San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

APR 04 2016

Steven Sylvester
G3 Enterprises - Label Division
2612 Crows Landing Road
Modesto, CA 95358

Re: Notice of Preliminary Decision - Authority to Construct
Facility Number: N-3309
Project Number: N-1160121

Dear Mr. Sylvester:

Enclosed for your review and comment is the District's analysis of G3 Enterprises - Label Division's application for an Authority to Construct for a printing press, at 2612 Crows Landing Road in Modesto, CA.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice and 45-day EPA notice comment periods, the District intends to issue the Authority to Construct. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. James Harader of Permit Services at (209) 557-6445.

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:JH

Enclosures

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

Seyed Sadredin
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San Joaquin Valley Air Pollution Control District
Authority to Construct
Application Review
Installation of New Flexographic Printing Operation

Facility Name:	G-3 Enterprises, Label Division	Date:	March 21, 2016
Mailing Address:	2612 Crows Landing Road Modesto, CA 95358-9400	Engineer:	James Harader
		Lead Engineer:	Nick Peirce
Contact Person:	Steven Sylvester		
Telephone:	(209) 341-6804		
Application #:	N-3309-26-0		
Project #:	N-1160121		
Complete:	February 4, 2016		

I. Proposal

G-3 Enterprises, Label Division (G3) has submitted an Authority to Construct application for the installation of a new flexographic printing press.

G3 received their initial Title V Permit in 2014. This modification can be classified as a Title V significant modification pursuant to Rule 2520, 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. G3 must apply to administratively amend their Title V permit.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)[1]
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 Emission 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)
Rule 4661	Organic Solvents (9/20/07)

[1] Pursuant to Section 2.0 of District Rule 2201, the requirements of the rule in effect on the date the application is deemed complete shall apply to such application. Since this project was deemed complete prior to the February 18, 2016 amendments to District Rule 2201, the February 18, 2016 amendments are not applicable to this project. Therefore, this project is subject to the April 21, 2011 version of District Rule 2201.

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

This equipment will be located at 2612 Crows Landing Road in Modesto, CA. The District has verified that the equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

G3 is a graphic arts facility. The applicant is proposing to install a new printing press. The printing press will be used to apply UV inks and UV coatings onto low-porosity materials to create labels. Electric UV curing equipment will be used to cure the UV inks and UV coatings. Additionally, equipment cleanup solvent is used for cleanup of the printing equipment.

The typical operating schedule for this equipment is 24 hours/day, 52 weeks/year.

V. Equipment Listing

N-3309-26-0: GRAPHIC ARTS PRINTING OPERATION SERVED BY A NILPETER FA-4 11-COLOR FLEXOGRAPHIC TYPE PRINTING PRESS AND A UV CURING STATION

VI. Emission Control Technology Evaluation

This operation will only emit VOCs. Emissions are controlled by using UV inks, UV coatings, and low-VOC cleanup solvent.

VII. General Calculations

A. Assumptions

1. Only VOCs will be emitted by the flexographic printing operation.
2. The applicant is proposing to use a maximum of 100 gallons/day and 36,254 gallons/year of UV inks.
3. The applicant is proposing to use a maximum of 80 gallons/day and 28,036 gallons/year of UV coatings
4. The applicant is proposing to use a maximum of 7 gallons/day and 2,555 gallons/year of press room cleaner.

B. Emission Factors

The following table shows the VOC content for the proposed graphic arts materials, as obtained from the respective manufacturers.

Proposed Materials	VOC Content (lb/gal)
Wikoff UV Inks	0.031
Wikoff UV Coatings	0.073
Citrus Safe Inc. Yellow Magic Equipment Cleanup Solvent	0.18

C. Calculations

1. Pre-Project Emissions (PE1)

Since this is a newly permitted operation, PE1 = 0.

2. Post Project PE (PE2)

For each graphic arts material, VOC emissions are calculated using the following equation.

PE2 VOC = Material Usage (Gal/day, Gal/year) x $EF_{Material}$ (lb-VOC/gal)

The following table shows the results of the VOC calculations:

Proposed Materials	Material VOC (lb/gal)	Material Usage (gal/day)	Material Usage (gal/year)	PE2 VOC (lb/day)	PE2 VOC (lb/year)
Wikoff UV Inks	0.031	100	36,254	3.1	1,124
Wikoff UV Coatings	0.073	80	28,036	5.8	2,047
Citrus Safe Inc. Yellow Magic Equipment Cleanup Solvent	0.18	7	2,555	1.3	460
			Total	**10.2**	**3,631**

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

Pursuant to District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid ATCs or PTOs at the Stationary Source and the quantity of Emission Reduction Credits (ERCs) 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. Since this project only involves units that emit VOC's, only the SSPE for VOC emissions will be presented.

The following emissions data was obtained from the application review for District Project N-1133139

SSPE1 (lb/yr)					
	NOx	**SOx**	**PM10**	**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-3309-25-0	0	0	0	0	3,635
ERC	0	0	0	0	0
Total	**7,432**	**197**	**560**	**5,705**	**73,818**

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

Pursuant to District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid ATCs or PTOs, except for emissions units proposed to be shut down as part of the Stationary Project, at the Stationary Source and the quantity of Emission Reduction Credits (ERCs) 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.

SSPE2 (lb/yr)					
	NOx	**SOx**	**PM10**	**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-3309-25-0	0	0	0	0	3,635
N-3309-26-0	***0***	***0***	***0***	***0***	***3,631***
ERC	0	0	0	0	0
Total	**7,432**	**197**	**560**	**5,705**	**77,449**

5. Major Source Determination

Rule 2201 Major Source Determination:

Pursuant to District Rule 2201, a Major Source is a stationary source with post project emissions or a Post Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status, the SSPE2 does not include 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.

Major Source Determination					
Pollutant	**SSPE1 (lb/yr)**	**SSPE2 (lb/yr)**	**Major Source Threshold (lb/yr)**	**Existing Major Source?**	**Becoming a Major Source?**
VOC	73,818	77,449	20,000	Yes	No

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)						
	NO2	VOC	SO2	CO	PM	PM10
Estimated Facility PE before Project Increase	3.7	36.9	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)

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 Section 3.22

This is a new unit; therefore, BE is equal to zero.

7. SB288 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."

This facility is only a Major Source for VOC emissions. Therefore, an SB288 Modification can only be triggered for VOC emissions. The project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine whether the project will trigger an SB288 Modification

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification?
VOC	3,631	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute an SB 288 Major Modification.

8. Federal Major Modification

The proposed printing press will emit VOC's and the facility is a major source for VOC emissions. Therefore, this proposal could potentially trigger a Federal Major Modification for VOC emissions. The Federal Major Modification threshold for VOC emissions is 0 lb/year.

The Net Emissions Increase (NEI) for a Federal Major Modification may be calculated as follows for new units:

NEI = PE2 – 0

PE2 for the new unit is 3,631 lb-VOC/year; therefore, the net emission increase will be greater than zero and this project triggers a Federal Major Modification for VOC emissions.

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. This project only results in a Federal Major Modification for VOC emissions. Thus:

Permit No.	Actual VOC Emissions (lb/yr)	Potential VOC Emissions (lb/year)	VOC Emissions Change (lb/yr)
N-3309-26-0	0	3,631	3,631
		Net emission change (lb/year):	3,631
		Federal Offset Quantity: (NEC * 1.5)	5,447

9. 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 IV.

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 for the following*:

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 a Major Modification.

*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

The daily emissions from the flexographic printing operation is compared to the BACT trigger threshold in the below table. Only VOC's are emitted by the proposed equipment.

New Emissions Unit BACT Applicability				
Pollutant	**Daily Emissions (lb/day)**	**BACT Threshold (lb/day)**	**SSPE2 (lb/yr)**	**BACT Triggered?**
VOC	10.2	> 2.0	n/a	Yes

As shown above, BACT for VOC emissions is triggered.

2. BACT Guideline

BACT Guideline 4.7.14, "Flexographic UV Printing – High End Printing of Labels, Tags, and Forms", is applicable to the proposed flexographic printing operation. For a copy of this guideline, please refer to Appendix II of this evaluation.

3. Top-Down BACT Analysis

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis must 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 II), BACT has been satisfied with the following:

VOC: Use of materials with VOC content (less water and exempt compounds) as indicated, or lower:

- UV-Cured Inks: 1% by weight
- UV-Cured Coatings: 8% by weight

And, evaporative minimization methods, which include keeping all solvents and solvent-laden cloths/papers, not in active use, in closed containers.

The applicant is proposing materials that meet the above limits. The following conditions will be included on the Authority to Construct permit:

- *Only UV curable inks and coatings shall be utilized. The VOC content of the inks utilized shall not exceed 1% by weight (less water and exempt compounds). The VOC content of the coatings utilized shall not exceed 8% by weight (less water and exempt compounds). [District Rule 2201]*

B. Offsets

1. Offset Applicability

Pursuant to Section 4.5.3, offset requirements are triggered on a pollutant-by-pollutant basis. Unless exempted pursuant to Section 4.6, offset requirements are triggered if the post-project potential to emit (SSPE2) equals or exceeds the offset threshold levels listed in the following table. The printing press only emits VOC emissions; therefore, the offset applicability will only be determined for VOC emissions.

Offsets Applicability			
Pollutant	SSPE2 (lb/yr)	Offset Threshold Levels (lb/yr)	Offsets Triggered?
VOC	77,449	20,000	**Yes**

2. Quantity of Offsets Required

As shown in the previous table, offsets are triggered for VOC emissions. For units operating under an SLC, the quantity of offsets required is calculated using the following equation:

Quantity of Offsets Required = $\sum$(PE2 – BE + ICCE) x DOR, where

PE2 = Post Project Potential to Emit
BE = 0 (for new units)
ICCE = Increase in Cargo Carrier Emissions (zero for this unit)
DOR = Distance Offset Ratio, determined pursuant to Section 4.8

For federal major modifications, DOR is equal to 1.5 for VOC emissions. For this project, there is no cargo carrier emissions and BE is equal to zero since this is a new unit. Thus,

Quantity of Offsets Required = $\sum$PE2 x DOR
Quantity of Offsets Required = 3,631 lb-VOC/year x 1.5
Quantity of Offsets Required = 5,447 lb-VOC/year

The facility is proposing to purchase 1,500 lb-VOC of emission credits for each quarter from ERC Certificate S-4636-1. As shown in the following table, the facilities proposal includes adequate VOC emission reduction credits to fully offset the project.

	Quarter 1 (lb)	Quarter 2 (lb)	Quarter 3 (lb)	Quarter 4 (lb)
Offsets Required (with 1.5:1 distance ratio)	1,361	1,361	1,361	1,362
ERC Credits Proposed (From Certificate S-4636-1)	1,500	1,500	1,500	1,500

The following conditions will be included on the Authority to Construct permit:

- *Prior to operating equipment under this Authority to Construct, the permittee shall surrender VOC emission reduction credits in the following quantities: 1st quarter – 1,361 lb, 2nd quarter – 1,361 lb, 3rd quarter – 1,361 lb, and 4th quarter – 1,362 lb. The emission reduction credit values listed in this condition already include the distance offset ratio of 1.5 to 1. [District Rule 2201]*

- *ERC Certificate Numbers S-4636-1 (or one or more certificates split from any of these certificates) shall be used to supply the required VOC 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, which is a new facility that is also a Major Source,
b. Major Modifications,
c. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
d. Any project which results in the offset thresholds being surpassed, and/or
e. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

a. New Major Source

As demonstrated previously in this document, this project will not cause this facility to become a new Major Source.

b. Major Modification

As demonstrated previously in this document, this project will trigger a Federal Major Modification. Therefore, a public notice is required.

c. PE > 100 lb/day

The Daily PE for the new emission unit was determined to be less than the 100 lb/day threshold.

d. Offset Threshold

The following table compares the SSPE1 and SSPE2 to the offset thresholds in order to determine if this proposal will result in emissions surpassing the offset threshold.

Offset Threshold				
Pollutant	**SSPE1 (lb/yr)**	**SSPE2 (lb/yr)**	**Offset Threshold (lb/yr)**	**Public Notice Required?**
VOC	73,818	77,449	20,000	No

As detailed in the preceding table, emissions from this facility are already above the offset threshold; thus, the offset threshold will not be surpassed.

e. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a Stationary Source Increase in Permitted Emissions (SSIPE) of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE is calculated as the Post Project Stationary Source Potential to Emit (SSPE2) minus the Pre-Project Stationary Source Potential to Emit (SSPE1), i.e. SSIPE = SSPE2 – SSPE1.

SSIPE Public Notice Threshold					
Pollutant	**SSPE2 (lb/yr)**	**SSPE1 (lb/yr)**	**SSIPE (lb/yr)**	**SSIPE Threshold (lb/yr)**	**Public Notice Required?**
VOC	77,449	73,818	3,631	20,000	No

As detailed in the preceding table, this project does not result in an increase in emissions that surpasses the SSIPE threshold.

2. Public Notice Action

As discussed above, public noticing is required for this project since the project triggers a Federal Major Modification. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and EPA, 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 Emissions Limits

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.15 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The following conditions will be included on the Authority to Construct permit:

- *VOC emissions from this unit shall not exceed 10.2 pounds during any one day. [District Rule 2201]*

- *VOC emissions from this unit shall not exceed 3,631 pounds during any rolling 12-month period. [District Rule 2201]*

E. Compliance Assurance

1. Source Testing

Emissions are based on graphic arts material usage and the material VOC content provided by the ink, coating, and cleaning solvent manufacturers. Source testing is not necessary to verify emissions from this operation.

2. Monitoring

No monitoring is required to demonstrate compliance with Rule 2201.

3. Recordkeeping

The following recordkeeping requirements will be included on the ATC permit:

- *The operator shall maintain a file that includes a material safety data sheet or product data sheet showing the material name, the manufacturer's name, the VOC content as applied, the specific mixing instructions and the density of each ink, coating and solvent in use. [District Rules 2201 and 4607]*

- *The operator shall record, on a monthly basis, the quantity, the VOC content and the density of each ink, coating and solvent used. Separate records shall be kept for pantone and non-pantone inks. [District Rules 2201 and 4607]*

- *The operator shall keep a daily record of the VOC emissions from this unit. [District Rule 2201]*

- *The operator shall keep a record of the rolling 12-month VOC emissions from this unit. This record shall be updated on at least a monthly basis. [District Rule 2201]*

- *All records shall be retained for a period of at least 5 years and shall be made available to APCO, ARB and EPA upon request. [District Rules 2201 and 4607]*

4. Reporting

No reporting is required to ensure compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

Section 4.14 of this rule requires that an ambient air quality analysis (AAQA) be conducted to determine whether the operation of the proposed equipment 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

This section requires that the owner of a New Major Source or the owner of a facility undergoing a Federal Major Modification demonstrate, to the satisfaction of the District, that all Major Sources it owns, operates or controls, are located in California and are subject to emission limits be in compliance with, or on schedule to be in compliance with all applicable emission limits or standards. The current modification is a Federal Major Modification so these requirements apply. G-3 Enterprises consists of a closure division (facility ID N-2028) and the facility undergoing this modification (label division, facility ID N-3309). The closure division is not a Major Source for any pollutant and the label division is in compliance with all applicable emission limitations and standards.

H. Alternate Siting Analysis

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 printing unit is being combined with an existing stationary source, therefore, requiring the press to be located at an alternative location would require the relocation of the entire stationary source. Such a relocation would cause a significant financial hardship and per § 21002 of the Public Resources Code, locating the equipment at an alternative site will not be required.

Rule 2520 Federally Mandated Operating Permits

Since this project triggers a Federal Major Modification, this proposal is considered a Significant Modification to the existing Title V permit. Pursuant to District Rule 2520 Section 11.3.1.1, a 30-day public notice is required for TV Significant Modifications.

As discussed earlier in this evaluation, 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. Continued compliance with this rule is expected. The facility shall not implement the changes requested until the final permit is issued.

Rule 4001 New Source Performance Standards (NSPS)

There are no New Source Performance Standards that are applicable to this type of operation.

Rule 4002 National Emission Standards for Hazardous Air Pollutants

Subpart KK– National Emission Standards for Hazardous Air Pollutants for the Printing and Publishing Industry

As it applies to flexographic printing operations, this subpart regulates only Wide-Web type units. Wide Web Flexographic Presses are defined in section 63.822 as units capable of printing on substrates greater than 18 inches in width. The proposed press will have the capability of printing on substrates with widths of 16 inches or less, therefore it is not a Wide Web Flexographic Press and it is not subject to 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 listed on the ATC:

- *{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]*

Rule 4102 Nuisance

Rule 4102 states that no air contaminant shall be released into the atmosphere which causes a public nuisance. Public nuisance conditions are not expected as a result of these operations provided the equipment is well maintained. Therefore, the following condition will be listed on the ATC to ensure compliance:

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

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 - Risk Management Policy for Permitting New and Modified Sources (dated 3/2/01) 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. The results of the analysis are shown below. Please refer to Appendix III for further details.

Categories	Flexographic Printing Press (unit 20-0)	Project Totals	Facility Totals
Prioritization Score	0.00*	0.00*	0.00
Acute Hazard Index	N/A	N/A	N/A
Chronic Hazard Index	N/A	N/A	N/A
Maximum Individual Cancer Risk (10^{-6})	N/A	N/A	N/A
T-BACT Required?	**No**		
Special Permit Conditions?	**No**		

* A prioritization was not performed after determining no Hazardous Air Pollutants (HAPs) are associated with this project. No further analysis was required.

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 is proposing to install a graphic arts printing operation; therefore, the proposed operation is subject to District Rule 4607 requirements.

Section 5.1, Table 1 lists the following VOC content limits:

Rule 4607, Section 5.1, Table 1 VOC Content Limits for Inks, Coatings, and Adhesives	
Material	**Grams of VOC per liter (lb/gal), less water and exempt compounds**
Flexographic Ink on Porous Substrates	225 (1.88)
All Other Inks	300 (2.5)
Coatings	300 (2.5)
Adhesives	150 (1.25)
Web Splicing Adhesives	150 (1.25)

This facility only prints on non-porous substrates and does not use any adhesives. The following permit condition will be included on the Authority to Construct permit:

- *The VOC content, less water and exempt compounds, of graphic art materials used by this printing press shall not exceed any of the following limits: (1) for inks: 2.5 lb/gal (300 g/l), (2) and for coatings: 2.5 lb/gal (300 g/l). [District Rule 4607]*

Section 5.1 Table 2 lists VOC content limits for fountain solutions; however, fountain solutions will not be used by this printing press.

Section 5.2 allows the use of 2 gallons/calendar day and 120 gallons/calendar year of specialty flexographic inks that have VOC contents greater than required in Table 1 of the Rule. The applicant has not proposed the use of any specialty flexographic inks.

Sections 5.3, 5.4, and 5.5 apply to coldest web offset lithographic fountain solutions, screen printing, and paper, film, foil, or fabric coating operations. This facility does not include these types of printing/coating units; therefore, these sections are not applicable.

Section 5.6 lists requirements for approved VOC emission control systems that may be used in lieu of complying with Section 5.1 VOC emission limits. The applicant is not proposing this option; therefore, Section 5.6 requirements are not applicable.

Section 5.7 lists the following approved coating application equipment:

1. Flow coater,
2. Roll coater,
3. Dip coater,
4. Foam coater,
5. Die coater,
6. Hand application methods, or
7. High-volume, low pressure (HVLP) spray for air dried coatings.

This facility does not use HVLP spray equipment. The following condition will be included on the ATC permit:

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

Section 5.8.1, Table 7 lists the following VOC content limits for solvent cleaning. The limits applicable to this facility are shown in the following table:

Rule 4607, Section 5.8.1, Table 7 VOC Content Limits for Solvent Cleaning	
Type of Solvent Cleaning Operation	**VOC Content Limit Grams of VOC/liter of material (lb/gal)**
Product Cleaning During Manufacturing Process; or Surface Preparation for Coating, Ink, or Adhesive Application	25 (0.21)
Repair and Maintenance Cleaning	25 (0.21)
Cleaning of Coating or Adhesive Application Equipment	25 (0.21)
Cleaning of Ink Application Equipment	
Flexographic Printing	25 (0.21)

The following condition will be included on the Authority to Construct permit:

- *The VOC content of solvents used for this operation shall not exceed any of the following limits: (1) For product cleaning during manufacturing process, or surface preparation for coating, ink or adhesive application: 25 grams VOC/liter of material; (2) For repair and maintenance cleaning: 25 grams VOC/liter of material; (3) For cleaning of coating or adhesive application equipment: 25 grams VOC/liter of material; and (4) For cleaning of flexographic ink application equipment: 25 grams VOC/liter of material. [District Rule 4607]*

Section 5.9 states that an operator must dispose of fresh or spent solvents, waste solvent cleaning materials, coatings, adhesives, catalysts, thinners, and ink in non-absorbent and non-leaking containers. The containers must remain closed at all times, except when depositing or removing the contents of the containers or when the container is empty.

- *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]*

Sections 6.1 and 6.2 require that records be maintained for the graphic art materials used at the facility. The following conditions will be included on the permits:

- *The operator shall maintain a file that includes a material safety data sheet or product data sheet showing the material name, the manufacturer's name, the VOC content as applied, the specific mixing instructions and the density of each ink, coating and solvent in use. [District Rules 2201 and 4607]*

- *The operator shall record, on a monthly basis, the quantity, the VOC content and the density of each ink, coating and solvent used. Separate records shall be kept for pantone and non-pantone inks. [District Rules 2201 and 4607]*

- *All records shall be retained for a period of at least 5 years and shall be made available to APCO, ARB and EPA upon request. [District Rules 2201 and 4607]*

Compliance with District Rule 4607 requirements is expected.

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a k-12 school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

The District performed an Engineering Evaluation (this document) for the proposed project and determined that the project will occur at an existing facility and the project involves negligible or no expansion of the existing use. Furthermore, the District determined that the project will not have a significant effect on the environment. The District finds that the project 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)).The District is not aware of any public concerns associated with this ATC project. Based on the above, an Indemnification Agreement and Letter of Credit for the ATC project are not required.

IX. Recommendation

Issue Authority to Construct N-3309-26-0 subject to the permit conditions on the attached draft Authority to Construct in Appendix I.

X. Billing Information

Billing Schedule			
Permit Number	**Fee Schedule**	**Fee Description**	**Fee Amount**
N-3309-26-0	3020-01-B	20 electric HP	$123

Appendices

I. Draft Authority to Construct Permit
II. BACT Guideline 4.7.5 and Top-Down BACT Analysis
IIII. Risk Management Review
IV. Quarterly Net Emission Change

Appendix I
Draft Authority to Construct Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: N-3309-26-0

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: G-3 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 SERVED BY A NILPETER FA-4 11-COLOR FLEXOGRAPHIC TYPE PRINTING PRESS AND A UV CURING STATION

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. 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
4. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
5. Prior to operating equipment under this Authority to Construct, the permittee shall surrender VOC emission reduction credits in the following quantities: 1st quarter - 1,361 lb, 2nd quarter - 1,361 lb, 3rd quarter - 1,361 lb, and 4th quarter - 1,362 lb. The emission reduction credit values listed in this condition already include the distance offset ratio of 1.5 to 1. [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

DRAFT

Arnaud Marjollet, Director of Permit Services
N-3309-26-0 Mar 25 2010 7:59AM – HARADERJ Joint Inspection NOT Required

6. ERC Certificate Numbers S-4636-1 (or one or more certificates split from any of these certificates) shall be used to supply the required VOC 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
7. Only UV curable inks and coatings shall be utilized. The VOC content of the inks utilized shall not exceed 1% by weight (less water and exempt compounds). The VOC content of the coatings utilized shall not exceed 8% by weight (less water and exempt compounds). [District Rule 2201] Federally Enforceable Through Title V Permit
8. The VOC content, less water and exempt compounds, of graphic art materials used by this printing press shall not exceed any of the following limits: (1) for inks: 2.5 lb/gal (300 g/l), (2) and for coatings: 2.5 lb/gal (300 g/l). [District Rule 4607] Federally Enforceable Through Title V Permit
9. The VOC content of solvents used for this operation shall not exceed any of the following limits: (1) For product cleaning during manufacturing process, or surface preparation for coating, ink or adhesive application: 25 grams VOC/liter of material; (2) For repair and maintenance cleaning: 25 grams VOC/liter of material; (3) For cleaning of coating or adhesive application equipment: 25 grams VOC/liter of material; and (4) For cleaning of flexographic ink application equipment: 25 grams VOC/liter of material. [District Rule 4607] Federally Enforceable Through Title V Permit
10. VOC emissions from this unit shall not exceed 10.2 pounds during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. VOC emissions from this unit shall not exceed 3,631 pounds during any rolling 12-month period. [District Rule 2201] 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] Federally Enforceable Through Title V Permit
13. The operator shall maintain a file that includes a material safety data sheet or product data sheet showing the material name, the manufacturer's name, the VOC content as applied, the specific mixing instructions and the density of each ink, coating and solvent in use. [District Rules 2201 and 4607] Federally Enforceable Through Title V Permit
14. The operator shall record, on a monthly basis, the quantity, the VOC content and the density of each ink, coating and solvent used. Separate records shall be kept for pantone and non-pantone inks. [District Rules 2201 and 4607] Federally Enforceable Through Title V Permit
15. The operator shall keep a daily record of the VOC emissions from this unit. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The operator shall keep a record of the rolling 12-month VOC emissions from this unit. This record shall be updated on at least a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All records shall be retained for a period of at least 5 years and shall be made available to APCO, ARB and EPA upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

Appendix II

BACT Guideline 4.7.14 and Top-Down BACT Analysis

Per » B A C T » Bact Guideline.asp?category Level1=4&category Level2=7&category Level3=14&last Update=11 » 9 :

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Best Available Control Technology (BACT) Guideline 4.7.14
Last Update: 11/9/2004

Flexographic UV Printing - High End Printing of Labels, Tags, and Forms**

Pollutant	Achieved in Practice or in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	use of materials with VOC content (less water and exempt compounds) as indicated, or lower: - for UV-cured inks: 1% by weight - for UV-cured coatings: 8% by weight and evaporative minimization methods, which include keeping all solvents and solvent-laden cloths/papers, not in active use, in closed containers	1. VOC capture and control with incineration (98% overall control efficiency) 2. VOC capture and control with carbon adsorption (95% overall control efficiency)	

** *The substrates, covered by this guideline, are low-porosity papers, plastic films, and metalized paper/foil*

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 s a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is requried 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.

Top-Down BACT Analysis

BACT Guidelines 4.7.14 is applicable to the proposed flexographic printing operation. A top-down BACT analysis will be used to evaluate the control options listed in this guideline.

VOC Emissions:

Step 1 - Identify All Possible Control Technologies

1. Use of materials with VOC content (less water and exempt compounds) as indicated or lower: -for UV cured inks: 1% by weight, - for UV cured coatings: 8% by weight, and evaporative minimization methods, which include keeping all solvents and solvent laden cloths/papers, not in active use, in closed containers. (Achieved in Practice)
2. VOC Capture and Control with incineration (98% overall control efficiency), (Technologically Feasible)
3. VOC Capture and Control with carbon adsorption (95% overall control efficiency), (Technologically Feasible)

Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible options.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1. VOC Capture and Control with incineration (98% overall control efficiency), (Technologically Feasible)
2. VOC Capture and Control with carbon adsorption (95% overall control efficiency), (Technologically Feasible)
3. Use of materials with VOC content (less water and exempt compounds) as indicated or lower: for UV cured inks: 1% by weight, for UV cured coatings: 8% by weight, and evaporative minimization methods, which include keeping all solvents and solvent laden cloths/papers, not in active use, in closed containers. (Achieved in Practice)

Step 4 - Cost Effective Analysis

A cost effective analysis is required for technologically feasible control options that are not Achieved-in-Practice.

Cost Effective Threshold:

The District's BACT Policy establishes annual cost thresholds for imposed control based upon the amount of pollutants abated by the controls. If the cost of control is at or below the threshold, the control is considered cost effective. If the cost exceeds the threshold, it is not cost effective and the control is not required. The District's cost effective threshold for VOC is $17,500/ton.

Industry Standard Emissions (ISE):

Industry standard emissions will be calculated using a typical VOC content of 1% by weight for UV inks and UV coatings, for this type of operation[2]. Typically, UV inks and coatings have a density of approximately 10 lb/gal.

UV Ink/Coating Industry Standard EF = 10 lb/gal x 0.01 lb-VOC/lb = 0.1 lb-VOC/gallon

The cleanup solvent will not be included, since a control system does not typically operate during the cleanup of printing equipment.

Proposed Materials	Industry Standard VOC Content (lb/gal)	Material Usage (gal/year)	Industry Standard VOC (lb/year)
UV Ink	0.1	36,254	3,625
UV Coating	0.1	28,036	2,804
		Total	**6,429**

Control Option 1: VOC Capture and Control with Incineration

98% total control efficiency using a VOC capture and control system with thermal/catalytic incineration and 100% VOC capture.

(A). Emission Reductions from Industry Standard:

Based on the above determined industry standard emissions and assuming a VOC capture efficiency of 100% and oxidizer destruction efficiency of 98%, the amount of VOC emissions reduced is calculated below.

VOC Emission Reductions = Annual ISE_{VOC} x 1 tons/2,000 lb x Overall Control Eff.
= 6,429 lb/year x 1 tons/2,000 lb x 0.98
= **3.2 tons/year**

(B). Design Parameters:

- For a similar size printing press, the estimated exhaust flow rate for the capture system was 1,100 CFM. (District Project N-1113462)
- Per the applicant, the printing press will operate up to 8,760 hr/year.

[2] This operation does not require the use of FDA-approved coatings. Non FDA-approved UV coatings typically have a VOC content of 1% by weight, while FDA-approved UV coatings typically have VOC contents up to 8% by weight.

(C). Annual Natural Gas Cost:

The cost of natural gas for this operation is calculated based on an operating schedule of 8,760 hours/year. A heat exchanger efficiency of 50% is assumed.

Natural Gas Usage = Flow Rate × Cp_{Air} × ΔT × HEF

Where:
- Flow Rate = Air flow through the oxidizer (1,100 cfm)
- Cp_{Air} = specific heat of air is 0.194 Btu/scf - °F
- ΔT = increase in the temperature of the contaminated air stream required for catalytic oxidation to occur (It will be assumed that the air stream would increase in temperature from 77°F to 600°F for catalytic incineration.)
- HEF = heat exchanger factor (0.5, assumed)

Natural Gas Usage = 1,100 cfm × 0.194 Btu/ scf - °F × (600 °F - 77 °F) × 0.5
x 8,760 hr/year × 60 min/hr × MMBtu/10^6 Btu
= 29,331 MMBtu/year

The fuel usage will be reduced by the heating value of the influent VOC stream. The heating value of the VOC's being controlled is not known, so the heating value of benzyl alcohol (14,900 Btu/lb) will be utilized in the calculation.

Btu Content = Uncontrolled VOC Emissions lb/year × HV Btu/lb
= 6,429 lb-VOC/yr × 14,900 Btu/lb × MMBtu/10^6 Btu
= 96 MMBtu/yr

Adjusted Natural Gas Usage = 29,331 MMBtu/year - 96 MMBtu/yr
= 29,235 MMBtu/yr

Natural Gas Cost = 29,235 MMBtu/year × $6.39/MMBtu[3]
= **$186,812/year**

(D). Cost Effectiveness of a Catalytic Oxidizer with 100% Capture:

Cost Effectiveness = Natural Gas Cost ($/year) ÷ Emission Reduction (ton-VOC/year)
= $186,812/year ÷ 3.2 tons-VOC/year
= **$58,379/ton-VOC**

[3] The natural gas price used is based on the average of the California industrial natural gas price over the previous 12 months of available data (December 2014 through November 2015) as published by the U.S. Energy Information Administration in their monthly natural gas reports. See http://tonto.eia.doe.gov/dnav/ng/hist/n3035ca3m.htm

The cost to operate a catalytic oxidizer with 100% capture is $58,379/ton, which is greater than the District's VOC cost-effectiveness threshold of $17,500/ton. Furthermore, the cost analysis did not include capital costs, installation costs, and other costs that would significantly increase the cost/ton to operate a catalytic oxidizer. Therefore, this VOC option is not cost effective.

The use of a thermal oxidizer, rather than a catalytic oxidizer, is an option listed in this guideline; however, the cost to operate a thermal oxidizer would be greater since more fuel would be required to achieve the higher chamber temperature required for the thermal oxidizer. Therefore, the use of a thermal oxidizer will also not be cost effective.

Control Option 2: VOC Capture and Control with Carbon Adsorption

95% total control using a VOC capture and control system with carbon adsorption and 100% capture.

(A). Emission Reduction:

Based on the above determined industry standard emissions and assuming a VOC capture efficiency of 100% and carbon adsorption system control efficiency of 95%, the amount of VOC emissions reduced is calculated below.

VOC Emission Reductions = Annual ISE_{VOC} × 1 tons/2,000 lb × Overall Control Eff.
= 6,429 lb/year × 1 tons/2,000 lb × 0.95
= **3.1 tons/year**

(B). Annual Carbon Replacement Costs:

Carbon adsorption occurs when air containing VOCs is blown through a carbon unit and the VOCs are adsorbed onto the surface of the cracks in the activated carbon particles. Two main areas of cost are the cost of the carbon adsorption unit itself and the annual operating cost of the unit. The primary annual operating cost is the replacement of the spent activated carbon. It will be shown that the annual cost to replace the spent activated carbon alone will be adequate to cause this technology to be not cost effective per District BACT policy. This estimate does not include the capital cost of purchasing the carbon adsorption unit or any additional operational and maintenance costs.

Since carbon can adsorb 20% of its weight in VOCs, and the control efficiency of carbon adsorption is 95%, the total amount of carbon required per year can be determined as follows:

Carbon Required = 6,429 lb-VOC/year x 0.95 x 1 lb-Carbon/0.2 lb-VOC
= 30,538 lb-Carbon/year

Per Kurt Keefer of EAS Corporation (916-967-9007,) the cost of carbon replacement for ranges from $2.00/lb to $10.00/lb, depending on the type and quantity of carbon purchased. For the purposes of this analysis and to be conservative, it is assumed that the price of carbon is $2.00/lb. The annual cost of spent carbon replacement will be:

Annual Carbon Replacement Cost = 30,538 lb-Carbon/year × $2/lb-Carbon
= $61,076/year

(C). Cost Effectiveness of a Carbon Adsorption System:

Cost Effectiveness = Annual Carbon Replacement Cost ($/year)
÷ Emission Reduction (ton-VOC/year)
= $61,076year ÷ 3.1 ton-VOC/year
= **$19,702/ton-VOC**

The cost to operate a carbon adsorption system is $19,702/ton, which is greater than the District's VOC cost-effectiveness threshold of $17,500/ton. Therefore, this VOC control option is not cost effective.

Control Option 3: Use of low-VOC UV Inks

A cost analysis is not required for achieved-in-practice control options.

Step 5 - Select BACT

As stated in Step 4, incineration and carbon adsorption are not cost effective control options and are not required. The only remaining control option is the use of low-VOC inks (< 1% VOC by weight) and coatings (< 8% VOC by weight). The applicant is proposing the use of low-VOC inks and coatings that meet these requirements. Therefore, BACT requirements are satisfied.

Appendix III
Risk Management Review Results

San Joaquin Valley Air Pollution Control District
Risk Management Review

To:	James Harader – Permit Services
From:	Tadeh issakhanian – Technical Services
Date:	February 8, 2016
Facility Name:	G3 Enterprises
Location:	2612 Crows Landing Rd. Modesto
Application #(s):	N-3309-26-0
Project #:	N-1160121

A. RMR SUMMARY

RMR Summary			
Categories	**Printing Operation (Unit 26-0)**	**Project Totals**	**Facility Totals**
Prioritization Score	**0.00***	0.00*	0.00
Acute Hazard Index	N/A	N/A	N/A
Chronic Hazard Index	N/A	N/A	N/A
Maximum Individual Cancer Risk	N/A	N/A	N/A
T-BACT Required?	**No**		
Special Permit Conditions?	**No**		

*A prioritization was not performed after determining no Hazardous Air Pollutants (HAPs) are associated with this project. No further analysis was required.

I. Project Description

Technical Services received a request on February 8, 2016, to perform a Risk Management Review for the installation of a flexographic printing press with UV inks and UV curing equipment.

II. Analysis

After reviewing the information provided in the Risk Management Review request along with MSDS sheets for the proposed coating products, Technical Services determined that there are no HAPs associated with this project. Per engineers note, since only HAP's are emitted through evaporation we didn't expect copper to be emitted from a printing press and determined that there was no Hap's emitted from the proposed project. Therefore, no further analysis or prioritization was required for this project.

III. Conclusion

The proposed project will not contribute to the facility's risk. 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.

IV. Attachments

A. RMR request from the project engineer
B. Additional information from the applicant/project engineer
C. Facility Summary

Appendix IV
QNEC Calculations

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 - BE, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.
PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.
BE = Baseline Emissions (per Rule 2201) for each emissions unit, lb/qtr.

For the new printing press, BE is equal to zero. Therefore, QNEC is equal to the quarterly PE2.

QNEC				
Pollutant	**PE2 (lb/year)**	**Quarterly PE2 (lb/qtr)**	**Quarterly BE (lb/qtr)**	**QNEC (lb/qtr)**
VOC	3,631	907.75	0.0	907.75