



AUG 27 2018

Mr. Steve Sylvester
G3 Enterprises, Label Division
2612 Crows Landing Road
Modesto, CA 95358

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
Facility Number: N-3309
Project Number: N-1182076

Dear Mr. Sylvester:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. You requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The proposed project is to install a sheet-fed offset lithographic printing press and ultra-violet (UV) light curing stations.

After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the Authority to Construct with a Certificate of Conformity. Please submit your comments within the 30-day public comment period, as specified in the enclosed public notice. Prior to operating with modifications authorized by the Authority 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. Nick Peirce, Permit Services Manager, at (209) 557-6400.

Thank you for your cooperation in this matter.

Sincerely,



Arnaud Marjolle
Director of Permit Services

Enclosures

cc: Tung Le, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email

Samir Sheikh
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
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

San Joaquin Valley Air Pollution Control District

Authority to Construct Application Review

Installation of a New Offset Lithographic Printing Press and UV Light Curing Stations

Facility Name: G3 Enterprises, Label Division

Date: August 16, 2018

Mailing Address: 2612 Crows Landing Road
Modesto, CA 95358

Engineer: Jag Kahlon

Lead Engineer: James Harader

Contact Person: Steven Sylvester

Telephone: (209) 202-7971

Fax: (209) 236-3938

E-Mail: Steven.sylvester@G3Enterprises.com

Application #(s): N-3309-28-0

Project #: N-1182076

Deemed Complete: July 17, 2018

I. Proposal

G3 Enterprises, Label Division is requesting an Authority to Construct (ATC) to install a sheet-fed offset lithographic printing press and ultra-violet (UV) light curing stations. The proposed equipment will be used to print graphics and apply coatings on aluminum metal sheets using the lithographic printing technique. The applied inks and coatings will be dried using UV light curing stations. The draft ATC is included in **Appendix A**.

G3 Enterprises, Label Division was issued initial Title V Permit on May 31, 2014. The proposed project is a Title V Significant Modification pursuant to Rule 2520, as this project is a Federal Major Modification under Rule 2201. Consequently, this project will be published in the local newspaper, Modesto Bee, and on the District's website (http://www.valleyair.org/notices/public_notices_idx.htm#Permitting and Emission Reduction Credit Certificate Notices) for public review and comments. The public comment period will last 30 days from the date of publication. The facility has also proposed to obtain the ATC permit with Certificate of Conformity (COC), which is EPA's 45-day review prior to the issuance of final ATC. Both COC and public notice will run concurrently. G3 Enterprises, Label Division must submit Title V administrative amendment application package (TVForm-008 and TVForm-009), and Emission Reduction Credit (ERC) withdrawal application to offset the emissions increase from the project before operating under this permit. Upon successful inspection, the District will incorporate the ATC permit into Title V permit.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (2/18/16)
Rule 2410	Prevention of Significant Deterioration (6/16/11)
Rule 2520	Federally Mandated Operating Permits (6/21/01)

Rule 4001 New Source Performance Standards (4/14/99)
Rule 4002 National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101 Visible Emissions (2/17/05)
Rule 4102 Nuisance (12/17/92)
Rule 4607 Graphic Arts and Paper, Film, Foil and Fabric Coatings (12/18/08)
CH&SC 41700 Health Risk Assessment
CH&SC 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 facility is located at 2612 Crows Landing Road in Modesto, California. The proposed equipment will not be located within 1,000 feet of the outer boundary of any K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not required for this project.

IV. Process Description

The proposed equipment will be used to print graphics on pre-cut aluminum metal sheets using UV inks via lithographic printing technique, which is a plane-o-graphic printing method in which the image and non-image areas are on the same plane. The printed graphics will be cured with UV light prior to applying epoxy varnish coating. The varnish coating will also be cured with UV light. The coating helps to protect the printed graphics during handling, from exposure to outer environmental elements, and provides better aesthetic appearance to the product. The finished sheets will be cut and folded to desired specification to make bottle caps for alcohol beverage bottles.

V. Equipment Listing

N-3309-28-0: GRAPHIC ARTS PRINTING OPERATION CONSISTING OF A CRABTREE FAST
N READY 2-COLOR LITHOGRAPHIC SHEET-FED PRINTING PRESS WITH UV
CURING STATIONS FOR PRINTING AND COATING ON ALUMINUM METAL
SHEETS

VI. Emission Control Technology Evaluation

The proposed operation is a source of VOC emissions. To reduce VOC emissions, the applicant has proposed to utilize low-VOC containing UV light curable inks and UV light curable coatings. Further, VOC content of the proposed fountain solution, blanket wash and roller wash solutions is significantly below the maximum allowable VOC content in these solutions under Rule 4607.

VII. General Calculations

A. Assumptions

- VOC is the pollutant of concern related to this project.
- The proposed ink, INXCURE PRINTPRO BF MOSCATO GRN-6581 (product 1540769) contains 0% VOC by wt., per Safety Data Sheets (SDS), however, the vendor reports that the maximum content is 0.0026% by wt. (E-mail dated July 11, 2018).
- The proposed coating, High Performance UV Overprint Varnish (product VZ7009/20), VOC content is 0.9% (E-mail on July 11, 2018 in the project file).
- The proposed fountain solution, Optimum Plus Fountain Solution, VOC content is 4 lb/gal, per SDS.
- The proposed blanket wash, PowerKlene EWS, VOC content is 0.67 lb/gal, per SDS.
- The proposed roller wash, Bottcher California Hybrid Wash, VOC content is 0.48 lb/gal, per SDS.
- Other assumptions will be stated as they are made during the evaluation.

B. Emission Factors

Emissions will be calculated using VOC content in a material and the respective maximum usage rate. No separate emission factors are established for the proposed operation. Please refer to section VII.C.2 below.

C. Calculations

1. Pre-Project Potential to Emit (PE1)

Since this is a new emissions unit, PE1 is zero for all pollutants.

2. Post Project Potential to Emit (PE2)

The applicant has proposed to calculate the annual emissions using 250 days/yr of operation.

Ink:

coating:

PE2 (lb/hr) = VOC content (by wt.) x Proposed Material usage (lb-material/hr)

PE2 (lb/day) = PE2 (lb/hr) x 24 (hr/day)

PE2 (lb/yr) = PE2 (lb/day) x 250 (days/yr)

Fountain solution:

VOC from fountain solution will release over the entire 24-hour period of print station operation. Therefore, hourly emissions would be:

PE2 (lb/hr) = VOC content (lb/gal) x Material usage (gal/day) x day/24 hr

PE2 (lb/day) = VOC content (lb/gal) x Material usage (gal/day)

$$\text{PE2 (lb/yr)} = \text{PE2 (lb/day)} \times 250 \text{ days/yr}$$

Blanket wash:

Roller wash solution:

Blanket wash and roller wash activities are presumed to occur toward the end of each shift. Therefore, the daily emissions will be spread over 3 events. Each event is expected to be completed in one block-hour. Thus,

$$\text{PE2 (lb/hr)} = \text{VOC content (lb/gal)} \times \text{Material usage (gal/day)} \times \text{day/3 events} \times \text{event/1 hour}$$

$$\text{PE2 (lb/day)} = \text{VOC content (lb/gal)} \times \text{Material usage (gal/day)}$$

$$\text{PE2 (lb/yr)} = \text{PE2 (lb/day)} \times 250 \text{ days/yr}$$

Material	VOC content	Material usage	PE2 (lb/hr)	PE2 (lb/day)	PE2 (lb/yr)
Ink	0.0026% by wt.	10.11 lb/hr	0.000263	0.0063	1.58
Coating	0.9% by wt.	9.92 lb/hr	0.08928	2.1427	535.68
Fountain Solution	4 lb/gal	0.5 gal/hr	0.0833	2.0	500.00
Blanket wash	0.67 lb/gal	1 gal/hr	0.2233	0.67	167.50
Roller wash	0.48 lb/gal	1 gal/hr	0.160	0.48	120.00
Total:			0.556	5.3	1,325

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

Pursuant to District Rule 2201, the 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 (AER) that have occurred at the source, and which have not been used on-site. The potential emissions for each permit unit are taken from the application review under project N-1160121.

SSPE1 (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
N-3309-1-2	0	0	0	0	35,933
N-3309-14-0	0	0	0	0	
N-3309-20-0	0	0	0	0	
N-3309-21-0	0	0	0	0	
N-3309-22-0	0	0	0	0	
N-3309-23-0	0	0	0	0	
N-3309-17-0	862	10	61	186	70
N-3309-24-0	6,570	187	499	5,519	34,180
N-3309-25-1	0	0	0	0	3,635
N-3309-26-0	0	0	0	0	3,631
N-3309-27-0	--	--	--	--	--
ERC	0	0	0	0	0
SSPE1	7,432	197	560	5,705	77,449

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

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

SSPE2 (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
N-3309-1-2	0	0	0	0	35,933
N-3309-14-0	0	0	0	0	
N-3309-20-0	0	0	0	0	
N-3309-21-0	0	0	0	0	
N-3309-22-0	0	0	0	0	
N-3309-23-0	0	0	0	0	
N-3309-17-0	862	10	61	186	70
N-3309-24-0	6,570	187	499	5,519	34,180
N-3309-25-1	0	0	0	0	3,635
N-3309-26-0	0	0	0	0	3,631
N-3309-27-0	--	--	--	--	--
N-3309-28-0	0	0	0	0	1,325
ERC	0	0	0	0	0
SSPE2	7,432	197	560	5,705	78,774

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

Rule 2201 Major Source Determination (lb/year)						
Category	NO _x	SO _x	PM ₁₀	*PM _{2.5}	CO	VOC
SSPE1	7,432	197	560	560	5,705	77,449
SSPE2	7,432	197	560	560	5,705	78,774
Major Source Threshold	20,000	140,000	140,000	140,000	200,000	20,000
Major Source?	No	No	No	No	No	Yes

*PM_{2.5} assumed to be equal to PM₁₀

As shown above, this source is an existing Major Source for VOC emissions and will remain a Major Source for VOC emissions after the proposed project. No change in other pollutants is expected to occur 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)(iii). Therefore the PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination (tons/year)						
Category	NO ₂	VOC	SO ₂	CO	PM	PM ₁₀
Estimated Facility PE before Project Increase	3.7	38.7	0.1	2.9	0.3	0.3
PSD Major Source Thresholds	250	250	250	250	250	250
PSD Major Source? (Y/N)	N	N	N	N	N	N

As shown above, the facility is not an existing PSD major source for any regulated NSR pollutant expected to be emitted at this facility.

6. Baseline Emissions (BE)

The BE calculation (in lb/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 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 District Rule 2201.

N-3309-28-0:

Since this is a new emissions unit, BE = PE1 = 0 for all pollutants.

7. SB 288 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."

Per section VII.C.5 above, this facility is a major source for VOC emissions. Thus, 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?
VOC	1,325	50,000	No

Since SB 288 Major Modification Thresholds are not surpassed with this project, 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.

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

For new emissions units, the increase in emissions is equal to the PE2 for each new unit included in this project.

The project's combined total emission increases are 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?
VOC	1,325	0	Yes

Since there is an increase in VOC emissions, this project constitute a Federal Major Modification. Federal Offset quantities are calculated below.

Federal Offset Quantities:

The Federal offset quantity is only calculated only for the pollutants for which the project is a Federal Major Modification. The Federal offset quantity is the sum of the annual emission changes for all new and modified emission units in a project calculated as the potential to emit after the modification (PE2) minus the actual emissions (AE) during the

baseline period for each emission unit times the applicable federal offset ratio. There are no special calculations performed for units covered by an SLC.

VOC		Federal Offset Ratio	1.5
Permit No.	Actual Emissions (lb/year)	Potential Emissions (lb/year)	Emissions Change (lb/yr)
N-3309-28-0	0	1,325	1,325
Net Emission Change (lb/year):			1,325
Federal Offset Quantity: (NEC * 1.5)			1,988

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

Rule 2410 applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment. The pollutants which must be addressed in the PSD applicability determination for sources located in the SJV and which are discussed in this project are: (See 52.21 (b) (23) definition of significant)

- NO₂ (as a primary pollutant)
- SO₂ (as a primary pollutant)
- CO
- PM
- PM₁₀
- VOC

I. Project Emissions Increase - New Major Source Determination

The post-project potentials to emit from all new and modified units are compared to the PSD major source thresholds to determine if the project constitutes a new major source subject to PSD requirements.

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)(iii). The PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination: Potential to Emit (tons/year)						
Category	NO ₂	VOC	SO ₂	CO	PM	PM ₁₀
Total PE from New and Modified Units	0.0	0.7	0.0	0.0	0.0	0.0
PSD Major Source threshold	250	250	250	250	250	250
New PSD Major Source?	N	N	N	N	N	N

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

10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in **Appendix E**.

VIII. Compliance Determination

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 Adjusted Increase in Permitted Emissions (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 seen in Section VII.C.2 above, PE2 from the proposed operation is greater than 2 lb/day for VOC emissions. Thus, BACT is triggered for VOC emissions.

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

None of the emission units are being relocated from one stationary source to another; therefore, BACT is not triggered.

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

None of the emission units are being modified under this project; therefore, BACT is not triggered.

d. SB 288/Federal Major Modification

As discussed in Sections VII.C.7 and VII.C.8 above, this project does constitute a Federal Major Modification for VOC emissions. Thus, BACT is triggered for VOC emissions.

2. BACT Guideline

BACT Guideline 4.7.2, Offset Lithographic Printing Non-heat Set Press, will be used to address BACT for VOC emissions (See **Appendix B**)

3. Top-Down BACT Analysis

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 C**), BACT will be satisfied using materials that comply with the BACT standard. The following table summarizes BACT requirement and proposed VOC content in various materials.

Material	BACT requirement VOC content	Proposed VOC content	BACT compliant?
Ink	<5% by wt., less water and exempt compounds	0.0026% by wt., less water and exempt compounds	Yes
Coating	2.5 lb/gal, less water and exempt compounds	0.084 lb/gal, less water and exempt compounds	Yes
Fountain Solution	<5% by vol.	<5% by vol.*	Yes
Blanket wash	0.83 lb/gal	0.67 lb/gal	Yes
Roller wash	0.83 lb/gal	0.48 lb/gal	Yes

*VOC content are required to be maintained at less than 5% by vol.

The following condition will be included in the permit to ensure on-going compliance with this section:

- VOC content of the materials shall not exceed any of the following: (a) Inks: less than 5% by weight, less water and exempt compounds; (b) Coatings: 2.5 lb/gal, less water and exempt compounds; (c) Fountain Solutions: less than 5% by volume; and (d) Roller Wash, Blanket Wash and on-press components: 0.83 lb/gal of material. [District Rules 2201 and 4607]

B. Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

Offset Determination (lb/year)					
Category	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE2	7,432	197	560	5,705	78,774
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	No	No	No	No	Yes

2. Quantity of Offsets Required

As seen above, the SSPE2 is greater than the offset thresholds for VOC emissions only. Therefore offset calculations will be required for this project.

The quantity of offsets in pounds per year for VOC is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

Offsets Required (lb/year) = $(\Sigma[PE2 - BE] + ICCE) \times DOR$, for all new or modified emissions units in the project,

Where,

PE2 = Post Project Potential to Emit, (lb/year)

BE = Baseline Emissions, (lb/year)

ICCE = Increase in Cargo Carrier Emissions, (lb/year)

DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE = PE1 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 = HAE

The facility is proposing to install a new emissions unit; therefore BE = 0. Also, there is only one emissions unit associated with this project and there are no increases in cargo carrier emissions; therefore offsets can be determined as follows:

$$\text{Offsets Required (lb/year)} = ([\text{PE2} - \text{BE}] + \text{ICCE}) \times \text{DOR}$$

$$\begin{aligned} \text{PE2 (VOC)} &= 1,325 \text{ lb/year} \\ \text{BE (VOC)} &= 0 \text{ lb/year} \\ \text{ICCE} &= 0 \text{ lb/year} \end{aligned}$$

Per section VII.C.8 above, this project is a Federal Major Modification. Thus, the distance offset ratio would be 1.5:1, per section 4.8.1 of Rule 2201.

$$\begin{aligned} \text{Offsets Required (lb/year)} &= ([1,325 - 0] + 0) \times 1.5 \\ &= 1,325 \times 1.5 \\ &= 1,988 \text{ lb-VOC/year} \end{aligned}$$

The quarterly emissions to be offset is as follows:

$$\begin{aligned} \text{Quarterly offsets required (lb/qtr)} &= (1,988 \text{ lb-VOC/year}) \div (4 \text{ quarters/year}) \\ &= 497 \text{ lb-VOC/qtr} \end{aligned}$$

The applicant has proposed to use ERC certificates S-4763-1, S-4371-1, S-4076-1, and a certificate split from ERC certificate S-4780-1 to offset the increases in VOC emissions associated with this project. The quarterly amount of credits available in these certificates are summarized below:

ERC Number	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
S-4763-1	139	139	139	138
S-4371-1	137	137	137	136
S-4076-1	183	183	183	182
Certificate split from ERC S-4780-1	500	500	500	500
Total	959	959	959	956

As seen above, the applicant has proposed sufficient credits to fully offset the quarterly VOC emissions increases associated with this project.

Proposed Rule 2201 (offset) Conditions:

- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 497 lb, 2nd quarter - 497 lb, 3rd quarter - 497 lb, and 4th quarter - 497 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 2/18/16) for the ERC specified below. [District Rule 2201]
- ERC Certificate Number S-4763-1, S-4371-1, S-4076-1 and S-4780-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this

Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]

C. Public Notification

1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed,
- d. Any project with an SSiPE of greater than 20,000 lb/year for any pollutant, and/or
- e. Any project which results in a Title V significant permit modification

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

As demonstrated in Section VII.C.7 above, this project does not constitute an SB 288 Modification. Thus, public noticing for SB 288 purposes is not required.

As demonstrated in Sections VII.C.8 above, this project is a Federal Major Modification. Thus, public noticing for Federal Major Modification purposes is required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements.

As seen in Section VII.C.2 above, daily emissions are not greater than 100 lb/day for any pollutant. Thus, public notice is not required under this section.

c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

Offset Thresholds				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO _x	7,432	7,432	20,000 lb/year	No
SO _x	197	197	54,750 lb/year	No
PM ₁₀	560	560	29,200 lb/year	No
CO	5,705	5,705	200,000 lb/year	No
VOC	77,449	78,774	20,000 lb/year	No

As detailed above, there were no thresholds surpassed with this project; therefore public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

SSIPE Public Notice Thresholds					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO _x	7,432	7,432	0	20,000 lb/year	No
SO _x	197	197	0	20,000 lb/year	No
PM ₁₀	560	560	0	20,000 lb/year	No
CO	5,705	5,705	0	20,000 lb/year	No
VOC	78,774	77,449	1,325	20,000 lb/year	No

As demonstrated above, the SSIPE for each pollutant is less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.

e. Title V Significant Permit Modification

As shown in the discussion of Rule 2520 below, this project constitutes a Title V Significant Modification. Thus, public noticing for Title V Significant Modifications is required for this project.

2. Public Notice Action

As discussed above, public noticing is required for this project. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public

notice will be published in a local newspaper of general circulation prior to the issuance of the ATC for this equipment.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT. The following conditions will be included in the permit:

Proposed Rule 2201 (DEL) Conditions:

- VOC emissions from this permit unit shall not exceed 5.3 pounds during any one day. [District Rule 2201]
- VOC emissions from this permit unit shall not exceed 1,325 pounds during any rolling 12-month period. [District Rule 2201]
- VOC content of the materials shall not exceed any of the following: (a) Inks: less than 5% by weight, less water and exempt compounds; (b) Coatings: 2.5 lb/gal, less water and exempt compounds; (c) Fountain Solutions: less than 5% by volume; and (d) Roller Wash, Blanket Wash and on-press components: 0.83 lb/gal of material. [District Rules 2201 and 4607]

E. Compliance Assurance

1. Source Testing

The potential emissions are determined using VOC content in the proposed inks, coating, fountain solution, blanket wash, and roller wash solutions, and maximum usage rates associated with each of these materials. This calculation methodology assumes all VOC will release into the atmosphere. Therefore, source testing is not required.

2. Monitoring

No monitoring is required to demonstrate compliance with Rule 2201.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following condition(s) will be included in the permit:

- The owner or operator shall maintain records of the daily VOC emissions from this permit unit. Daily VOC emissions may be calculated from the monthly materials (inks,

- coatings, fountain solutions, blanket wash, roller wash, etc.) usage records and the number of days per calendar month this unit was operated. [District Rule 2201]
- On a monthly basis, the owner or operator shall calculate and record the monthly VOC emissions in pounds from this permit unit. [District Rule 2201]
 - On a monthly basis, the permittee shall calculate and record the annual VOC emissions in pounds by summing the VOC emissions from the previous 12 months. [District Rule 2201]
 - All records shall be maintained for a period of at least five years and shall be made available to the District, ARB and EPA upon request.[District Rules 2201 and 4607]

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

Section 4.14 of this Rule requires that an AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The only emissions from this operation will be VOC. Since there are no ambient air quality standards for VOC, an AAQA is not required.

G. Compliance Certification

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Federal Major Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards.

As discussed in Section VIII above, this project does constitute a Federal Major Modification, therefore this requirement is applicable. G3 Enterprises is comprised of multiple companies including G3 Enterprises – Closure Division, G3 Enterprises –Winery Operations, G3 Enterprises – Winery Services, G3 Enterprise – Label Division, and G3 Enterprises Inc. Out of these companies, only G3 Enterprises – Label Division is a Major Source and is operating in compliance with all applicable emissions limitations and standards (see **Appendix F – Compliance Certification**).

H. Alternate Siting Analysis

Section 4.15.1 of this Rule requires that the applicant shall prepare an analysis functionally equivalent to the requirements of Division 13, Section 21000 et. seq. of the Public Resources Code. Section 21002 of the Public Resources Code states that projects should not be approved as proposed if there are feasible alternatives or feasible mitigation measures that would substantially lessen the environmental impacts associated with that project. This section also states that in the event of specific economic, social or other conditions would

make such a project infeasible then the project may be approved in spite of the significant effects.

The proposed operation will be installed at an existing stationary source, which will result in the least possible impact to the environment from the project. Alternative sites would involve relocation and/or construction of various support structures on a much greater scale, and would therefore result in a much greater impact on the environment.

Compliance is expected with this rule.

Rule 2410 Prevention of Significant Deterioration

As shown in Section VII.C.9 above, this project does not result in a new PSD major source or PSD major modification. No further discussion is required.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. A significant permit modification is defined as a "permit amendment that does not qualify as a minor permit modification or administrative amendment." Since the proposed project is a Federal Major Modification under Rule 2201, the proposed project is considered a Significant Modification to the existing Title V permit.

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 shall not implement the changes requested until the final permit is issued.

Rule 4001 New Source Performance Standards (NSPS)

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

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60.

Pursuant to §60.430(c), this subpart applies to each rotogravure printing press that commences construction, modification, or reconstruction after October 28, 1980.

The proposed unit is lithographic printing press, not a rotogravure press; and therefore, this subpart does not apply and no further discussion is required.

Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

40 CFR Part 63, Subpart KK – National Emission Standards for the Printing and Publishing Industry

Pursuant to §63.820(a)(1), this subpart 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 packing rotogravure, or wide-web flexographic printing presses are operated.

The proposed unit is not a publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing press. Therefore, this unit is not subject to the requirements of this subpart.

Rule 4101 Visible Emissions

Rule 4101 states that 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. Therefore, the following condition will be included in the permit:

- 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]

Compliance is expected with this Rule.

Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – *Risk Management Policy for Permitting New and Modified Sources* specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

An HRA is not required for a project with a total facility prioritization score of less than one. According to the Technical Services Memo for this project (**Appendix D**), the total facility prioritization score including this project was greater than one. Therefore, an HRA was required to determine the short-term acute and long-term chronic exposure from this project.

The cancer risk for this project is shown below:

HRA Summary		
Unit	Cancer Risk	T-BACT Required
N-3309-28-0	NA*	No

*Cancer Risk was not calculated since there is no risk factor for this type of unit.

Discussion of T-BACT

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is not required for this project because the HRA indicates that the risk is not above the District's thresholds for triggering T-BACT requirements; therefore, compliance with the District's Risk Management Policy is expected.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification not have acute or chronic indices, or a cancer risk greater than the District's significance levels (i.e. acute and/or chronic indices greater than 1 and a cancer risk greater than 20 in a million). As outlined by the HRA Summary in **Appendix D** of this report, the emissions increases for this project was determined to be less than significant.

Compliance is expected with this rule.

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

The purpose of this rule is to limit VOC emissions from graphic arts printing operations, digital printing operations, and paper, film, foil or fabric costing operations. The rule also specifies the administrative requirements for recording and measuring the emissions, and a compliance schedule.

Section 5.1, requires that an operator of any graphic arts printing operations shall not use graphic arts materials in excess of the VOC content limits, as applied in Table 1 and Table 2 of this section.

Table 1. VOC Content Limits for Inks, Coating, & Adhesives	
Material	Grams of VOC per liter (lb/gal), less water & less exempt compounds
All Other Inks	300 (2.5)
Coatings	300 (2.5)

Table 2. VOC Content Limits for Fountain Solution	
Material	Percent VOC by volume
Sheet-fed offset lithographic with maximum sheet size greater than 11 x 17 inches	5.0

Per SDSs, VOC content in the proposed UV ink is 0.000027 lb/gal¹ and the coating is 0.084 lb/gal². Further, as-applied, VOC content of fountain solution will be limited to 5.0 % by volume. The following condition(s) will be included in the permit:

- VOC content of the materials shall not exceed any of the following: (a) Inks: less than 5% by weight, less water and exempt compounds; (b) Coatings: 2.5 lb/gal, less water and exempt compounds; (c) Fountain Solutions: less than 5% by volume; and (d) Roller Wash, Blanket Wash and on-press components: 0.83 lb/gal of material. [District Rules 2201 and 4607]

Section 5.7 states no operator shall apply coatings unless coatings are applied with equipment operated according to manufacturer's specifications, and only by the use of one of the following types of coating application equipment:

- Flow coater
- Roll coater
- Dip coater
- Foam coater
- Die coater
- Hand application methods, or
- High-Volume, low-pressure (HVLP) spray for air dried coatings
- Other coating application methods which are demonstrated to the APCO to be capable of achieving at least 65% transfer efficiency

The coatings will be applied by roll coater; therefore compliance with the requirement of this rule. The following condition(s) will be included in the permit:

- Only flow coater, roll coater, dip coater, foam coater, die coater, hand application methods shall be used to apply coatings. The application equipment shall be operated in accordance with the manufacturer's specifications. [District Rule 4607]

Section 5.8, requires that an operator shall not use organic solvents for cleaning operations that exceed the VOC content limits specified in Table 7 of this Section.

Type of Solvent Cleaning Operation	VOC Content Limit Grams of VOC/liter of material (lb/gal)
Surface Preparation for coating, ink, or adhesive application	25 (0.21)
Cleaning of coating or adhesive application equipment	25 (0.21)
Cleaning of ink application equipment	--
- Roller wash-Step 1	100 (0.83)
- Roller Wash – Step 2; Roller wash – not specified; Blanket Wash, and on-press components	100 (0.83)
- Removable Press components	25 (0.21)

¹ 0.0026 lb-VOC/100 lb-ink x 10.3 lb-ink/gal = 0.00027 lb-VOC/gal

² 0.9 lb-VOC/100 lb-coating x 9.34 lb-coating/gal = 0.084 lb-VOC/gal

The following condition(s) will be included in the permit:

- The owner or operator shall utilize organic solvents for cleaning operations that complied with the VOC content limit specified in Table 7 of District Rule 4607. [District Rule 4607]
- The owner or operator using any solvent containing more than 25 g/L of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: wipe cleaning; application of solvent using nonpropellant-induced, hand-held spray bottles; non-atomized solvent flow method, or solvent flushing method. [District Rule 4607]
- The owner or operator using any solvent containing more than 25 g/L 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. [District Rule 4607]
- The owner or operator using any solvent containing more than 25 g/L of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings 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 component part(s) being cleaned 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]

Section 5.9 requires that an operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, and ink in closed, non-absorbent and non-leaking containers. The container shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. The following condition(s) will be included in the permit:

- The owner or operator shall store and dispose of fresh or spent solvents and waste solvent cleaning materials such as cloth, paper, etc. in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing material or when it is empty. [District Rule 4607]

Section 5.10 requires that an operator shall properly use and properly operates all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts materials. The following condition(s) will be included in the permit:

- 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. The permittee shall properly use and properly operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rules 2201 and 4607]

Section 6.1 requires the operator subject to the requirement of this rule to keep all applicable records on-site for a minimum of five years, and make records available to the APCO, ARB, and EPA upon request.

Section 6.1.1 requires an operator to maintain a current file documenting coatings, inks, adhesives, fountain solutions, wash primers, and solvents in use and in storage. The file shall include a SDS or product data sheet showing the material name, manufacturer's name, VOC content as applied, specific mixing instructions, and density.

Section 6.1.2 specifies recordkeeping requirements for facility utilize only compliant materials. Sections 6.1.2.1, 6.1.2.2, and 6.1.2.3 requires the monthly records of the following: 1) the type and amount of all inks, 2) the type and amount of each coating, adhesive, wash primer, and solvent (including cleaning solvent) used; and 3) the type, amount, and percent VOC by volume of fountain solution used.

The following condition(s) will be included in the permit:

- The owner or operator shall maintain a current file of coatings, inks, fountain solutions, and solvents in use and in storage. The file shall include safety data sheet (SDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, density, and composite vapor pressure. [District Rule 4607]
- The owner or operator shall maintain monthly records of the following items: (a) The name, type, quantity, and VOC content (in lb/gal, less water and exempt compounds) of all inks, coatings, fountain solutions (in % by volume), solvents, cleaning materials used; (b) The combined total amount of VOC's emitted from the use of all VOC containing materials (in pounds); and (c) The dates of operation of this permit unit. [District Rules 2201 and 4607]
- All records shall be maintained for a period of at least five years and shall be made available to the District, ARB and EPA upon request. [District Rules 2201 and 4607]

Compliance is expected with this rule.

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

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 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; and
- 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.

Greenhouse Gas (GHG) Significance Determination

It is determined that no other agency has or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project. The District's engineering evaluation (this document) demonstrates that the project would not result in an increase in project specific greenhouse gas emissions. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change.

District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. 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. Therefore, the District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15301 (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)).

Indemnification Agreement/Letter of Credit Determination

According to District Policy APR 2010 (CEQA Implementation Policy), when the District is the Lead or Responsible Agency for CEQA purposes, an indemnification agreement and/or a letter of credit may be required. The decision to require an indemnity agreement and/or a letter of credit is based on a case-by-case analysis of a particular project's potential for litigation risk, which in turn may be based on a project's potential to generate public concern, its potential for significant impacts, and the project proponent's ability to pay for the costs of litigation without a letter of credit, among other factors.

The criteria pollutant emissions and toxic air contaminant emissions associated with the proposed project are not significant, and there is minimal potential for public concern for this particular type of facility/operation. Therefore, an Indemnification Agreement and/or a Letter of Credit will not be required for this project in the absence of expressed public concern.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue ATC N-3309-28-0 subject to the permit conditions on the attached draft ATC in **Appendix A**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
N-3309-28-0	3020-01-F	700 hp, electric motors	\$698

Appendixes

- A: Draft ATC
- B: BACT Guideline
- C: BACT Analysis
- D: HRA Summary
- E: Quarterly Net Emissions Change
- F: Compliance Certification

Appendix A
Draft ATC

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-3309-28-0

LEGAL OWNER OR OPERATOR: G3 ENTERPRISES, LABEL DIVISION
MAILING ADDRESS: 2612 CROWS LANDING RD
MODESTO, CA 95358-9400

LOCATION: 2612 CROWS LANDING RD
MODESTO, CA 95358-9400

EQUIPMENT DESCRIPTION:

GRAPHIC ARTS PRINTING OPERATION CONSISTING OF A CRABTREE FAST N READY 2-COLOR LITHOGRAPHIC SHEET-FED PRINTING PRESS WITH UV CURING STATIONS FOR PRINTING AND COATING ON ALUMINUM METAL SHEETS

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. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. 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] Federally Enforceable Through Title V Permit
5. 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. The permittee shall properly use and properly operate all graphic arts printing technologies as directed and/or specified by the manufacturer of the printer or graphic arts material. [District Rules 2201 and 4607] 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.

Samir Sheikh, Executive Director / APCCO

Arnaud Marjolle, Director of Permit Services

N-3309-28-0 Aug 16 2018 1:37PM - KAM,CHJ Joint Inspection NOT Required

6. VOC content of the materials shall not exceed any of the following: (a) Inks: less than 5% by weight, less water and exempt compounds; (b) Coatings: 2.5 lb/gal, less water and exempt compounds; (c) Fountain Solutions: less than 5% by volume; and (d) Roller Wash, Blanket Wash and on-press components: 0.83 lb/gal of material. [District Rules 2201 and 4607] Federally Enforceable Through Title V Permit
7. Only flow coater, roll coater, dip coater, foam coater, die coater, hand application methods shall be used to apply coatings. The application equipment shall be operated in accordance with the manufacturer's specifications. [District Rules 2201 and 4607] Federally Enforceable Through Title V Permit
8. VOC emissions from this permit unit shall not exceed 5.3 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. VOC emissions from this permit unit shall not exceed 1,325 pounds during any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The owner or operator shall utilize organic solvents for cleaning operations that complied with the VOC content limit specified in Table 7 of District Rule 4607. [District Rule 4607] Federally Enforceable Through Title V Permit
11. The owner or operator using any solvent containing more than 25 g/L of VOC for organic solvent cleaning, cleaning activities shall be by one of the following methods: wipe cleaning; application of solvent using nonpropellant-induced, hand-held spray bottles; non-atomized solvent flow method, or solvent flushing method. [District Rule 4607] Federally Enforceable Through Title V Permit
12. The owner or operator using any solvent containing more than 25 g/L 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. [District Rule 4607] Federally Enforceable Through Title V Permit
13. The owner or operator using any solvent containing more than 25 g/L of VOC for organic solvent cleaning, the permittee shall not use VOC-containing material to clean spray equipment used for the application of coatings 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 component part(s) being cleaned 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
14. The owner or operator shall store and dispose of fresh or spent solvents and waste solvent cleaning materials such as cloth, paper, etc. in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing material or when it is empty. [District Rule 4607] Federally Enforceable Through Title V Permit
15. The owner or operator shall maintain records of the daily VOC emissions from this permit unit. Daily VOC emissions may be calculated from the monthly materials (inks, coatings, fountain solutions, blanket wash, roller wash, etc.) usage records and the number of days per calendar month this unit was operated. [District Rule 2201] Federally Enforceable Through Title V Permit
16. On a monthly basis, the owner or operator shall calculate and record the monthly VOC emissions in pounds from this permit unit. [District Rule 2201] Federally Enforceable Through Title V Permit
17. On a monthly basis, the permittee shall calculate and record the annual VOC emissions in pounds by summing the VOC emissions from the previous 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
18. The owner or operator shall maintain a current file of coatings, inks, fountain solutions, and solvents in use and in storage. The file shall include safety data sheet (SDS) or product data sheet showing the material name, manufacturer's name, VOC content as applied, mixing instruction, density, and composite vapor pressure. [District Rule 4607] Federally Enforceable Through Title V Permit
19. The owner or operator shall maintain monthly records of the following items: (a) The name, type, quantity, and VOC content (in lb/gal, less water and exempt compounds) of all inks, coatings, fountain solutions (in % by volume), solvents, cleaning materials used; (b) The combined total amount of VOC's emitted from the use of all VOC containing materials (in pounds); and (c) The dates of operation of this permit unit. [District Rules 2201 and 4607] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. All records shall be maintained for a period of at least five years and shall be made available to the District, ARB and EPA upon request. [District Rules 2201 and 4607] Federally Enforceable Through Title V Permit
21. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter -497 lb, 2nd quarter - 497 lb, 3rd quarter - 497 lb, and 4th quarter - 497 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 2/18/16) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit
22. ERC Certificate Number S-4763-1, S-4371-1, S-4076-1 and S-4780-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

Appendix B
BACT Guideline

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.7.2*

Last Update: 10/15/2010

Offset Lithographic Printing - Non-heat Set Press

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	<p>Using materials with the following VOC contents:</p> <p>Inks: less than 5% VOC by weight (less water and exempt compounds) or less than 30% VOC by weight (less water and exempt compounds) for high end graphics</p> <p>Fountain Solutions: less than 5% by volume for coldset web offset lithographic, less than 5% by volume for sheet-fed offset lithographic with maximum sheet size greater than 11x17 inches, and less than 8% by volume for high end graphics</p>	<p>VOC capture and incineration; or</p> <p>VOC capture and carbon adsorption and using materials with the following VOC contents:</p> <p>- Inks: less than 5% VOC by weight (less water and exempt compounds) or less than 30% VOC by weight (less water and exempt compounds) for high end graphics</p> <p>- Fountain Solutions: less than 5% by volume for coldset web offset lithographics, less than 5% by volume for sheet-fed offset lithographic with maximum sheet size greater than 11x17 inches, and less than 8% by volume for high end graphics</p>	

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**

Appendix C
BACT Analysis

Top-Down BACT Analysis for VOC Emissions

The following VOC emission control technologies are listed in BACT guideline 4.7.2, Offset Lithographic – Non-heat Set Press:

Step 1 - Identify all control technologies

Achieved in Practice or contained in the SIP:

Inks:

- Use of inks with VOC content less than 5% by weight (less water and exempt compounds) or less than 30% by weight (less water and exempt compounds) for high-end graphics

Fountain solutions:

- Use of fountain solution less than 5% by volume for coldset web offset lithographic, less than 5% by volume for sheet-fed offset lithographic with maximum sheet size greater than 11x17 inches, and less than 8% by volume for high end graphics

Coating:

- This guideline does not include VOC content limit on the coatings. To determine, what is being achieved-in-practice or contained in the SIP approved rules the following rules were reviewed:
 - BAAQMD Reg 8, Rule 20 - Graphic Arts Printing and Coating Operation, 11/19/08 version, Section 8-20-302;
 - SCAQMD Rule 1130 - Graphic Arts, 5/2/14 version, Section (c)(1);
 - Sac Metro Rule 450 - Graphic Arts Operations, 10/23/08 version Section 301.1; and
 - SJVAPCD Rule 4607 - Graphic Arts and Paper, Film, Foil and Fabric Coatings, 12/18/08 version), Section 5.1

All the above rules limits coatings VOC content to 2.5 lb/gal (less water and exempt compounds). Note that the BACT guidelines in these Districts were also reviewed and none of them list VOC content on the coating.

Based on the above search, VOC content of 2.5 lb/gal, less water and exempt compounds, is determined to be an achieved-in-practice BACT standard for the coatings.

Roller wash, blanket wash and on-press components:

- This guideline does not include VOC content limit on the roller wash/blanket wash solvents. To determine, what is being achieved-in-practice or contained in the SIP approved rules the following rules were reviewed:
 - BAAQMD Reg 8, Rule 20 - Graphic Arts Printing and Coating Operation, 11/19/08 version, Section 8-20-309, VOC content = 0.83 lb/gal;
 - SCAQMD Rule 1130 - Graphic Arts, 5/2/14 version – rule requires to comply with Rule 1171;
 - SCAQMD Rule 1171 – Solvent Cleaning Operations, 5/1/09 version, section (c)(1), VOC content = 0.83 lb/gal for UV ink application equipment and roller wash, blanket wash & on press components;

- Sac Metro Rule 450 - Graphic Arts Operations, 10/23/08 version Section 302.1, VOC content = 0.83 lb/gal for UV ink application equipment and roller wash, blanket wash & on press components; and
- SJVAPCD Rule 4607 - Graphic Arts and Paper, Film, Foil and Fabric Coatings, 12/18/08 version), Section 5.8, VOC = 0.83 for 0.83 lb/gal for UV ink application equipment and roller wash, blanket wash & on press components

Note that the BACT guidelines in these Districts were also reviewed and none of them list VOC content limit on the roller wash/blanket wash; SCAQMD guideline defaults the VOC content to their Rule 1171.

Based on the above search, VOC content of 0.83 lb/gal, less water and exempt compounds, is determined to be an achieved-in-practice BACT standard for roller wash, blanket wash, and on-press components.

Technologically Feasible:

- VOC capture and incineration
- VOC capture and carbon absorption and use of material listed under achieved-in-practice section (above)

Alternate Basic Equipment:

None

Step 2 - Eliminate technologically infeasible options

There is no technologically infeasible option.

Step 3 - Rank remaining options by control effectiveness

1. VOC capture and incineration - 98% overall capture and control (technologically feasible option)
2. VOC capture and carbon absorption and use of material listed under achieved-in-practice section (above) - 95% overall capture and control (technologically feasible option)
3. Comply with the VOC content limit for inks, coating, fountain solutions, roller wash, blanket wash, and on-press components stated under achieved-in-practice section of Step 1

Step 4 - Cost Effectiveness Analysis

A cost-effective analysis will now be performed for each control technology, since none of the control technologies has been eliminated.

Uncontrolled VOC emission from the operation:

The uncontrolled VOC emission from the proposed operation is 1,325 lb-VOC per year.

1st option - VOC capture and incineration - 98% overall capture and control

Per applicant, thermal oxidizer cost alone would be \$278,400. Per guidance in District's BACT Policy APR-1305, the capital cost is annualized over 10 years assuming 10% interest. The annualized cost would be:

$$\text{Annualized Cost} = (\$278,400) \left[\frac{(0.1)(1 + 0.1)^{10}}{(1 + 0.1)^{10} - 1} \right] = \frac{\$45,308}{\text{yr}}$$

The amount of VOC reduced (tons/yr) by this option would be:

$$\begin{aligned} &= 1,325 \text{ lb-VOC/yr} \times 1 \text{ tons-VOC}/2,000 \text{ lb-VOC} \times 0.98 \\ &= 0.65 \text{ ton-VOC/yr} \end{aligned}$$

Cost of VOC reduction (\$/ton) would be:

$$\begin{aligned} &= \$45,308/\text{year} \div 0.65 \text{ ton-VOC/year} \\ &= \$69,705/\text{ton-VOC} \end{aligned}$$

Since the cost of reductions is more than the cost effectiveness threshold of \$17,500/ton, use of this technology is not required.

2rd option - VOC capture and carbon adsorption (95% overall capture & control)

The carbon bed replacement cost normally exceeds the cost effectiveness threshold by itself, so the capital cost is not being included in this analysis.

Assuming the carbon would be able to capture 20% of its weight in VOC, the annual carbon requirement would be 6,625 pounds (1,325/0.2).

According to phone conversation between the process engineer and Nicole Passarella of Calgon on Nov 8, 2016, under project N-1162967, the cost is \$2.03/lb-carbon. Therefore, the cost of carbon for this project is calculated to:

$$\text{Cost of carbon} = 6,625 \text{ lb-carbon/year} \times \$2.03/\text{lb-carbon} = \$13,449/\text{year}$$

The amount of VOC reduced (tons/yr) by this option would be:

$$\begin{aligned} &= 1,325 \text{ lb-VOC/yr} \times 1 \text{ tons-VOC}/2,000 \text{ lb-VOC} \times 0.95 \\ &= 0.63 \text{ ton-VOC/yr} \end{aligned}$$

Cost of VOC reduction (\$/ton) would be:

$$\begin{aligned} &= \$13,449/\text{year} \div 0.63 \text{ ton-VOC/year} \\ &= \$21,348/\text{ton-VOC} \end{aligned}$$

As demonstrated above, the cost of disposing or replacing the carbon for the carbon adsorption system alone would exceed the VOC cost effectiveness threshold of \$17,500/ton. Therefore, this control technology is not cost effective and will be removed from consideration at this time.

3rd option - comply with the VOC content limit for inks, coating, fountain solutions, roller wash, blanket wash stated under achieved-in-practice section of Step 1

The applicant has proposed to comply with this option. Therefore, no further discussion is necessary.

Step 5 - Select BACT

The BACT for the proposed operation is to use:

Inks - VOC content less than 5% by wt. (less water and exempt compounds);

Coatings - VOC content not exceeding 2.5 lb/gal, less water and exempt compounds;

Fountain Solution - VOC content less than 5% by volume; and

Roller Wash, Blanket Wash, and on-press components - VOC content not exceeding 0.83 lb/gal of material

The applicant has proposed to comply with the above BACT requirements; therefore, this proposal satisfied the District's BACT requirements.

Appendix D
HRA Summary

San Joaquin Valley Air Pollution Control District Risk Management Review

To: Jag Kahlon – Permit Services
 From: Will Worthley – Technical Services
 Date: July 23, 2018
 Facility Name: G3 Enterprises, Labels Division
 Location: 2612 Crows Landing Road, Modesto
 Application #(s): N-3309-28-0
 Project #: N-1182076

A. RMR SUMMARY

RMR Summary						
Units	Prioritization Score	Acute Hazard Index	Chronic Hazard Index	Maximum Individual Cancer Risk	T-BACT Required?	Special Permit Requirements?
Unit 28-0 (Lithographic Printing Press)	0.004	0.00	0.00	NA ¹	No	Yes
Project Totals	0.004	0.00	0.00	NA ¹		
Facility Totals	>1	0.43	0.27	5.83E-07		

¹Cancer Risk was not calculated since there is no risk factor for this type of unit.

Proposed Permit Requirements

To ensure that human health risks will not exceed District allowable levels; the following shall be included as requirements for:

Unit # 28-0

1. 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.

B. RMR REPORT

I. Project Description

Technical Services received a request on July 17, 2018, to perform an Ambient Air Quality Analysis (AAQA) and a Risk Management Review (RMR) for a Lithographic Printing Press operation. The facility is adding a new printing press line and a UV curing station for printing/coating on aluminum metal sheets.

An AAQA for this project was requested; however, the project only results in VOC emissions. There currently no AAQA standards for VOC; therefore, an AAQA analysis was not performed.

II. Analysis

The SDS sheets for the coatings used in the operation were reviewed by CAS# for Toxic Air Contaminants (TACs). The values were entered into the coating spreadsheet to calculate the TAC's emissions, and input into the San Joaquin Valley APCD's Hazard Assessment and Reporting Program (SHARP). In accordance with the District's Risk Management Policy for Permitting New and Modified Sources (APR 1905, May 28, 2015), risks from the proposed unit's toxic emissions were prioritized using the procedure in the 2016 CAPCOA Facility Prioritization Guidelines. The prioritization score for this proposed facility was greater than 1.0 (see RMR Summary Table). Therefore, a refined health risk assessment was required. The AERMOD model was used, with the parameters outlined below and meteorological data for 2013-2017 from Modesto to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the SHARP Program, which then used the Air Dispersion Modeling and Risk Tool (ADMRT) of the Hot Spots Analysis and Reporting Program Version 2 (HARP 2) to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

The following parameters were used for the review:

Analysis Parameters Unit 28-0 (Ink & Fountain Solution)			
Source Type	Point	Location Type	Urban
Stack Height (m)	12.19	Closest Receptor (m)	215
Stack Diameter. (m)	0.51	Type of Receptor	Business
Stack Exit Velocity (m/s)	6.99	Max Hours per Year	8760
Stack Exit Temp. (°K)	322	Fuel Type	N/A
VOC Emission Rate (lb/hr)	0.08	VOC Emission Rate (lb/yr)	502

Analysis Parameters Unit 28-0 (Coating, Blanket Wash, & Roller Wash)			
Source Type	Point	Location Type	Urban
Stack Height (m)	12.19	Closest Receptor (m)	215
Stack Diameter. (m)	0.51	Type of Receptor	Business
Stack Exit Velocity (m/s)	10.48	Max Hours per Year	8760
Stack Exit Temp. (°K)	322	Fuel Type	N/A
VOC Emission Rate (lb/hr)	0.47	VOC Emission Rate (lb/yr)	823

III. Conclusion

The acute and chronic indices are below 1.0 and the cancer risk factor associated with the project is less than 1.0 in a million. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

To ensure that human health risks will not exceed District allowable levels; the permit requirements listed on page 1 of this report must be included for this proposed unit.

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.

IV. Attachments

- A. RMR request from the project engineer
- B. Additional information from the applicant/project engineer
- C. Prioritization score w/ toxic emissions summary
- D. Facility Summary

Appendix E
Quarterly Net Emissions Change

Quarterly Net Emissions Change (QNEC)

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

QNEC = PE2 - PE1, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.

PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.

PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

Using the values in Sections VII.C.2 and VII.C.1 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

$PE2_{quarterly} = PE2_{annual} \div 4 \text{ quarters/year}$

$PE1_{quarterly} = PE1_{annual} \div 4 \text{ quarters/year}$

Quarterly NEC [QNEC]			
Pollutant	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO _x	0	0	0
SO _x	0	0	0
PM ₁₀	0	0	0
CO	0	0	0
VOC	1,325	0	331.25

Appendix F
Compliance Certification



7/18/2018

Mr. Nick Peirce
San Joaquin Valley Air Pollution Control District
4800 Enterprise Way
Modesto CA 95356-8718

Subject: Compliance Statement for G3 Enterprises, Inc. – Label Division

Dear Mr. Peirce:

In accordance with Rule 2201, Section 4.15, "Additional Requirements for New Major Sources and Federal Major Modifications," G3 Enterprises Inc. – Label Division is pleased to provide this compliance statement regarding its proposed project to install and operate a two-color offset lithographic Crabtree printing press that will print on sheet-fed metal sheets – Project #N-1182076

All major stationary sources in California owned or operated by G3 Enterprises, Inc, or by any entity controlling, controlled by, or under common control with G3 Enterprises, Inc., and which are subject to emission limitations, are in compliance or on a schedule for compliance with all applicable emission limitations and standards. These sources include one or more of the following facilities:

G3 Enterprises Inc., - Label Division – N3309
2612 Crows Landing Road, Modesto CA 95358

Based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Please contact me if you have any questions regarding this certification.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Kalal', is written over a white background.

John Kalal, Vice President/General Manager - Manufacturing Divisions
G3 Enterprises, Inc. – Label Division

WE EXIST FOR YOU TO SUCCEED.

G3 Enterprises, Inc. | 502 E. Whitmore Ave. Modesto, CA 95358
www.G3Enterprises.com | P 800.321.8247
Labels | Closures | Bottling Services | Logistics | Minerals | Real Estate

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
 MINOR PERMIT MODIFICATION

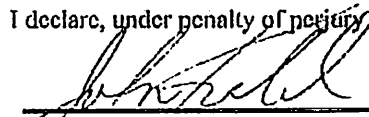
ADMINISTRATIVE
AMENDMENT

COMPANY NAME: G3 Enterprises Inc. – Label Division	FACILITY ID: N – 3309
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: G3 Enterprises, Inc. – Label Division	
3. Agent to the Owner: Steven Sylvester	

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

- Based on information and belief formed after reasonable inquiry, the source identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the source 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 foregoing is correct and true:



Signature of Responsible Official

6-7-2018

Date

John Kalal

Name of Responsible Official (please print)

Vice President – G3 Manufacturing Divisions

Title of Responsible Official (please print)