VII.F. (Major Modification) above, the proposed project does not result in a net emissions change (NEC), which exceeds the major modification trigger threshold for any pollutant. Therefore, public notice is not required for major modification purposes.

c. PE Notification:

As indicated in Section VII.C.2.A. (Daily PE2 Calculations) above, the proposed project will not result in the installation of new emission units with an increase in emissions of greater than 100 lb/day for any pollutant. Therefore, public noticing will be not required for PE > 100 lb/day purposes.

d. Existing Facility - Offset Threshold Notification

Existing facilities with the SSPE1 below the offset threshold resulting in an SSPE2 exceeding the offset threshold due to the proposed project for one or more pollutants will require public noticing. As shown in Section VII.E. (Facility Emissions) of this document, the SSPE1 and SSPE2 for NOx and VOC are above the offset threshold levels. Therefore, public noticing is not required for offset threshold exceedance purposes.

e. New Facility - Offset Threshold Notification

This is an existing facility. This section does not require a public notification.

f. SSIPE Notification:

A notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/yr of any affected pollutant. As shown in this document, the SSIPE will not exceed 20,000 lb/year for any criteria pollutant as a result of this project. Therefore, public noticing will not be required for SSIPE exceeding 20,000 lb/year.

2. Public Notice Action

Rule 2201, Section 5.5 details the actions taken by the District when public noticing is triggered according to the application types above. As indicated above the public noticing requirements is not triggered for this project. Therefore, public notification and publication requirements as indicated in section 5.5 of this rule are not required.

D. Daily Emissions Limits

Daily Emission Limits (DELs) are required by Rule 2201, Sections 3.17 & 5.7.2. The daily emission limits from the graphic arts printing operations will be equal to the above calculated daily PE2 for each pollutant.

E. Compliance Assurance

The following measures shall be taken to ensure continued compliance with District Rules.

1. Source Testing & Monitoring

Pursuant to District Policy APR 1705 (Source Testing Frequency), units equipped with an afterburner, thermal incinerator, or catalytic incinerator for controlling VOC must be tested annually. The drying ovens serving the heatset offset lithographic printing presses are vented to the shared RTOs for VOC control. The applicant is proposing a minimum VOC destruction efficiency of 98% from the facility shared RTOs. Therefore, source testing to verify the control efficiency and VOC emissions from the each shared RTO will be required annually.

The drying ovens will be subject to the source testing and monitoring requirements of District Rule 4309 (Dryers, Dehydrators, and Ovens). Refer to Section VIII, Rule 4309, for a discussion of these source testing and monitoring requirements.

The proposed regenerative thermal oxidizer is not subject to any District Rule monitoring requirements. However, monitoring of the regenerative thermal oxidizers utilizing a continuous temperature indicator and recorder will be required to verify proper operation of the oxidizer.

2. Record Keeping

Daily record keeping will be required to verify compliance with the permitted daily emission limits. The facility has conditions to limit the combined facility wide daily NOx and VOC emissions to not exceed 150 lb NOx/day and 235.6 lb VOC/day, respectively. Therefore, a permit condition requiring a daily record of the quantity of natural gas utilized by each facility drying oven and thermal oxidizer will be required to verify compliance with the daily NOx emission limit. In addition, a permit condition requiring a daily record of the combined facility-wide daily VOC emissions will be required to verify compliance with the daily VOC emission limit.

The drying ovens will be subject to the record keeping requirements of District Rule 4309 (Dryers, Dehydrators, and Ovens). Refer to Section VIII, Rule 4309, for a discussion of these record keeping requirements.

The graphic arts printing operation will be subject to the record keeping requirements of District Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings). Refer to the conditions on the draft ATC permit for these record keeping requirements.

3. Reporting

No applicable District rule or policy requires reporting.

Rule 2520 - Federally Mandated Operating Permits:

This facility was issued their Title V Operating Permit on 07/26/04. This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit.

In accordance with Rule 2520, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

As discussed above, the facility has applied for a Certificate of Conformity (COC). Therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. The facility may operate under the ATC upon submittal of the Title V administrative amendment application.

The following federally enforceable conditions will be placed on each of these ATC permits to ensure compliance with this rule:

- *{1830} This Authority to Construct serves as a written Certificate of Conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2520] Y*
- *{1831} Prior to operating with the modifications authorized by this Authority to Construct, the facility shall submit an application for an administrative amendment to its Title V permit, in accordance with District Rule 2520, Section 11.4.2. [District Rule 2520] Y*

Compliance with this rule is expected.

Rule 4001 - New Source Performance Standards

40 CFR Part 60, Subpart QQ - Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing

Subpart QQ applies to publication rotogravure printing presses, except for proof presses which construction, modification, or reconstruction has commenced after October 28, 1980. This facility does not perform any publication rotogravure printing, therefore, this rule is not applicable.

Rule 4002 – National Emissions Standards for Hazardous Air Pollutants

40 CFR Part 63, Subpart KK – National Emissions Standard for the Printing and Publishing Industry

According to §63.820(a)(1) (Applicability), Subpart KK applies to each new and existing facility that is a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, at which publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses are operated. According to §63.2 (Definitions), a Major source means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants.

Based on the information provided by the applicant, this facility's only source of HAP emissions was from the printing inks used in their flexographic printing press under permit unit N-1646-15, which has been removed. Therefore, the facility has a potential HAP emissions of zero, which is less than 10 tons per year for each HAP or any combined of HAPs. Since this facility is not a major source of HAP emissions, this rule is not applicable.

40 CFR Part 63, Subpart OOOO - National Emission Standard for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles

Subpart OOOO applies to the printing, coating, slashing, dyeing, or finishing of fabric and other textiles. This facility does not perform any printing, coating slashing, dyeing, or finishing of fabric and other textiles. Therefore, this rule is not applicable.

Rule 4101 - Visible Emissions:

As long as the equipment is properly maintained and operated, each emission unit will not discharge into the atmosphere any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart or equivalent to 20% opacity. A permit condition will be placed on each of these ATC permits as follows:

- *{15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]*

Therefore, compliance with this rule is expected.

Rule 4102 – Nuisance:

As long as the equipment is properly maintained and operated the emission units will not discharge any air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such person or public or which cause or have a natural tendency to cause injury or damage to business or property. A permit condition will be placed on each of these ATC permits as follows:

- *{98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]*

Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Analysis):

Pursuant to District's Risk Management Policy APR 1905 (03/2/01), for any source with increases in toxic air emissions, the health risks resulting from such projects must be evaluated. The health risk assessment process begins with a prioritization score using CAPCOA facility prioritization guidelines. If the project cumulative prioritization score increase is equal to or less than one, no further assessment will be required.

For this Risk Management Review, (see Appendix F) only the three units proposing VOC increases were reviewed and modeled. Technical Services performed prioritizations using the District's HEARTs database. Since the facility's total cumulative prioritization score was greater than one, a refined health risk assessment was required and performed. The Acute Hazard Index for all three units was below 1.0; and there was no Chronic Hazard Index or Maximum Individual Cancer Risk associated with this project. In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).

Rule 4201 - Particulate Matter Concentration:

This rule defines the maximum allowable concentration of particulates in the exhaust as 0.1 gr/dscf. According to AP 42 (Table 1.4-2, footnote c), all PM emissions from natural gas combustion are less than 1 μm in diameter. Since the drying ovens and associated RTOs will be fired exclusively on natural gas fuel, it is reasonable to assume the PM emissions will be the same as the PM₁₀ emissions. Thus, the particulate concentration in the exhaust of the RTOs serving the drying ovens may be calculated as follows:

For the Drying Ovens & RTOs:

$$\begin{aligned} \text{PM Concentration} &= 0.0076 \text{ lb-PM}_{10}/\text{MMBtu} \times \text{MMBtu}/8,578 \text{ dscf} \times 7,000 \text{ gr/lb} \\ &= 0.006 \text{ gr/dscf} < 0.1 \text{ gr/dscf} \end{aligned}$$

Therefore, as long as the equipment is properly maintained and operated, compliance with District Rule 4201 requirements is expected and a permit condition will be placed on each ATC permit as follows:

- *{14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]*

Rule 4301 - Fuel Burning Equipment:

Pursuant to Section 3.1 of this rule, this rule applies only to units that produce heat or power via indirect heat transfer. The drying ovens and associated regenerative thermal oxidizer are direct-fired units. Thus, this rule does not apply.

Rule 4309 - Dryers, Dehydrators, and Ovens:

The purpose of this rule is to limit emissions of oxides of nitrogen (NOx) and carbon monoxide (CO) from dryers, dehydrators, and ovens. This rule applies to any dryer, dehydrator, or oven that is fired on gaseous fuel, liquid fuel, or is fired on gaseous and liquid fuel sequentially, and the total rated heat input for the unit is 5.0 million British thermal units per hour (5.0 MMBtu/hr) or greater.

Section 5.0, Requirements:

Section 5.2 requires that, except for dehydrators, NOx and CO emissions shall not exceed the limits specified in the following table. All ppmv emission limits specified in this section are referenced at dry stack gas conditions and 19.00 percent by volume stack gas oxygen.

Section 5.2, Table 1, from District Rule 4309, list the following requirements:

Rule 4309 NOx and CO Emissions Limits		
Category	Operated on gaseous fuel	
	NO_x Limit	CO Limit
Other processes, which are not Asphalt/Concrete Plants or Milk, Cheese, or Dairy Processing Facilities	4.3 ppmv	42 ppmv

The affected permits (N-1646-23, -25, -36, -37, and -38) have a total of eight drying ovens which are rated greater than 5.0 MMBtu/hr. All of the ovens have permit conditions with the following oven emission limits:

NOx: 4.3 ppmvd @ 19% O₂ and
CO: 25 ppmvd @ 19% O₂

Therefore, compliance with Section 5.2 of District Rule 4309 is expected.

Section 5.4, Monitoring Provisions:

Section 5.4.1 requires each unit subject to section 5.2 to either install a continuous emissions monitoring system (CEMS) for NOx, CO, and oxygen or implement an APCO-approved Alternate Monitoring System. The applicant chooses the latter option, and proposes to use Option A (periodic monitoring using District-approved portable analyzer) from the District's pre-approved Alternate Monitoring Schemes contained in District Policy SSP 3005 (4/28/2008). The following conditions will be incorporated into each affected units' ATC permit in order to ensure compliance with the requirements of the proposed alternate monitoring plan:

- *{3741} The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309] N*
- *{3742} If either the NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4309]*
- *{3743} All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309]*
- *{3744} The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309]*

Section 5.5, Compliance Determination:

Section 5.5.1 requires that all emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Section 5.5.2 requires that no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0. Therefore, the following permit condition will be placed on each affected units' ATC permit as follows:

- *{3713} All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309]*

Section 5.5.5 requires that for emissions monitoring pursuant to Sections 5.4.1.2.2.1, emission readings shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five readings evenly spaced out over the 15-consecutive-minute period.

Therefore, since the applicant proposed to use a portable analyzer to satisfy the monitoring requirements of District Rule 4309, the following permit condition will be placed on each affected units' ATC permit as follows:

- *{3743} All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309]*

Section 5.5.6 requires that for emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. Therefore, the following permit condition will be placed on each ATC permit as follows:

- *{3715} For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309]*

Section 6.1, Record Keeping:

Section 6.1.6 requires that the records required by Sections 6.1.1 through 6.1.5 shall be maintained for five calendar years and shall be made available to the APCO upon request. Failure to maintain records or information contained in the records that demonstrate noncompliance with the applicable requirements of this rule shall constitute a violation of this rule. A permit condition will be placed on each ATC permit as follows:

- *{Modified 2983} All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070 and 4309]*

Section 6.2, Test Methods:

Section 6.2 identifies the following test methods as District-approved source testing methods for the pollutants listed:

Pollutant	Units	Test Method Required
Fuel hhv	Fuel hhv shall be certified by third party fuel supplier or:	
	Liquid fuels	ASTM D 240-87 or D 2382-88
	Gaseous fuels	ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89
NO _x	ppmv	EPA Method 7E or ARB Method 100
CO	ppmv	EPA Method 10 or ARB Method 100
Stack Gas O ₂	%	EPA Method 3 or 3A, or ARB Method 100
Stack Gas Velocities	ft/min	EPA Method 2
Stack Gas Moisture Content	%	EPA Method 4

The following permit conditions will be placed on each affected units' ATC permit as follows:

- *{109} Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]*
- *{3718} NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309]*
- *{3719} CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309]*
- *{3720} Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309]*

Section 6.3, Compliance Demonstration

Section 6.3.2 requires the permittee to perform initial source test to determine compliance with NO_x and CO emission limits. Furthermore, the unit is required to be tested every 24 months. The applicant will be required to perform a source test to satisfy the requirements of this section. Since the initial source testing was previously conducted, on the reoccurring testing will be necessary. The exhaust of the drying ovens is vented through the associated RTOs and the applicant had requested to demonstrate compliance with the NO_x and CO emission limits of this rule at the exhaust of the RTOs.

The following conditions will be included in each ATC permit to verify compliance with the proposed NO_x and CO emission limits:

- *Source testing to measure NO_x and CO emissions from the drying ovens shall be conducted at the exhaust of the associated regenerative thermal oxidizer at least once every 24 months. [District Rules 2201 and 4309]*

- {3722} All test results for NO_x and CO shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309]
- {110} The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

Conclusion:

Conditions will be incorporated into the affected units' permit in order to ensure compliance with each section of this rule. Therefore, compliance with District Rule 4309 requirements is expected with the issuance of these ATC permits.

Rule 4607 - Graphic Arts and Paper, Film, Foil, and Fabric Coatings:

This rule is applicable to any graphic arts printing operation, to digital printing operations, and to any paper, film, foil, or fabric coating operation and to the organic solvent cleaning materials and processes associated with such operations. The applicant will be operating graphic arts printing operations (heatset offset lithographic printing). Therefore, these permit units are subject to the provisions of this rule.

As determined under project #N-1030443, (N-1646-6-1, 16-1, 23-2, & 24-2), N-1054269 (N-1646-38-0), and #N-1060441 (N-1646-39-0), the heatset offset lithographic printing presses are expected to comply with the VOC emission control system requirements, evaporative loss minimization requirements, organic solvent cleaning, storage & disposal requirements, administrative requirements, and recordkeeping requirements listed in this rule. In addition, the use of these RTOs was determined to be approved VOC emission control systems under these referenced projects. The applicant is not proposing any modifications that will change the previous compliance determinations for these permit units. Therefore, continued compliance with all of the applicable requirements of this rule is expected as long as the equipment is properly maintained and operated.

Rule 4801 - Sulfur Compounds

Section 3.1 prohibits emissions of sulfur compounds as SO₂ in excess of 0.2% by volume (2,000 ppmv) averaged over 15 minutes.

From Section VII.B. of this document, the SO₂ emissions from the drying ovens and thermal oxidizer are calculated based on an emission factor of 0.00285 lb-SO_x/MMBtu.

$$\begin{aligned}\text{lb-SO}_2/\text{exhaust vol.} &= (\text{lb-SO}_2/\text{MMBtu}) \div (\text{F factor}) \\ &= (0.00285 \text{ lb-SO}_2/\text{MMBtu}) \div (8,578 \text{ dscf/MMBtu}) \\ &= 3.32 \times 10^{-7} \text{ lb-SO}_2/\text{dscf}\end{aligned}$$

$$\text{Volume SO}_2/\text{exhaust vol.} = nRT/P$$

Where,

$$\begin{aligned}n &= \text{moles SO}_x = (3.32 \times 10^{-7} \text{ lb-SO}_2/\text{dscf}) \div (64 \text{ lb-SO}_2/\text{lb-mol}) \\ &= 5.0 \times 10^{-9} \text{ lb-mol/dscf} \\ R &= \text{Universal gas constant} = 10.73 \text{ psi-ft}^3/\text{lb-mol-}^\circ\text{R} \\ T &= 60^\circ\text{F standard temperature} = 520^\circ \text{R} \\ P &= \text{Standard atmospheric pressure} = 14.7 \text{ psi}\end{aligned}$$

$$\begin{aligned}\text{Volume SO}_2/\text{exhaust vol.} &= [(5.0 \times 10^{-9} \text{ lb-mol/dscf}) \times (10.73 \text{ psi-ft}^3/\text{lb-mol-}^\circ\text{R}) \times \\ &\quad (520 \text{ }^\circ\text{R})] \div 14.7 \text{ psi} \\ &= 1.9 \times 10^{-6} \text{ dscf-SO}_2/\text{dsc- exhaust} \\ &= 1.9 \text{ ppmv} \ll 2,000 \text{ ppmv}\end{aligned}$$

Compliance with this rule is expected.

California Health & Safety Code 42301.6 (School Notice)

This facility will not be operated within 1,000 feet of a K-12 school site boundary. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not required for this project.

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Issue Authority to Construct permits N-1646-6-5, N-1646-16-5, N-1646-23-5, N-1646-25-4, N-1646-36-4, N-1646-37-4, N-1646-38-5, and N-1646-39-5 subject to the permit conditions on the attached draft Authority to Construct permits in Appendix A.

X. Billing Information

The 9.5 MMBtu/hr Megtec Enterprise II and 18.0 MMBtu/hr Reeco Retherm Model E RTOs are equally shared between six permit units (-6, -16, -23, -25, -36, & -38). Therefore, only 1/6 or 4.6 MMBtu/hr of the heat input rating of these shared RTOs will be included in the determination of the fee schedule.

The 5.728 MMBtu/hr Megtec Cleanswitch RTO will be shared between two permit units (N-1646-37, and -39). Therefore, only 1/2 or 2.9 MMBtu/hr of the input rating of the shared RTO will be included in the determination of the fee schedule.

For ATC Permits N-1646-6-5, and -16-5:

Drying Ovens Burner Rating:	1.4 MMBtu/hr
Shared RTOs Burner Rating:	4.6 MMBtu/hr
Total Burner Rating:	6.0 MMBtu/hr

Therefore, the fee schedule will be based on a total heat input rate of **6.0 MMBtu/hr**.

For ATC Permit N-1646-23-5:

Drying Oven Burner Rating:	9.2 MMBtu/hr
Shared RTOs Burner Rating:	4.6 MMBtu/hr
Total Burner Rating:	13.8 MMBtu/hr

Therefore, the fee schedule will be based on a total heat input rate of **13.8 MMBtu/hr**.

For ATC Permit N-1646-25-4:

Drying Oven Burner Rating:	31.5 MMBtu/hr
Shared RTOs Burner Rating:	4.6 MMBtu/hr
Total Burner Rating:	36.1 MMBtu/hr

Therefore, the fee schedule will be based on a total heat input rate of **36.1 MMBtu/hr**.

For ATC Permit N-1646-36-4:

Drying Ovens Burner Rating:	19.8 MMBtu/hr
Shared RTOs Burner Rating:	4.6 MMBtu/hr
Total Burner Rating:	24.4 MMBtu/hr

Therefore, the fee schedule will be based on a total heat input rate of **24.4 MMBtu/hr**.

For ATC Permit N-1646-37-3:

Drying Ovens Burner Rating:	18.4 MMBtu/hr
Shared RTO Burner Rating:	2.9 MMBtu/hr
Total Burner Rating:	21.3 MMBtu/hr

Therefore, the fee schedule will be based on a total heat input rate of **21.3 MMBtu/hr**.

For ATC Permit N-1646-38-5:

Drying Ovens Burner Rating:	19.8 MMBtu/hr
Shared RTOs Burner Rating:	4.6 MMBtu/hr
Total Burner Rating:	24.4 MMBtu/hr

Therefore, the fee schedule will be based on a total heat input rate of **24.4 MMBtu/hr**.

For ATC Permit N-1646-39-5:

Drying Ovens Burner Rating:	4.6 MMBtu/hr
Shared RTOs Burner Rating:	2.9 MMBtu/hr
Total Burner Rating:	7.5 MMBtu/hr

Therefore, the fee schedule will be based on a total heat input rate of **7.5 MMBtu/hr**.

ATC Permit Number	Fee Schedule	Fee Description	Previous Fee Schedule
N-1646-6-5	3020-02-G	Total Heat Input: 6.0 MMBtu/hr	3020-02-F
N-1646-16-5	3020-02-G	Total Heat Input: 6.0 MMBtu/hr	3020-02-F
N-1646-23-5	3020-02-G	Total Heat Input: 13.8 MMBtu/hr	3020-02-G
N-1646-25-4	3020-02-H	Total Heat Input: 36.1 MMBtu/hr	3020-02-H
N-1646-36-4	3020-02-H	Total Heat Input: 24.4 MMBtu/hr	3020-02-H
N-1646-37-3	3020-02-H	Total Heat Input: 21.3 MMBtu/hr	3020-02-H
N-1646-38-5	3020-02-H	Total Heat Input: 24.4 MMBtu/hr	3020-02-H
N-1646-39-5	3020-02-G	Total Heat Input: 7.5 MMBtu/hr	3020-02-G

XI. Appendices

- Appendix A:** Draft Authority to Construct
- Appendix B:** Current Permit to Operate
- Appendix C:** Title V Modification – Compliance Certification Form
- Appendix D:** District BACT Clearinghouse Guideline 4.7.1
- Appendix E:** Quarterly Net Emissions Change (QNEC)
- Appendix F:** Risk Management Review Summary

Appendix A
Draft Authority To Construct

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: N-1646-6-5

LEGAL OWNER OR OPERATOR: WORLDCOLOR (USA) LLC
MAILING ADDRESS: 2201 COOPER AVE
MERCED, CA 95348

LOCATION: 2201 COOPER AVE
MERCED, CA 95348

EQUIPMENT DESCRIPTION:

MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE HARRIS MODEL 1000B HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS #514 SERVED BY TWO TEC NATURAL GAS FIRED DRYING OVENS (TOTAL OF 1.4 MMBTU/HR) ALL VENTED TO THE 9.5 MMBTU/HR MEG TEC ENTERPRISE II OR 18 MMBTU/HR REECO RETHERM MODEL E REGENERATIVE THERMAL OXIDIZERS: DECREASE DAILY VOC LIMIT FROM 69.1 TO 37.5 LB/DAY.

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The drying ovens and regenerative thermal oxidizers shall be fired exclusively on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The drying oven serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the thermal oxidizer at all times except during periods of start-up while the dryer is being air purged. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

N-1646-6-5 : Sep 19 2012 10:49AM -- HEINENG : Joint Inspection NOT Required

6. The collection system for the dryer exhaust and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
7. Each thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
8. Each thermal oxidizer shall be equipped with an operational continuous temperature monitoring and recording instrument. [District , Rules 2201, 2520, 9.3.2, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
9. Each thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The incinerator shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rules 2201, 2520, 9.3.2, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
10. The VOC content of organic solvents used to perform surface preparation or cleanup shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607, 5.8.1] Federally Enforceable Through Title V Permit
11. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607, 5.8.3] Federally Enforceable Through Title V Permit
12. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, solvent shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607, 5.8.4] Federally Enforceable Through Title V Permit
13. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607, 5.8.5] Federally Enforceable Through Title V Permit
14. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607, 5.9] Federally Enforceable Through Title V Permit
15. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607, 5.10] Federally Enforceable Through Title V Permit
16. The Volatile Organic Compound (VOC) content of the printing inks as applied (excluding water and exempt compounds) shall be less than 45% by weight and the VOC content of the fountain solutions shall be less than 15% by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
17. VOC emissions from the printing inks and solvents shall not exceed 37.5 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. NO_x emissions from the drying oven shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

19. CO emissions from the drying oven shall not exceed 25.0 ppmvd @ 19% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Emissions from the drying oven shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
21. NO_x emissions from the regenerative thermal oxidizers shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rule 2201] Federally Enforceable Through Title V Permit
22. CO emissions from the regenerative thermal oxidizers shall not exceed 25.0 ppmvd @ 19% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Emissions from the regenerative thermal oxidizers shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to demonstrate compliance with the VOC destruction efficiency of each regenerative thermal oxidizer shall be conducted on an annual basis. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
26. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit
27. Source testing to determine the destruction efficiency of each regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607, 6.4.7] Federally Enforceable Through Title V Permit
28. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607, 6.1.1] Federally Enforceable Through Title V Permit
29. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 4607, 6.1.3] Federally Enforceable Through Title V Permit
30. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607, 6.1.2.1] Federally Enforceable Through Title V Permit
31. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607, 6.1.2.2] Federally Enforceable Through Title V Permit
32. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607, 6.1.2.3] Federally Enforceable Through Title V Permit
33. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of the regenerative thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
34. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, and 4607] Federally Enforceable Through Title V Permit
35. Each thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2520, 9.3.2 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

36. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit
37. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
38. If the District or EPA determine that a Quality improvement plan is required under 40 CFR part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: N-1646-16-5

LEGAL OWNER OR OPERATOR: WORLDCOLOR (USA) LLC
MAILING ADDRESS: 2201 COOPER AVE
MERCED, CA 95348

LOCATION: 2201 COOPER AVE
MERCED, CA 95348

EQUIPMENT DESCRIPTION:

MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE HARRIS MODEL 1000 HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS #517 SERVED BY TWO TEC NATURAL GAS FIRED DRYING OVENS (TOTAL OF 1.366 MMBTU/HR) ALL VENTED TO THE 9.5 MMBTU/HR MEG TEC ENTERPRISE II OR 18 MMBTU/HR REECO RETHERM MODEL E REGENERATIVE THERMAL OXIDIZERS: DECREASE DAILY VOC LIMIT FROM 69.1 TO 27.0 LB/DAY.

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The drying ovens and regenerative thermal oxidizers shall be fired exclusively on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The drying oven serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the thermal oxidizer at all times except during periods of start-up while the dryer is being air purged. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

DAVID WARNER, Director of Permit Services
N-1646-16-5 : Sep 19 2012 10:49AM - HEINENG : Joint Inspection NOT Required

6. The collection system for the dryer exhaust and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
7. Each thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
8. Each thermal oxidizer shall be equipped with an operational continuous temperature monitoring and recording instrument. [District , Rules 2201, 2520, 9.3.2, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
9. Each thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The incinerator shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rules 2201, 2520, 9.3.2, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
10. The VOC content of organic solvents used to perform surface preparation or cleanup shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607, 5.8.1] Federally Enforceable Through Title V Permit
11. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607, 5.8.3] Federally Enforceable Through Title V Permit
12. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, solvent shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607, 5.8.4] Federally Enforceable Through Title V Permit
13. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607, 5.8.5] Federally Enforceable Through Title V Permit
14. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607, 5.9] Federally Enforceable Through Title V Permit
15. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607, 5.10] Federally Enforceable Through Title V Permit
16. The Volatile Organic Compound (VOC) content of the printing inks as applied (excluding water and exempt compounds) shall be less than 45% by weight and the VOC content of the fountain solutions shall be less than 15% by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
17. VOC emissions from the printing inks and solvents shall not exceed 27 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. NO_x emissions from the drying oven shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

19. CO emissions from the drying oven shall not exceed 25.0 ppmvd @ 19% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Emissions from the drying oven shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
21. NO_x emissions from the regenerative thermal oxidizers shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rule 2201] Federally Enforceable Through Title V Permit
22. CO emissions from the regenerative thermal oxidizers shall not exceed 25.0 ppmvd @ 19% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Emissions from the regenerative thermal oxidizers shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to demonstrate compliance with the VOC destruction efficiency of each regenerative thermal oxidizer shall be conducted on an annual basis. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
26. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit
27. Source testing to determine the destruction efficiency of each regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607, 6.4.7] Federally Enforceable Through Title V Permit
28. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607, 6.1.1] Federally Enforceable Through Title V Permit
29. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 4607, 6.1.3] Federally Enforceable Through Title V Permit
30. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607, 6.1.2.1] Federally Enforceable Through Title V Permit
31. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607, 6.1.2.2] Federally Enforceable Through Title V Permit
32. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607, 6.1.2.3] Federally Enforceable Through Title V Permit
33. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of the regenerative thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
34. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, and 4607] Federally Enforceable Through Title V Permit
35. Each thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2520, 9.3.2 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

36. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit
37. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
38. If the District or EPA determine that a Quality improvement plan is required under 40 CFR part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-1646-23-5

LEGAL OWNER OR OPERATOR: WORLDCOLOR (USA) LLC
MAILING ADDRESS: 2201 COOPER AVE
MERCED, CA 95348

LOCATION: 2201 COOPER AVE
MERCED, CA 95348

EQUIPMENT DESCRIPTION:

MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE HEIDELBERG HARRIS MODEL M-1000B HEATSET OFFSET PRINTING PRESS #519 SERVED BY ONE 9.5 MMBTU/HR THERMAL ELECTRON MODEL A3406E DRYING OVEN VENTED TO THE 9.5 MMBTU/HR MEG TEC ENTERPRISE II OR 18 MMBTU/HR REECO RETHERM MODEL E REGENERATIVE THERMAL OXIDIZERS: DECREASE DAILY VOC LIMIT FROM 69.1 TO 37.5 LB/DAY.

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The drying ovens and regenerative thermal oxidizers shall be fired exclusively on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The drying ovens serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the regenerative thermal oxidizer at all times except during periods of start-up while the dryers are being air purged. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

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DAVID WARNER, Director of Permit Services
N-1646-23-5 : Sep 19 2012 10:49AM - HEINENG : Joint Inspection NOT Required

6. The collection system for the dryer exhausts and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
7. Each regenerative thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
8. Each regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The regenerative thermal oxidizer shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
9. Each regenerative thermal incinerator shall be equipped with a continuous temperature monitoring and recording instrument. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
10. The VOC content of organic solvents used to perform surface preparation or cleanup shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607, 5.8.1] Federally Enforceable Through Title V Permit
11. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607, 5.8.3] Federally Enforceable Through Title V Permit
12. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, solvent shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607, 5.8.4] Federally Enforceable Through Title V Permit
13. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607, 5.8.5] Federally Enforceable Through Title V Permit
14. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607, 5.9] Federally Enforceable Through Title V Permit
15. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607, 5.10] Federally Enforceable Through Title V Permit
16. The Volatile Organic Compound (VOC) content of the printing inks as applied (excluding water and exempt compounds) shall be less than 45% by weight and the VOC content of the fountain solutions shall be less than 15% by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
17. VOC emissions from the printing inks and solvents shall not exceed 37.5 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. NOx emissions from the drying oven shall not exceed 43 ppmvd @ 19% O2 (referenced as NO2). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

19. CO emissions from the drying oven shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
20. Emissions from the drying oven shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
21. NO_x emissions from the regenerative thermal oxidizers shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
22. CO emissions from the regenerative thermal oxidizers shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
23. Emissions from the regenerative thermal oxidizers shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to demonstrate compliance with the VOC destruction efficiency of each regenerative thermal oxidizer shall be conducted on an annual basis. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Source testing to determine the destruction efficiency of each regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607, 6.4.7] Federally Enforceable Through Title V Permit
26. Source testing to measure NO_x and CO emissions from the drying ovens shall be conducted at the exhaust of the associated regenerative thermal oxidizer at least once every 24 months. [District Rules 2201 and 4309, 6.3.2] Federally Enforceable Through Title V Permit
27. All test results for NO_x and CO shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309, 6.3.7] Federally Enforceable Through Title V Permit
28. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
29. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
30. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
31. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit
32. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309, 5.5.6] Federally Enforceable Through Title V Permit
33. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
34. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
35. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

36. If either the NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
37. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
38. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
39. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607, 6.1.1] Federally Enforceable Through Title V Permit
40. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 4607, 6.1.3] Federally Enforceable Through Title V Permit
41. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607, 6.1.2.1] Federally Enforceable Through Title V Permit
42. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607, 6.1.2.2] Federally Enforceable Through Title V Permit
43. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607, 6.1.2.3] Federally Enforceable Through Title V Permit
44. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of each regenerative thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
45. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, and 4607, and 4309] Federally Enforceable Through Title V Permit
46. Each thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
47. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

48. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
49. If the District or EPA determine that a Quality improvement plan is required under 40 CFR part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-1646-25-4

LEGAL OWNER OR OPERATOR: WORLDCOLOR (USA) LLC
MAILING ADDRESS: 2201 COOPER AVE
MERCED, CA 95348

LOCATION: 2201 COOPER AVE
MERCED, CA 95348

EQUIPMENT DESCRIPTION:

MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE (1) KOENIG & BAUER COMMANDER HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #508) AND ONE (1) 31.5 MMBTU/HR (3 BURNERS @ 10.5 MMBTU/HR EACH) NATURAL GAS FIRED MEGTEC MODEL DUAL DRY III 119 DRYING OVEN SERVED BY THE 9.5 MMBTU/HR MEGTEC ENTERPRISE II OR THE 18 MMBTU/HR REECO RETHERM MODEL E NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZERS: DECREASE DAILY VOC LIMIT FROM 74.1 TO 60.0 LB/DAY.

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The drying ovens and regenerative thermal oxidizers shall be fired exclusively on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The drying ovens serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the regenerative thermal oxidizer at all times except during periods of start-up while the dryers are being air purged. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

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DAVID WARNER, Director of Permit Services

N-1646-25-4 : Sep 19 2012 10:49AM - HEINENG : Joint Inspection NOT Required

6. The collection system for the dryer exhausts and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
7. Each regenerative thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
8. Each regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The regenerative thermal oxidizer shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
9. Each regenerative thermal incinerator shall be equipped with a continuous temperature monitoring and recording instrument. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
10. The VOC content of organic solvents used to perform surface preparation or cleanup shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607, 5.8.1] Federally Enforceable Through Title V Permit
11. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607, 5.8.3] Federally Enforceable Through Title V Permit
12. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, solvent shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607, 5.8.4] Federally Enforceable Through Title V Permit
13. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607, 5.8.5] Federally Enforceable Through Title V Permit
14. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607, 5.9] Federally Enforceable Through Title V Permit
15. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607, 5.10] Federally Enforceable Through Title V Permit
16. The Volatile Organic Compound (VOC) content of the printing inks as applied (excluding water and exempt compounds) shall be less than 45% by weight and the VOC content of the fountain solutions shall be less than 15% by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
17. VOC emissions from the printing inks and solvents shall not exceed 60 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Emissions from the drying oven shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

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19. NO_x emissions from the drying oven shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
20. CO emissions from the drying oven shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
21. NO_x emissions from the regenerative thermal oxidizers shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
22. CO emissions from the regenerative thermal oxidizers shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
23. Emissions from the regenerative thermal oxidizers shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Source testing to demonstrate compliance with the VOC destruction efficiency of each regenerative thermal oxidizer shall be conducted on an annual basis. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Source testing to determine the destruction efficiency of each regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607, 6.4.7] Federally Enforceable Through Title V Permit
26. Source testing to measure NO_x and CO emissions from the drying ovens shall be conducted at the exhaust of the associated regenerative thermal oxidizer at least once every 24 months. [District Rules 2201 and 4309, 6.3.2] Federally Enforceable Through Title V Permit
27. All test results for NO_x and CO shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309, 6.3.7] Federally Enforceable Through Title V Permit
28. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
29. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
30. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
31. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit
32. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309, 5.5.6] Federally Enforceable Through Title V Permit
33. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
34. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
35. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

36. If either the NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
37. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
38. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
39. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607, 6.1.1] Federally Enforceable Through Title V Permit
40. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 4607, 6.1.3] Federally Enforceable Through Title V Permit
41. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607, 6.1.2.1] Federally Enforceable Through Title V Permit
42. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607, 6.1.2.2] Federally Enforceable Through Title V Permit
43. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607, 6.1.2.3] Federally Enforceable Through Title V Permit
44. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of each regenerative thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
45. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, and 4607, and 4309] Federally Enforceable Through Title V Permit
46. Each thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
47. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

48. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
49. If the District or EPA determine that a Quality improvement plan is required under 40 CFR part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: N-1646-36-4

LEGAL OWNER OR OPERATOR: WORLDCOLOR (USA) LLC
MAILING ADDRESS: 2201 COOPER AVE
MERCED, CA 95348

LOCATION: 2201 COOPER AVE
MERCED, CA 95348

EQUIPMENT DESCRIPTION:

MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN S 57.5" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #520) AND TWO 9.9 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135 DRYING OVENS (EACH CONSISTS OF AN 8.4 MMBTU/HR MAXON OVENPAK 400 BURNER AND A 1.5 MMBTU/HR MAXON APX BURNER) SERVED BY THE SHARED 9.5 MMBTU/HR MEGTEC ENTERPRISE II OR THE 18 MMBTU/HR REECO RETHERM MODEL E NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZERS: INCREASE DAILY VOC LIMIT FROM 50.0 TO 95.5 LB/DAY.

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The drying ovens and regenerative thermal oxidizers shall be fired exclusively on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The drying ovens serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the regenerative thermal oxidizer at all times except during periods of start-up while the dryers are being air purged. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

N-1646-36-4 : Sep 25 2012 8:46AM - HEINENG : Joint Inspection NOT Required

6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
7. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the drying ovens shall be installed, utilized and maintained. [District Rules 2201] Federally Enforceable Through Title V Permit
8. The collection system for the dryer exhausts and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
9. Each regenerative thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
10. Each regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The regenerative thermal oxidizer shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
11. Each regenerative thermal incinerator shall be equipped with a continuous temperature monitoring and recording instrument. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
12. The VOC content of organic solvents used to perform surface preparation or cleanup shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607, 5.8.1] Federally Enforceable Through Title V Permit
13. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607, 5.8.3] Federally Enforceable Through Title V Permit
14. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, solvent shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607, 5.8.4] Federally Enforceable Through Title V Permit
15. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607, 5.8.5] Federally Enforceable Through Title V Permit
16. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607, 5.9] Federally Enforceable Through Title V Permit
17. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607, 5.10] Federally Enforceable Through Title V Permit

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18. The Volatile Organic Compound (VOC) content of the printing inks as applied (excluding water and exempt compounds) shall be less than 45% by weight and the VOC content of the fountain solutions shall be less than 15% by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
19. VOC emissions from the printing inks and solvents shall not exceed 95.5 pounds in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Emissions from the drying ovens shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
21. NO_x emissions from the drying oven shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
22. CO emissions from the drying oven shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
23. Emissions from the regenerative thermal oxidizers shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
24. NO_x emissions from the regenerative thermal oxidizers shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
25. CO emissions from the regenerative thermal oxidizers shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
26. The total quantity of natural gas used in the drying ovens under this permit unit shall not exceed 18.7 million cubic feet in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Source testing to demonstrate compliance with the VOC destruction efficiency of each regenerative thermal oxidizer shall be conducted on an annual basis. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Source testing to determine the destruction efficiency of each regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607, 6.4.7] Federally Enforceable Through Title V Permit
29. Source testing to measure NO_x and CO emissions from the drying ovens shall be conducted at the exhaust of the associated regenerative thermal oxidizer at least once every 24 months. [District Rules 2201 and 4309, 6.3.2] Federally Enforceable Through Title V Permit
30. All test results for NO_x and CO shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309, 6.3.7] Federally Enforceable Through Title V Permit
31. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
32. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
33. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
34. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit
35. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309, 5.5.6] Federally Enforceable Through Title V Permit

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36. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
37. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
38. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
39. If either the NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
40. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
41. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
42. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607, 6.1.1] Federally Enforceable Through Title V Permit
43. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 4607, 6.1.3] Federally Enforceable Through Title V Permit
44. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607, 6.1.2.1] Federally Enforceable Through Title V Permit
45. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607, 6.1.2.2] Federally Enforceable Through Title V Permit
46. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607, 6.1.2.3] Federally Enforceable Through Title V Permit
47. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of each regenerative thermal oxidizer [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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48. The permittee shall maintain a record of the cumulative annual quantity of natural gas used (in cubic feet) by the drying ovens under this permit. The cumulative total quantity of natural gas used shall be updated monthly. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
49. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, and 4607, and 4309] Federally Enforceable Through Title V Permit
50. The regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
51. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit
52. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
53. If the District or EPA determine that a Quality improvement plan is required under 40 CFR part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-1646-37-3

LEGAL OWNER OR OPERATOR: WORLDCOLOR (USA) LLC
MAILING ADDRESS: 2201 COOPER AVE
MERCED, CA 95348

LOCATION: 2201 COOPER AVE
MERCED, CA 95348

EQUIPMENT DESCRIPTION:

MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN S 64" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #522) WITH ONE 9.4 MMBTU/HR NATURAL GAS MEGTEC MODEL DD III-135-2080 DRYING OVEN #1 AND ONE 9.0 MMBTU/HR NATURAL GAS FIRED MODEL DD III-135-2080 DRYING OVEN #2 EACH VENTED TO THE SHARED 5.728 MMBTU/HR MEGTEC CLEANSWITCH MODEL CS-300-95 NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZER: INCREASE DAILY VOC LIMIT FROM 50.0 TO 95.5 LB/DAY.

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The drying ovens and regenerative thermal oxidizer shall be fired exclusively on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
5. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the drying ovens shall be installed, utilized and maintained. [District Rules 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

DAVID WARNER, Director of Permit Services

N-1646-37-3 : Sep 19 2012 10:49AM - HEINENG : Joint Inspection NOT Required

6. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the regenerative thermal oxidizer shall be installed, utilized and maintained. [District Rules 2201] Federally Enforceable Through Title V Permit
7. The drying ovens serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the regenerative thermal oxidizer at all times except during periods of start-up while the dryers are being air purged. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
9. The collection system for the dryer exhausts and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The regenerative thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The incinerator shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The regenerative thermal oxidizer shall be equipped with an operational continuous temperature monitoring and recording instrument. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The VOC content of the materials shall not exceed the following: inks less than 45% VOC by weight (less water and exempt compounds) and fountain solutions less than 15% by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The VOC content of organic solvents used to perform surface preparation or cleanup shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607] Federally Enforceable Through Title V Permit
15. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607] Federally Enforceable Through Title V Permit
16. Solvents shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607] Federally Enforceable Through Title V Permit
17. The permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607] Federally Enforceable Through Title V Permit
18. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607] Federally Enforceable Through Title V Permit
20. VOC emissions from the printing inks and solvents shall not exceed 95.5 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
21. NO_x emissions from the drying ovens shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂) or 0.0492 lb-NO_x/MMBtu. [District Rules 2201 & 4309] Federally Enforceable Through Title V Permit
22. VOC emission from the drying ovens shall not exceed 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Emissions from the drying ovens shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
24. NO_x emissions from the regenerative thermal oxidizer shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂) or 0.0492 lb-NO_x/MMBtu. [District Rules 2201 & 4309] Federally Enforceable Through Title V Permit
25. CO emissions from the regenerative thermal oxidizer shall not exceed 25.0 ppmvd @ 19% O₂ or 0.174 lb-CO/MMBtu. [District Rules 2201 & 4309] Federally Enforceable Through Title V Permit
26. Emissions from the regenerative thermal oxidizers shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
27. The total quantity of natural gas used in the drying ovens under this permit unit shall not exceed 137,000 cubic feet in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The total quantity of natural gas used in the drying ovens under this permit unit shall not exceed 50.0 million cubic feet in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The total quantity of natural gas used in the regenerative thermal oxidizer shall not exceed 25,000 million cubic feet in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Source testing to demonstrate compliance with the VOC destruction efficiency of the regenerative thermal oxidizer shall be conducted on an annual basis. [District Rule 2201] Federally Enforceable Through Title V Permit
31. Source testing to determine the destruction efficiency of the regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607] Federally Enforceable Through Title V Permit
32. Source testing to measure NO_x and CO emissions from the drying ovens shall be conducted at the exhaust of the associated regenerative thermal oxidizer at least once every 24 months. [District Rules 2201 and 4309] Federally Enforceable Through Title V Permit
33. All test results for NO_x and CO shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309] Federally Enforceable Through Title V Permit
34. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309] Federally Enforceable Through Title V Permit
35. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309] Federally Enforceable Through Title V Permit
36. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309] Federally Enforceable Through Title V Permit
37. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

38. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309] Federally Enforceable Through Title V Permit
39. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
40. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
41. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309] Federally Enforceable Through Title V Permit
42. If either the NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309] Federally Enforceable Through Title V Permit
43. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309] Federally Enforceable Through Title V Permit
44. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4309] Federally Enforceable Through Title V Permit
45. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607] Federally Enforceable Through Title V Permit
46. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 2201 & 4607] Federally Enforceable Through Title V Permit
47. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607] Federally Enforceable Through Title V Permit
48. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607] Federally Enforceable Through Title V Permit
49. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

50. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of each thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
51. The permittee shall maintain a record of the cumulative annual quantity of natural gas used (in cubic feet) by the drying ovens under this permit. The cumulative total quantity of natural gas used shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
52. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4309] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: N-1646-38-5

LEGAL OWNER OR OPERATOR: WORLDCOLOR (USA) LLC
MAILING ADDRESS: 2201 COOPER AVE
MERCED, CA 95348

LOCATION: 2201 COOPER AVE
MERCED, CA 95348

EQUIPMENT DESCRIPTION:

MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN S 64" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #523) WITH ONE 9.4 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135-2080 DRYING OVEN #1 (WITH MAXON LOW NOX BURNERS) AND ONE 9.0 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135-2080 DRYING OVEN #2 (WITH MAXON LOW NOX BURNERS) EACH SERVED BY THE SHARED 9.5 MMBTU/HR MEGTEC ENTERPRISE II OR THE 18 MMBTU/HR REECO RETHERM MODEL E NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZERS: INCREASE DAILY VOC LIMIT FROM 50.0 TO 95.5 LB/DAY.

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The drying ovens and regenerative thermal oxidizers shall be fired exclusively on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
5. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in each drying oven shall be installed, utilized and maintained. [District Rules 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

N-1646-38-5 - Sep 19 2012 10:49AM - HEINENG : Joint Inspection NOT Required

6. The drying ovens serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the thermal oxidizer at all times except during periods of start-up while the dryers are being air purged. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
8. The collection system for the dryer exhausts and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
9. Each thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
10. Each thermal oxidizer shall be equipped with an operational continuous temperature monitoring and recording instrument. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The VOC content of the materials shall not exceed the following: inks less than 45% VOC by weight (less water and exempt compounds) and fountain solutions less than 15% by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The VOC content of organic solvents used to perform surface preparation or solvent cleaning shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607, 5.8.1] Federally Enforceable Through Title V Permit
13. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607, 5.8.3] Federally Enforceable Through Title V Permit
14. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, solvent shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607, 5.8.4] Federally Enforceable Through Title V Permit
15. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607, 5.8.5] Federally Enforceable Through Title V Permit
16. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607, 5.9] Federally Enforceable Through Title V Permit
17. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607, 5.10] Federally Enforceable Through Title V Permit
18. VOC emissions from the printing inks and solvents shall not exceed 95.5 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

19. NO_x emissions from the drying ovens shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
20. CO emissions from the drying ovens shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
21. Emissions from the drying ovens shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
22. NO_x emissions from the regenerative thermal oxidizers shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
23. CO emissions from the regenerative thermal oxidizers shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
24. Emissions from the regenerative thermal oxidizers shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
25. The total quantity of natural gas used in the drying ovens under this permit unit shall not exceed 137,000 cubic feet in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
26. The total quantity of natural gas used in the drying ovens under this permit unit shall not exceed 50.0 million cubic feet in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Source testing to demonstrate compliance with the VOC destruction efficiency of each regenerative thermal oxidizer shall be conducted on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Source testing to determine the destruction efficiency of each regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607, 6.4.7] Federally Enforceable Through Title V Permit
29. Source testing to measure NO_x and CO emissions from the drying ovens shall be conducted at the exhaust of the associated regenerative thermal oxidizer at least once every 24 months. [District Rules 2201 and 4309, 6.3.2] Federally Enforceable Through Title V Permit
30. All test results for NO_x and CO shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309, 6.3.7] Federally Enforceable Through Title V Permit
31. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
32. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
33. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
34. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit
35. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309, 5.5.6] Federally Enforceable Through Title V Permit
36. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 108] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

37. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
38. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
39. If either the NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
40. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
41. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
42. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607, 6.1.1] Federally Enforceable Through Title V Permit
43. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 4607, 6.1.3] Federally Enforceable Through Title V Permit
44. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607, 6.1.2.1] Federally Enforceable Through Title V Permit
45. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607, 6.1.2.2] Federally Enforceable Through Title V Permit
46. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607, 6.1.2.3] Federally Enforceable Through Title V Permit
47. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of each regenerative thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
48. The permittee shall maintain a record of the cumulative annual quantity of natural gas used (in cubic feet) by the drying ovens under this permit. The cumulative total quantity of natural gas used shall be updated monthly. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

49. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, and 4607, and 4309] Federally Enforceable Through Title V Permit
50. The regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The regenerative thermal oxidizer shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
51. The regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
52. The regenerative thermal incinerator shall be equipped with a continuous temperature monitoring and recording instrument. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
53. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit
54. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
55. If the District or EPA determine that a Quality improvement plan is required under 40 CFR part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
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PERMIT NO: N-1646-39-5

LEGAL OWNER OR OPERATOR: WORLDCOLOR (USA) LLC
MAILING ADDRESS: 2201 COOPER AVE
MERCED, CA 95348

LOCATION: 2201 COOPER AVE
MERCED, CA 95348

EQUIPMENT DESCRIPTION:

MODIFICATION OF GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN N 38" WIDE 5-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #524) WITH ONE 4.587 MMBTU/HR NATURAL GAS FIRED THERMO WISCONSIN MODEL APOLLO A3100 DRYING OVEN SERVED BY THE SHARED 5.728 MMBTU/HR MEGTEC CLEANSWITCH MODEL CS-300-95 NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZER: DECREASE DAILY VOC LIMIT FROM 50.1 TO 27.5 LB/DAY.

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The drying oven and thermal oxidizer shall be fired exclusively on natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
5. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the drying oven shall be installed, utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

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6. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the thermal oxidizer shall be installed, utilized and maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The drying ovens serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the thermal oxidizer at all times except during periods of start-up while the dryers are being air purged. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
9. The collection system for the dryer exhausts and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District NSR Rule and 4607, 5.6] Federally Enforceable Through Title V Permit
10. The thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District NSR Rule and 4607, 5.6] Federally Enforceable Through Title V Permit
11. The thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The incinerator shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The thermal oxidizer shall be equipped with an operational continuous temperature monitoring and recording instrument. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The VOC content of organic solvents used to perform surface preparation or cleanup shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607, 5.8.1] Federally Enforceable Through Title V Permit
14. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607, 5.8.3] Federally Enforceable Through Title V Permit
15. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, solvent shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607, 5.8.4] Federally Enforceable Through Title V Permit
16. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607, 5.8.5] Federally Enforceable Through Title V Permit
17. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607, 5.9] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

18. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607, 5.10] Federally Enforceable Through Title V Permit
19. The VOC content of the materials shall not exceed the following: inks less than 45% VOC by weight (less water and exempt compounds) and fountain solutions less than 15% by volume. [District NSR Rule] Federally Enforceable Through Title V Permit
20. VOC emissions from the printing inks and solvents shall not exceed 27.5 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
21. NO_x emissions from the drying oven shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rule 2201] Federally Enforceable Through Title V Permit
22. CO emissions from the drying oven shall not exceed 25.0 ppmvd @ 19% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Emissions from the drying oven shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
24. NO_x emissions from the regenerative thermal oxidizer shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rule 2201] Federally Enforceable Through Title V Permit
25. CO emissions from the regenerative thermal oxidizer shall not exceed 25.0 ppmvd @ 19% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Emissions from the regenerative thermal oxidizer shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
27. The total quantity of natural gas used in the drying oven under this permit unit shall not exceed 11,651 million cubic feet in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The total quantity of natural gas used in the thermal oxidizer shall not exceed 25,000 million cubic feet in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
29. Source testing to demonstrate compliance with the VOC destruction efficiency of each regenerative thermal oxidizer shall be conducted on an annual basis. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit
32. Source testing to determine the destruction efficiency of each regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607, 6.4.7] Federally Enforceable Through Title V Permit
33. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607, 6.1.1] Federally Enforceable Through Title V Permit
34. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 4607, 6.1.3] Federally Enforceable Through Title V Permit
35. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607, 6.1.2.1] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

36. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607, 6.1.2.2] Federally Enforceable Through Title V Permit
37. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607, 6.1.2.3] Federally Enforceable Through Title V Permit
38. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of the regenerative thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
39. The permittee shall maintain a record of the cumulative annual quantity of natural gas used (in cubic feet) by the drying oven and thermal oxidizer under this permit. The cumulative total quantity of natural gas used shall be updated monthly. [District NSR Rule] Federally Enforceable Through Title V Permit
40. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, and 4607] Federally Enforceable Through Title V Permit
41. The regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The regenerative thermal oxidizer shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
42. The regenerative thermal incinerator shall be equipped with a continuous temperature monitoring and recording instrument. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
43. The regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
44. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit
45. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
46. If the District or EPA determine that a Quality improvement plan is required under 40 CFR part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

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Appendix B
Current Permit to Operate



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT



HEALTHY AIR LIVING™

Permit to Operate

FACILITY: N-1646

EXPIRATION DATE: 09/30/2013

LEGAL OWNER OR OPERATOR: WORLDCOLOR (USA) LLC
MAILING ADDRESS: 2201 COOPER AVE
MERCED, CA 95348

FACILITY LOCATION: 2201 COOPER AVE
MERCED, CA 95348

FACILITY DESCRIPTION: COMMERCIAL PRINTING

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin
Executive Director / APCO

David Warner
Director of Permit Services

San Joaquin Valley Air Pollution Control District

FACILITY: N-1646-0-2

EXPIRATION DATE: 09/30/2013

FACILITY-WIDE REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Total Volatile Organic Compound (VOC) emissions from the entire stationary source shall not exceed 235.6 pounds in any single day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Total NOx emissions from the entire stationary source shall not exceed 150 pounds during any one day. A daily log of fuel usage for each dryer and for the incinerator shall be maintained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1 and Merced County Rule 109] Federally Enforceable Through Title V Permit
6. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0 and Merced County Rule 109] Federally Enforceable Through Title V Permit
7. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
8. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
9. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
10. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
11. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: WORLDCOLOR (USA) LLC
Location: 2201 COOPER AVE, MERCED, CA 95348
N-1646-0-2 : Sep 19 2012 9:23AM - HEINENG

12. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
13. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
15. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
16. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
17. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
18. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
19. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
20. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
21. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
22. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
23. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
24. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

25. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
26. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (2/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and Merced County Rule 401] Federally Enforceable Through Title V Permit
27. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating within the District with a VOC content in excess of the corresponding limit specified in the Table of Standards 1 (effective through 12/31/2010) or the Table of Standards 2 (effective on and after 1/1/2011) of District Rule 4601 (12/17/09). [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
28. All VOC-containing materials for architectural coatings subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
29. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
30. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
31. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
32. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR 82, Subpart B. [40 CFR 82, Subpart B] Federally Enforceable Through Title V Permit
33. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
34. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
35. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
36. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
37. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

38. Any unpaved vehicle/equipment area that anticipates more than 75 vehicle trips per day shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 100 vehicle trips per day shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/04) or Rule 8011 (8/19/04). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
39. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
40. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
41. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
42. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
43. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Merced County Rule 401 and Merced County Rule 109. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
44. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601, sections 5.1, 5.2, 5.3 and 5.8 (12/17/09); 8021 (8/19/04); 8031 (8/19/04); 8041 (8/19/04); 8051 (8/19/04); 8061 (8/19/04); and 8071 (9/16/04). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
45. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin August 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1646-2-3

EXPIRATION DATE: 09/30/2013

EQUIPMENT DESCRIPTION:

PAPER SCRAP HANDLING SYSTEM SERVING THE PAPER SLITTERS ON PRINTING PRESS #524 & #531, INSERTER BINDERIES #733, #734, #735, #737, #738 AND #739 AND THE BINDERIES #760, #761, #762, #763, #764 AND #765. THE PAPER SCRAP FROM ALL THESE UNITS IS CONVEYED PNEUMATICALLY TO FIVE MAREN BALERS (A, B, C, D AND E) EACH SERVED BY ITS OWN SOCK FILTER SYSTEM

PERMIT UNIT REQUIREMENTS

1. All ducting and control equipment shall be in good working order to prevent fugitive particulate emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. A spare set of sock filters shall be maintained on the premises at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Visible emissions from each sock filter serving the baler shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Material removed from sock filters shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
5. PM10 emissions from each sock filter system exhaust shall not exceed 0.00234 pounds per ton of total scrap material collected by the Maren balers. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The combined amount of scrap material collected by the Maren balers shall not exceed 43 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Each sock filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes, or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Records of dust collector system maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. The permittee shall maintain daily records of the amount of scrap collected by the Maren balers (tons/day). [District Rule 2201] Federally Enforceable Through Title V Permit
10. All records shall be retained for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1646-6-3

EXPIRATION DATE: 09/30/2013

EQUIPMENT DESCRIPTION:

GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE HARRIS MODEL 1000B HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS #514 SERVED BY TWO TEC NATURAL GAS FIRED DRYING OVENS (TOTAL OF 1.366 MMBTU/HR) ALL VENTED TO THE 9.5 MMBTU/HR MEG TEC ENTERPRISE II OR 18 MMBTU/HR REECO RETHERM MODEL E REGENERATIVE THERMAL OXIDIZERS

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The drying ovens and regenerative thermal oxidizers shall be fired exclusively on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The drying oven serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the thermal oxidizer at all times except during periods of start-up while the dryer is being air purged. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The collection system for the dryer exhaust and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District NSR Rule and 4607, 5.6] Federally Enforceable Through Title V Permit
5. Each thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District NSR Rule and 4607, 5.6] Federally Enforceable Through Title V Permit
6. Each thermal oxidizer shall be equipped with an operational continuous temperature monitoring and recording instrument. [District NSR Rule, 2520, 9.3.2, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
7. Each thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The incinerator shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District NSR Rule, 2520, 9.3.2, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
8. The VOC content of organic solvents used to perform surface preparation or cleanup shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607, 5.8.1] Federally Enforceable Through Title V Permit
9. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607, 5.8.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, solvent shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607, 5.8.4] Federally Enforceable Through Title V Permit
11. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607, 5.8.5] Federally Enforceable Through Title V Permit
12. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607, 5.9] Federally Enforceable Through Title V Permit
13. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607, 5.10] Federally Enforceable Through Title V Permit
14. The Volatile Organic Compound (VOC) content of the printing inks as applied (excluding water and exempt compounds) shall be less than 45% by weight and the VOC content of the fountain solutions shall be less than 15% by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
15. VOC emissions from the printing inks and solvents shall not exceed 69.1 pounds in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
16. NO_x emissions from the drying oven shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rule 2201] Federally Enforceable Through Title V Permit
17. CO emissions from the drying oven shall not exceed 25.0 ppmvd @ 19% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Emissions from the drying oven shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
19. NO_x emissions from the regenerative thermal oxidizers shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rule 2201] Federally Enforceable Through Title V Permit
20. CO emissions from the regenerative thermal oxidizers shall not exceed 25.0 ppmvd @ 19% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emissions from the regenerative thermal oxidizers shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Source testing to demonstrate compliance with the VOC destruction efficiency of each regenerative thermal oxidizer shall be conducted on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
24. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

25. Source testing to determine the destruction efficiency of each regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607, 6.4.7] Federally Enforceable Through Title V Permit
26. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607, 6.1.1] Federally Enforceable Through Title V Permit
27. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 4607, 6.1.3] Federally Enforceable Through Title V Permit
28. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607, 6.1.2.1] Federally Enforceable Through Title V Permit
29. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607, 6.1.2.2] Federally Enforceable Through Title V Permit
30. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607, 6.1.2.3] Federally Enforceable Through Title V Permit
31. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of the regenerative thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, and 4607] Federally Enforceable Through Title V Permit
33. Each thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2520, 9.3.2 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
34. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit
35. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
36. If the District or EPA determine that a Quality improvement plan is required under 40 CFR part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1646-16-3

EXPIRATION DATE: 09/30/2013

EQUIPMENT DESCRIPTION:

GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE HARRIS MODEL 1000 HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS #517 SERVED BY TWO TEC NATURAL GAS FIRED DRYING OVENS (TOTAL OF 1.366 MMBTU/HR) ALL VENTED TO THE 9.5 MMBTU/HR MEG TEC ENTERPRISE II OR 18 MMBTU/HR REECO RETHERM MODEL E REGENERATIVE THERMAL OXIDIZERS

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The drying ovens and regenerative thermal oxidizers shall be fired exclusively on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The drying oven serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the thermal oxidizer at all times except during periods of start-up while the dryer is being air purged. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The collection system for the dryer exhaust and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District NSR Rule and 4607, 5.6] Federally Enforceable Through Title V Permit
5. Each thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District NSR Rule and 4607, 5.6] Federally Enforceable Through Title V Permit
6. Each thermal oxidizer shall be equipped with an operational continuous temperature monitoring and recording instrument. [District NSR Rule, 2520, 9.3.2, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
7. Each thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The incinerator shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District NSR Rule, 2520, 9.3.2, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
8. The VOC content of organic solvents used to perform surface preparation or cleanup shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607, 5.8.1] Federally Enforceable Through Title V Permit
9. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607, 5.8.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

10. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, solvent shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607, 5.8.4] Federally Enforceable Through Title V Permit
11. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607, 5.8.5] Federally Enforceable Through Title V Permit
12. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607, 5.9] Federally Enforceable Through Title V Permit
13. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607, 5.10] Federally Enforceable Through Title V Permit
14. The Volatile Organic Compound (VOC) content of the printing inks as applied (excluding water and exempt compounds) shall be less than 45% by weight and the VOC content of the fountain solutions shall be less than 15% by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
15. VOC emissions from the printing inks and solvents shall not exceed 69.1 pounds in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
16. NO_x emissions from the drying oven shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rule 2201] Federally Enforceable Through Title V Permit
17. CO emissions from the drying oven shall not exceed 25.0 ppmvd @ 19% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Emissions from the drying oven shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
19. NO_x emissions from the regenerative thermal oxidizers shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rule 2201] Federally Enforceable Through Title V Permit
20. CO emissions from the regenerative thermal oxidizers shall not exceed 25.0 ppmvd @ 19% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emissions from the regenerative thermal oxidizers shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Source testing to demonstrate compliance with the VOC destruction efficiency of each regenerative thermal oxidizer shall be conducted on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
24. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

25. Source testing to determine the destruction efficiency of each regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607, 6.4.7] Federally Enforceable Through Title V Permit
26. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607, 6.1.1] Federally Enforceable Through Title V Permit
27. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 4607, 6.1.3] Federally Enforceable Through Title V Permit
28. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607, 6.1.2.1] Federally Enforceable Through Title V Permit
29. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607, 6.1.2.2] Federally Enforceable Through Title V Permit
30. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607, 6.1.2.3] Federally Enforceable Through Title V Permit
31. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of the regenerative thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, and 4607] Federally Enforceable Through Title V Permit
33. Each thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2520, 9.3.2 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
34. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit
35. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
36. If the District or EPA determine that a Quality improvement plan is required under 40 CFR part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1646-19-4

EXPIRATION DATE: 09/30/2013

EQUIPMENT DESCRIPTION:

PAPER SLITTING SYSTEM SERVING PRINTING PRESSES #507 AND #520, AND TWO HARRIS MODEL RG321 BINDER SAWS (BINDERS #713 AND #714). THE PAPER SCRAP FROM THESE UNITS IS CONVEYED PNEUMATICALLY TO A BALE MASTER BALER SERVED BY A MAC MODEL 44RPT 280 BAGHOUSE SYSTEM

PERMIT UNIT REQUIREMENTS

1. All ducting and control equipment shall be in good working order to prevent fugitive particulate emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The baghouse exhaust fan(s) shall be in operation during paper scrap conveying operation. [District Rule 2201] Federally Enforceable Through Title V Permit
3. PM10 emissions from the Mac baghouse exhaust shall not exceed 0.000234 pounds per ton of total scrap material collected by the Bale Master baler. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The amount of scrap material collected by the Bale Master baler shall not exceed 2.4 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The baghouse shall be equipped with a pressure differential gauge to indicate the pressure drop across the bags. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The baghouse shall operate at all times with a minimum differential pressure of 1 inches water column and a maximum differential pressure of 6 inches water column. [District Rule 2201]
7. Replacement bags numbering at least 10% of the total number of bags in the largest baghouse using each type of bag shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Material removed from baghouse shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The baghouse cleaning frequency and duration shall be adjusted to optimize the control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
10. There shall be no visible emissions from the dust control system. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Visible emissions from the baghouse shall be evaluated using EPA method 22 for a period of at least 6 minutes at least once during each day that the baghouse is operated. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Dust collection system shall be completely inspected annually while in operation for evidence of particulate matter leaks and repaired as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Dust collector filters shall be thoroughly inspected annually for tears, scuffs, abrasions, holes, or any evidence of particulate matter leaks and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

14. Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. The permittee shall maintain on a daily basis, records of visible emissions from the baghouse, the amount of scrap collected in tons/day, and pressure differential gauge reading. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. All records shall be retained for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1646-23-3

EXPIRATION DATE: 09/30/2013

EQUIPMENT DESCRIPTION:

GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE HEIDELBERG HARRIS MODEL M-1000B HEATSET OFFSET PRINTING PRESS #519 SERVED BY ONE THERMAL ELECTRON MODEL A3406E DRYING OVEN VENTED TO THE 9.5 MMBTU/HR MEG TEC ENTERPRISE II OR 18 MMBTU/HR REECO RETHERM MODEL E REGENERATIVE THERMAL OXIDIZERS

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The drying ovens and regenerative thermal oxidizers shall be fired exclusively on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The drying ovens serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the regenerative thermal oxidizer at all times except during periods of start-up while the dryers are being air purged. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The collection system for the dryer exhausts and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
5. Each regenerative thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
6. Each regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The regenerative thermal oxidizer shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
7. Each regenerative thermal incinerator shall be equipped with a continuous temperature monitoring and recording instrument. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
8. The VOC content of organic solvents used to perform surface preparation or cleanup shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607, 5.8.1] Federally Enforceable Through Title V Permit
9. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607, 5.8.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, solvent shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607, 5.8.4] Federally Enforceable Through Title V Permit
11. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607, 5.8.5] Federally Enforceable Through Title V Permit
12. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607, 5.9] Federally Enforceable Through Title V Permit
13. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607, 5.10] Federally Enforceable Through Title V Permit
14. VOC emissions from the printing inks and solvents shall not exceed 69.1 pounds in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
15. NO_x emissions from the drying oven shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
16. CO emissions from the drying oven shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
17. Emissions from the drying oven shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
18. NO_x emissions from the regenerative thermal oxidizers shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
19. CO emissions from the regenerative thermal oxidizers shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
20. Emissions from the regenerative thermal oxidizers shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
21. Source testing to demonstrate compliance with the VOC destruction efficiency of each regenerative thermal oxidizer shall be conducted on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Source testing to determine the destruction efficiency of each regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607, 6.4.7] Federally Enforceable Through Title V Permit
23. Source testing to measure NO_x and CO emissions from the drying ovens shall be conducted at the exhaust of the associated regenerative thermal oxidizer at least once every 24 months thereafter. [District Rules 2201 and 4309, 6.3.2] Federally Enforceable Through Title V Permit
24. All test results for NO_x and CO shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309, 6.3.7] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

25. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
26. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
27. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
28. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit
29. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309, 5.5.6] Federally Enforceable Through Title V Permit
30. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
32. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
33. If either the NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
34. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
35. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

36. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607, 6.1.1] Federally Enforceable Through Title V Permit
37. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 4607, 6.1.3] Federally Enforceable Through Title V Permit
38. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607, 6.1.2.1] Federally Enforceable Through Title V Permit
39. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607, 6.1.2.2] Federally Enforceable Through Title V Permit
40. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607, 6.1.2.3] Federally Enforceable Through Title V Permit
41. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of each regenerative thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
42. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, and 4607, and 4309] Federally Enforceable Through Title V Permit
43. Each thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
44. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit
45. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
46. If the District or EPA determine that a Quality improvement plan is required under 40 CFR part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1646-25-3

EXPIRATION DATE: 09/30/2013

EQUIPMENT DESCRIPTION:

GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE (1) KOENIG & BAUER COMMANDER HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #508) AND ONE (1) 31.5 MMBTU/HR (3 BURNERS @ 10.5 MMBTU/HR EACH) NATURAL GAS FIRED MEGTEC MODEL DUAL DRY III 119 DRYING OVEN SERVED BY THE 9.5 MMBTU/HR MEGTEC ENTERPRISE II OR THE 18 MMBTU/HR REECO RETHERM MODEL E NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZERS

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The drying ovens and regenerative thermal oxidizers shall be fired exclusively on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The drying ovens serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the regenerative thermal oxidizer at all times except during periods of start-up while the dryers are being air purged. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The collection system for the dryer exhausts and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
5. Each regenerative thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
6. Each regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The regenerative thermal oxidizer shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
7. Each regenerative thermal incinerator shall be equipped with a continuous temperature monitoring and recording instrument. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
8. The VOC content of organic solvents used to perform surface preparation or cleanup shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607, 5.8.1] Federally Enforceable Through Title V Permit
9. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607, 5.8.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

10. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, solvent shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607, 5.8.4] Federally Enforceable Through Title V Permit
11. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607, 5.8.5] Federally Enforceable Through Title V Permit
12. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607, 5.9] Federally Enforceable Through Title V Permit
13. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607, 5.10] Federally Enforceable Through Title V Permit
14. The Volatile Organic Compound (VOC) content of the printing inks as applied (excluding water and exempt compounds) shall be less than 45% by weight and the VOC content of the fountain solutions shall be less than 15% by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
15. VOC emissions from the printing inks and solvents shall not exceed 74.1 pounds in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
16. NO_x emissions from the drying oven shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
17. CO emissions from the drying oven shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
18. PM₁₀ emissions from the drying oven shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
19. SO_x emissions from the drying oven shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
20. VOC emission from the drying oven shall not exceed 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
21. NO_x emissions from the regenerative thermal oxidizers shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
22. CO emissions from the regenerative thermal oxidizers shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
23. PM₁₀ emissions from the regenerative thermal oxidizers shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
24. SO_x emissions from the regenerative thermal oxidizers shall not exceed 0.00285 lbs/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
25. VOC emissions from the regenerative thermal oxidizer shall not exceed 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

26. Source testing to demonstrate compliance with the VOC destruction efficiency of each regenerative thermal oxidizer shall be conducted on an annual basis. [District Rule 2201] Federally Enforceable Through Title V Permit
27. Source testing to determine the destruction efficiency of each regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607, 6.4.7] Federally Enforceable Through Title V Permit
28. Source testing to measure NO_x and CO emissions from the drying ovens shall be conducted at the exhaust of the associated regenerative thermal oxidizer at least once every 24 months. [District Rules 2201 and 4309, 6.3.2] Federally Enforceable Through Title V Permit
29. All test results for NO_x and CO shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309, 6.3.7] Federally Enforceable Through Title V Permit
30. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
31. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
32. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
33. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309, 5.5.6] Federally Enforceable Through Title V Permit
35. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
36. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
37. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
38. If either the NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

39. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
40. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
41. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607, 6.1.1] Federally Enforceable Through Title V Permit
42. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 4607, 6.1.3] Federally Enforceable Through Title V Permit
43. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607, 6.1.2.1] Federally Enforceable Through Title V Permit
44. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607, 6.1.2.2] Federally Enforceable Through Title V Permit
45. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607, 6.1.2.3] Federally Enforceable Through Title V Permit
46. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of each regenerative thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
47. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, and 4607, and 4309] Federally Enforceable Through Title V Permit
48. Each thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
49. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit
50. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
51. If the District or EPA determine that a Quality improvement plan is required under 40 CFR part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1646-34-1

EXPIRATION DATE: 09/30/2013

EQUIPMENT DESCRIPTION:

235 HP DETROIT DIESEL MODEL 1044-7312 EMERGENCY DIESEL FIRED IC ENGINE POWERING A FIRE PUMP

PERMIT UNIT REQUIREMENTS

1. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
2. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
7. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115]
8. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1646-36-3

EXPIRATION DATE: 09/30/2013

EQUIPMENT DESCRIPTION:

GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMANS 57.5" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #520) AND TWO 9.9 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135 DRYING OVENS (EACH CONSISTS OF AN 8.4 MMBTU/HR MAXON OVENPAK 400 BURNER AND A 1.5 MMBTU/HR MAXON APX BURNER) SERVED BY THE SHARED 9.5 MMBTU/HR MEGTEC ENTERPRISE II OR THE 18 MMBTU/HR REECO RETHERM MODEL E NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZERS

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The drying ovens and regenerative thermal oxidizers shall be fired exclusively on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The drying ovens serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the regenerative thermal oxidizer at all times except during periods of start-up while the dryers are being air purged. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
5. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the drying ovens shall be installed, utilized and maintained. [District Rules 2201] Federally Enforceable Through Title V Permit
6. The collection system for the dryer exhausts and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
7. Each regenerative thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
8. Each regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The regenerative thermal oxidizer shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
9. Each regenerative thermal incinerator shall be equipped with a continuous temperature monitoring and recording instrument. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
10. The VOC content of organic solvents used to perform surface preparation or cleanup shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607, 5.8.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607, 5.8.3] Federally Enforceable Through Title V Permit
12. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, solvent shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607, 5.8.4] Federally Enforceable Through Title V Permit
13. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607, 5.8.5] Federally Enforceable Through Title V Permit
14. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607, 5.9] Federally Enforceable Through Title V Permit
15. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607, 5.10] Federally Enforceable Through Title V Permit
16. The Volatile Organic Compound (VOC) content of the printing inks as applied (excluding water and exempt compounds) shall be less than 45% by weight and the VOC content of the fountain solutions shall be less than 15% by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
17. VOC emissions from the printing inks and solvents shall not exceed 50.0 pounds in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
18. NO_x emissions from the drying oven shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
19. CO emissions from the drying oven shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
20. PM₁₀ emissions from the drying oven shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
21. SO_x emissions from the drying oven shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
22. VOC emission from the drying oven shall not exceed 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
23. NO_x emissions from the regenerative thermal oxidizers shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

24. CO emissions from the regenerative thermal oxidizers shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
25. PM₁₀ emissions from the regenerative thermal oxidizers shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
26. SO_x emissions from the regenerative thermal oxidizers shall not exceed 0.00285 lbs/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
27. VOC emissions from the regenerative thermal oxidizer shall not exceed 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The total quantity of natural gas used in the drying ovens under this permit unit shall not exceed 18.7 million cubic feet in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
29. Source testing to demonstrate compliance with the VOC destruction efficiency of each regenerative thermal oxidizer shall be conducted on an annual basis. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Source testing to determine the destruction efficiency of each regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607, 6.4.7] Federally Enforceable Through Title V Permit
31. Source testing to measure NO_x and CO emissions from the drying ovens shall be conducted at the exhaust of the associated regenerative thermal oxidizer at least once every 24 months. [District Rules 2201 and 4309, 6.3.2] Federally Enforceable Through Title V Permit
32. All test results for NO_x and CO shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309, 6.3.7] Federally Enforceable Through Title V Permit
33. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
34. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
35. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
36. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit
37. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309, 5.5.6] Federally Enforceable Through Title V Permit
38. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
39. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
40. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

41. If either the NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
42. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
43. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
44. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607, 6.1.1] Federally Enforceable Through Title V Permit
45. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 4607, 6.1.3] Federally Enforceable Through Title V Permit
46. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607, 6.1.2.1] Federally Enforceable Through Title V Permit
47. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607, 6.1.2.2] Federally Enforceable Through Title V Permit
48. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607, 6.1.2.3] Federally Enforceable Through Title V Permit
49. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of each regenerative thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
50. The permittee shall maintain a record of the cumulative annual quantity of natural gas used (in cubic feet) by the drying ovens under this permit. The cumulative total quantity of natural gas used shall be updated monthly. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
51. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, and 4607, and 4309] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

52. The regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
53. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit
54. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
55. If the District or EPA determine that a Quality improvement plan is required under 40 CFR part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1646-37-2

EXPIRATION DATE: 09/30/2013

EQUIPMENT DESCRIPTION:

GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN S 64" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #522) WITH ONE 9.4 MMBTU/HR NATURAL GAS MEGTEC MODEL DD III-135-2080 DRYING OVEN #1 AND ONE 9.0 MMBTU/HR NATURAL GAS FIRED MODEL DD III-135-2080 DRYING OVEN #2 EACH VENTED TO THE SHARED 5.728 MMBTU/HR MEGTEC CLEANSWITCH MODEL CS-300-95 NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZER.

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The drying ovens and regenerative thermal oxidizer shall be fired exclusively on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
3. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the drying ovens shall be installed, utilized and maintained. [District Rules 2201] Federally Enforceable Through Title V Permit
4. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the regenerative thermal oxidizer shall be installed, utilized and maintained. [District Rules 2201] Federally Enforceable Through Title V Permit
5. The drying ovens serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the regenerative thermal oxidizer at all times except during periods of start-up while the dryers are being air purged. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
7. The collection system for the dryer exhausts and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The regenerative thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The incinerator shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The regenerative thermal oxidizer shall be equipped with an operational continuous temperature monitoring and recording instrument. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The VOC content of the materials shall not exceed the following: inks less than 45% VOC by weight (less water and exempt compounds) and fountain solutions less than 15% by volume. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. The VOC content of organic solvents used to perform surface preparation or cleanup shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607] Federally Enforceable Through Title V Permit
13. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607] Federally Enforceable Through Title V Permit
14. Solvents shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607] Federally Enforceable Through Title V Permit
15. The permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607] Federally Enforceable Through Title V Permit
16. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607] Federally Enforceable Through Title V Permit
17. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607] Federally Enforceable Through Title V Permit
18. VOC emissions from the printing inks and solvents shall not exceed 50.0 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
19. NO_x emissions from the drying ovens shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂) or 0.0492 lb-NO_x/MMBtu. [District Rules 2201 & 4309] Federally Enforceable Through Title V Permit
20. CO emissions from the drying ovens shall not exceed 25.0 ppmvd @ 19% O₂ or 0.174 lb-CO/MMBtu. [District Rules 2201 & 4309] Federally Enforceable Through Title V Permit
21. PM₁₀ emissions from the drying ovens shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
22. SO_x emissions from the drying ovens shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
23. VOC emission from the drying ovens shall not exceed 0.0055 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
24. NO_x emissions from the regenerative thermal oxidizer shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂) or 0.0492 lb-NO_x/MMBtu. [District Rules 2201 & 4309] Federally Enforceable Through Title V Permit
25. CO emissions from the regenerative thermal oxidizer shall not exceed 25.0 ppmvd @ 19% O₂ or 0.174 lb-CO/MMBtu. [District Rules 2201 & 4309] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

26. PM10 emissions from the regenerative thermal oxidizer shall not exceed 0.01 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
27. SOx emissions from the regenerative thermal oxidizer shall not exceed 0.00285 lbs/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
28. VOC emissions from the regenerative thermal oxidizer shall not exceed 0.02 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
29. The total quantity of natural gas used in the drying ovens under this permit unit shall not exceed 137,000 cubic feet in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
30. The total quantity of natural gas used in the drying ovens under this permit unit shall not exceed 50.0 million cubic feet in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
31. The total quantity of natural gas used in the regenerative thermal oxidizer shall not exceed 25,000 million cubic feet in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
32. Source testing to demonstrate compliance with the VOC destruction efficiency of the regenerative thermal oxidizer shall be conducted on an annual basis. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Source testing to determine the destruction efficiency of the regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607] Federally Enforceable Through Title V Permit
34. Source testing to measure NOx and CO emissions from the drying ovens shall be conducted at the exhaust of the associated regenerative thermal oxidizer at least once every 24 months. [District Rules 2201 and 4309] Federally Enforceable Through Title V Permit
35. All test results for NOx and CO shall be reported in ppmv @ 19% O2 (or no correction if measured above 19% O2), corrected to dry stack conditions. [District Rule 4309] Federally Enforceable Through Title V Permit
36. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309] Federally Enforceable Through Title V Permit
37. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309] Federally Enforceable Through Title V Permit
38. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309] Federally Enforceable Through Title V Permit
39. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309] Federally Enforceable Through Title V Permit
40. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309] Federally Enforceable Through Title V Permit
41. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
42. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

43. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309] Federally Enforceable Through Title V Permit
44. If either the NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309] Federally Enforceable Through Title V Permit
45. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309] Federally Enforceable Through Title V Permit
46. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4309] Federally Enforceable Through Title V Permit
47. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607] Federally Enforceable Through Title V Permit
48. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 2201 & 4607] Federally Enforceable Through Title V Permit
49. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607] Federally Enforceable Through Title V Permit
50. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607] Federally Enforceable Through Title V Permit
51. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607] Federally Enforceable Through Title V Permit
52. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of each thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
53. The permittee shall maintain a record of the cumulative annual quantity of natural gas used (in cubic feet) by the drying ovens under this permit. The cumulative total quantity of natural gas used shall be updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

54. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4309] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1646-38-4

EXPIRATION DATE: 09/30/2013

EQUIPMENT DESCRIPTION:

GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN S 64" WIDE 8-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #523) WITH ONE 9.4 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135-2080 DRYING OVEN #1 (WITH MAXON LOW NOX BURNERS) AND ONE 9.0 MMBTU/HR NATURAL GAS FIRED MEGTEC MODEL DD III-135-2080 DRYING OVEN #2 (WITH MAXON LOW NOX BURNERS) EACH SERVED BY THE SHARED 9.5 MMBTU/HR MEGTEC ENTERPRISE II OR THE 18 MMBTU/HR REECO RETHERM MODEL E NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZERS

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The drying ovens and regenerative thermal oxidizers shall be fired exclusively on natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
3. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in each drying oven shall be installed, utilized and maintained. [District Rules 2201] Federally Enforceable Through Title V Permit
4. The drying ovens serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the thermal oxidizer at all times except during periods of start-up while the dryers are being air purged. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
6. The collection system for the dryer exhausts and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
7. Each thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District Rules 2201 and 4607, 5.6] Federally Enforceable Through Title V Permit
8. Each thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The incinerator shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Each thermal oxidizer shall be equipped with an operational continuous temperature monitoring and recording instrument. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The VOC content of the materials shall not exceed the following: inks less than 45% VOC by weight (less water and exempt compounds) and fountain solutions less than 15% by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The VOC content of organic solvents used to perform surface preparation or solvent cleaning shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607, 5.8.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607, 5.8.3] Federally Enforceable Through Title V Permit
13. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, solvent shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607, 5.8.4] Federally Enforceable Through Title V Permit
14. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607, 5.8.5] Federally Enforceable Through Title V Permit
15. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607, 5.9] Federally Enforceable Through Title V Permit
16. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607, 5.10] Federally Enforceable Through Title V Permit
17. VOC emissions from the printing inks and solvents shall not exceed 50.0 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
18. NO_x emissions from the drying ovens shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
19. CO emissions from the drying ovens shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
20. Emissions from the drying ovens shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
21. NO_x emissions from the regenerative thermal oxidizers shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
22. CO emissions from the regenerative thermal oxidizers shall not exceed 25.0 ppmvd @ 19% O₂. [District Rules 2201 & 4309, 5.2] Federally Enforceable Through Title V Permit
23. Emissions from the regenerative thermal oxidizers shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
24. The total quantity of natural gas used in the drying ovens under this permit unit shall not exceed 137,000 cubic feet in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

25. The total quantity of natural gas used in the drying ovens under this permit unit shall not exceed 50.0 million cubic feet in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Source testing to demonstrate compliance with the VOC destruction efficiency of each regenerative thermal oxidizer shall be conducted on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Source testing to determine the destruction efficiency of each regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607, 6.4.7] Federally Enforceable Through Title V Permit
28. Source testing to measure NO_x and CO emissions from the drying ovens shall be conducted at the exhaust of the associated regenerative thermal oxidizer at least once every 24 months. [District Rules 2201 and 4309, 6.3.2] Federally Enforceable Through Title V Permit
29. All test results for NO_x and CO shall be reported in ppmv @ 19% O₂ (or no correction if measured above 19% O₂), corrected to dry stack conditions. [District Rule 4309, 6.3.7] Federally Enforceable Through Title V Permit
30. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
31. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
32. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4309, 6.2] Federally Enforceable Through Title V Permit
33. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4309. [District Rule 4309, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit
34. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rule 4309, 5.5.6] Federally Enforceable Through Title V Permit
35. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
36. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
37. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
38. If either the NO_x or CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

39. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
40. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 19% O₂ (or no correction if measured above 19% O₂), (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range [District Rule 4309, 5.4] Federally Enforceable Through Title V Permit
41. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607, 6.1.1] Federally Enforceable Through Title V Permit
42. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 4607, 6.1.3] Federally Enforceable Through Title V Permit
43. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607, 6.1.2.1] Federally Enforceable Through Title V Permit
44. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607, 6.1.2.2] Federally Enforceable Through Title V Permit
45. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607, 6.1.2.3] Federally Enforceable Through Title V Permit
46. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of each regenerative thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
47. The permittee shall maintain a record of the cumulative annual quantity of natural gas used (in cubic feet) by the drying ovens under this permit. The cumulative total quantity of natural gas used shall be updated monthly. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
48. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, and 4607, and 4309] Federally Enforceable Through Title V Permit
49. The regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The regenerative thermal oxidizer shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
50. The regenerative thermal incinerator shall be equipped with a continuous temperature monitoring and recording instrument. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
51. The regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
52. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

53. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
54. If the District or EPA determine that a Quality improvement plan is required under 40 CFR part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1646-39-2

EXPIRATION DATE: 09/30/2013

EQUIPMENT DESCRIPTION:

GRAPHIC ARTS PRINTING OPERATION CONSISTING OF ONE MAN ROLAND MODEL ROTOMAN N 38" WIDE 5-COLOR HEATSET OFFSET LITHOGRAPHIC PRINTING PRESS (PRESS #524) WITH ONE 4.587 MMBTU/HR NATURAL GAS FIRED THERMO WISCONSIN MODEL APOLLO A3100 DRYING OVEN SERVED BY THE SHARED 5.728 MMBTU/HR MEGTEC CLEANSWITCH MODEL CS-300-95 NATURAL GAS FIRED REGENERATIVE THERMAL OXIDIZER

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The drying oven and thermal oxidizer shall be fired exclusively on natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
3. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the drying oven shall be installed, utilized and maintained. [District NSR Rule] Federally Enforceable Through Title V Permit
4. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the thermal oxidizer shall be installed, utilized and maintained. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The drying ovens serving the heatset offset printing press shall be maintained under negative pressure and shall be vented through the thermal oxidizer at all times except during periods of start-up while the dryers are being air purged. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
7. The collection system for the dryer exhausts and for all fugitive VOC emissions shall have a minimum capture efficiency of 90%. [District NSR Rule and 4607, 5.6] Federally Enforceable Through Title V Permit
8. The thermal oxidizer shall be operated with a minimum VOC destruction efficiency of 98%. [District NSR Rule and 4607, 5.6] Federally Enforceable Through Title V Permit
9. The thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The incinerator shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District NSR Rule] Federally Enforceable Through Title V Permit
10. The thermal oxidizer shall be equipped with an operational continuous temperature monitoring and recording instrument. [District NSR Rule] Federally Enforceable Through Title V Permit
11. The VOC content of organic solvents used to perform surface preparation or cleanup shall not exceed the VOC content limits specified in Table 7 of Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings - 12/18/08 version). [District Rule 4607, 5.8.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: (1) wipe cleaning; or (2) application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; or (3) non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or (4) solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4607, 5.8.3] Federally Enforceable Through Title V Permit
13. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, solvent shall not be atomized into the open air unless it is vented to a VOC control device. This provision shall not apply to operations where roller or blanket wash is applied automatically and the cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems, and cleaning with nonpropellant-induced, hand-held spray bottles or containers which solvents are dispensed without a propellant-induced force. [District Rule 4607, 5.8.4] Federally Enforceable Through Title V Permit
14. For a permittee using any solvent containing more than 25 g/L (0.21 lb/gal) of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings, adhesives, or ink, unless an enclosed system or equipment that is proven to be equally effective at controlling emissions is used for cleaning. If an enclosed system is used, it must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, draining procedures, and it must be used according to manufacturer's recommendations and must be closed when not in use. [District Rule 4607, 5.8.5] Federally Enforceable Through Title V Permit
15. Permittee shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and inks in closed, non-absorbent, non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4607, 5.9] Federally Enforceable Through Title V Permit
16. The permittee shall properly use and operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rule 4607, 5.10] Federally Enforceable Through Title V Permit
17. The VOC content of the materials shall not exceed the following: inks less than 45% VOC by weight (less water and exempt compounds) and fountain solutions less than 15% by volume. [District NSR Rule] Federally Enforceable Through Title V Permit
18. VOC emissions from the printing inks and solvents shall not exceed 50.0 pounds in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
19. NO_x emissions from the drying oven shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rule 2201] Federally Enforceable Through Title V Permit
20. CO emissions from the drying oven shall not exceed 25.0 ppmvd @ 19% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emissions from the drying oven shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
22. NO_x emissions from the regenerative thermal oxidizer shall not exceed 4.3 ppmvd @ 19% O₂ (referenced as NO₂). [District Rule 2201] Federally Enforceable Through Title V Permit
23. CO emissions from the regenerative thermal oxidizer shall not exceed 25.0 ppmvd @ 19% O₂. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Emissions from the regenerative thermal oxidizer shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, or 0.0055 lb-VOC/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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25. The total quantity of natural gas used in the drying oven under this permit unit shall not exceed 11,651 million cubic feet in any one calendar year. [District NSR Rule] Federally Enforceable Through Title V Permit
26. The total quantity of natural gas used in the thermal oxidizer shall not exceed 25,000 million cubic feet in any one calendar year. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Source testing to demonstrate compliance with the VOC destruction efficiency of each regenerative thermal oxidizer shall be conducted on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit
29. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit
30. Source testing to determine the destruction efficiency of each regenerative thermal oxidizer shall be conducted using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Methods 25, 25A, or 25C for measuring total gaseous organic concentrations at the inlet and outlet of the control device. [District Rule 4607, 6.4.7] Federally Enforceable Through Title V Permit
31. Permittee shall maintain a current file of coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, and density. [District Rule 4607, 6.1.1] Federally Enforceable Through Title V Permit
32. The permittee shall record on a daily basis, the type and amount of each coating, adhesive, fountain solution, wash primer, and solvent used. [District Rule 4607, 6.1.3] Federally Enforceable Through Title V Permit
33. The permittee shall record on a monthly basis, the type and amount of all inks used and their VOC content and densities, using one of the methods listed in Rule 4607, Section 6.1.2.1 (12/18/08 version of Rule 4607). [District Rule 4607, 6.1.2.1] Federally Enforceable Through Title V Permit
34. The permittee shall record on a monthly basis, the type and amount of each ink, coating, adhesive, wash primer, and solvent used. [District Rule 4607, 6.1.2.2] Federally Enforceable Through Title V Permit
35. The permittee shall record on a monthly basis, the type, amount and percent VOC by volume of each fountain solution used. [District Rule 4607, 6.1.2.3] Federally Enforceable Through Title V Permit
36. The permittee shall maintain daily records of the following: (1). Quantity of VOC emitted (in pounds) from this printing press; (2). Cumulative quantity of VOC emitted (in pounds) from all graphic arts printing operations at the facility; (3) Quantity of natural gas used (in cubic feet) by each drying oven and each thermal oxidizer at the facility; (4) Operational temperature of the regenerative thermal oxidizer. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
37. The permittee shall maintain a record of the cumulative annual quantity of natural gas used (in cubic feet) by the drying oven and thermal oxidizer under this permit. The cumulative total quantity of natural gas used shall be updated monthly. [District NSR Rule] Federally Enforceable Through Title V Permit
38. All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, and 4607] Federally Enforceable Through Title V Permit
39. The regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. The regenerative thermal oxidizer shall be preheated to 1400 deg. F prior to the start-up of the heatset offset printing operation. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
40. The regenerative thermal incinerator shall be equipped with a continuous temperature monitoring and recording instrument. [District Rules 2201 and 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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41. The regenerative thermal oxidizer shall be operated at a minimum temp. of 1400 deg. F. Upon determining an excursion from this requirement, the permittee shall investigate the excursion and take corrective action to minimize emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 2520 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
42. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit
43. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
44. If the District or EPA determine that a Quality improvement plan is required under 40 CFR part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

Appendix C
Title V Modification – Compliance Certification Form

**San Joaquin Valley
Unified Air Pollution Control District**

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE
 MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME: QG, LLC	FACILITY ID: N - 1646
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: QG, LLC	
3. Agent to the Owner:	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

Frieder de Biasi

Signature of Responsible Official

7-23-12

Date

Frieder de Biasi

Name of Responsible Official (please print)

Plant Director

Title of Responsible Official (please print)

Appendix D
SJVAPCD BACT Guideline 4.7.1

Best Available Control Technology (BACT) Guideline 4.7.1
Last Update: 6/25/1999

**Offset Lithographic Printing - Publication Printing, High-end Graphics,
Heatset using with a Drying Oven**

Pollutant	Achieved in Practice or in the SIP	Technologically Feasible	Alternate Basic Equipment
CO	Natural gas fuel used in the drying oven	Catalytic Oxidation	
NOx	Natural gas fuel used in the drying oven		
VOC	Using low VOC fountain solutions and inks compliant with District Rule 4607 (Graphic Arts) (This control is achieved in practice only for facilities subject to Rule 4607.)	1. VOC capture and incineration using high-end graphics heatset inks with a VOC content < 45% by weight (less water and exempt compounds) and fountain solutions with a VOC content of < 15% by volume 2. VOC capture and carbon adsorption using high-end graphics heatset inks with a VOC content of < 45% by weight (less water and exempt compounds) and fountain solutions with a VOC content of < 15% by volume 3. Using low VOC fountain solutions and inks compliant with District Rule 4607 (Graphic Arts)	

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

This is a Summary Page for this Class of Source. For background information, see Permit Specific BACT Determinations on Details Page.

Appendix E
Quarterly Net Emissions Change (QNEC)

Quarterly Net Emissions Change (QNEC)

The QNEC is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

NEC = PE2 - BE, where:

- NEC = Quarterly Net Emissions Change
- PE2 = Post Project Potential to Emit for all units
- BE = Baseline Emissions (per Rule 2201).

Using the quarterly values calculated in Sections VII.C.2 and VII.C.6 and the evaluation above, quarterly NEC can be calculated as follows:

Quarterly NEC (QNEC) for Presses (VOC)					
Permit #	PE1 (lb/day)	PE1 (lb /year)	PE2 (lb/day)	PE2 (lb/yr)	QNEC* (lb /qtr)
-6	69.1	25,222	37.5	13,688	0
-16	69.1	25,222	27.0	9,855	0
-23	69.1	25,222	37.5	13,688	0
-25	74.1	27,047	60.0	21,900	0
-36	50.0	18,250	95.5	34,858	0
-37	50.0	18,250	95.5	34,858	0
-38	50.0	18,250	95.5	34,858	0
-39	50.0	18,250	27.5	10,038	0

* An SLC limits Annual VOC emissions to 85,994/year and there is no change proposed to the SLC, therefore, the quarterly NEC is considered to be zero for the units operating under the SLC.

Appendix F

Risk Management Review Summary

San Joaquin Valley Air Pollution Control District Risk Management Review

To: George Heinen – Permit Services
 From: Cheryl Lawler – Technical Services
 Date: January 4, 2013
 Facility Name: Worldcolor USA
 Location: 2201 Cooper Avenue, Merced
 Application #(s): N-1646-6-5, 16-5, 23-5, 25-4, 36-4, 37-4, 38-5, 39-5
 Project #: N-1122453

A. RMR SUMMARY

RMR Summary					
Categories	Printing Press VOC Increase (Unit 36-4)	Printing Press VOC Increase (Unit 37-4)	Printing Press VOC Increase (Unit 38-5)	Project Totals	Facility Totals
Prioritization Score	0.00	0.00	0.00	0.00	>1.0
Acute Hazard Index	0.00	0.00	0.00	0.01	0.11
Chronic Hazard Index	N/A*	N/A*	N/A*	N/A*	0.29
Maximum Individual Cancer Risk	N/A*	N/A*	N/A*	N/A*	9.14E-07
T-BACT Required?	No	No	No		
Special Permit Conditions?	No	No	No		

*The Chronic Hazard Index and Maximum Individual Cancer Risk were not calculated because the annual VOC emission limits were not changing or increasing.

B. RMR REPORT

I. Project Description

Technical Services received a request on January 2, 2013, to perform a Risk Management Review (RMR) for a printing operation consisting of eight printing presses requesting to modify their daily and hourly VOC emission limits. For three of the presses (Units 36-4, 37-4, & 38-5) VOC emissions will be increasing, and for five of the presses (Units 6-5, 16-5, 23-5, 25-4, & 39-5) VOC emissions will be decreasing. Annual VOC emission limits will not be changing or increasing for any of the units.

II. Analysis

For this RMR, only the three units proposing VOC increases were reviewed and modeled. Technical Services performed prioritizations using the District's HEARTs database. Since the facility's total cumulative prioritization score was greater than one, a refined health risk assessment was required and performed. Previously determined ink products speciations from previously performed facility projects were used for this project, along with the increased hourly VOC emission rates supplied by the processing engineer. AERMOD was

used, with volume source parameters outlined below, and concatenated 5-year meteorological data from Merced to determine maximum dispersion factors at the nearest residential and business receptors. These dispersion factors were input into the HARP model to calculate the Acute Hazard Index for the project.

The following parameters were used for the review:

Analysis Parameters			
Source Type	Volume	Number of Windows in Press Room Modeled	2
Roof Vents Release Height (m)	0.76	Windows Release Height (m)	0.61
Roof Vents Length of Side (m)	6.38	Windows Length of Side (m)	3.86 & 6.1
Initial Lateral Dimension (m)	1.48	Initial Lateral Dimension (m)	0.9 & 1.42
Initial Vertical Dimension (m)	5.67	Initial Vertical Dimension (m)	2.84 both
Number of Roof Vents in Warehouse Modeled	3	Closest Receptor (m)	305

III. Conclusions

The Acute Hazard Index for all three units was below 1.0; and there was no Chronic Hazard Index or Maximum Individual Cancer Risk associated with this project. In accordance with the District's Risk Management Policy, the project is approved **without** Toxic Best Available Control Technology (T-BACT).

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

Attachments

RMR Request Form
Ink Products Speciation Worksheets
Volume Source Calculations
Prioritization
Risk Results
Facility Summary