San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

JUL 13 2016

Mr. Mac McCullough
Pacific Southwest Container
4320 Leckron Road
Modesto, CA 95357

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # N-3606
Project # N1160858

Dear Mr. McCullough:

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. This project is for the installation of a carton manufacturing operation.

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,

for Arnaud Marjollet
Director of Permit Services

Enclosures

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

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San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
Modifications to Cardboard Box Manufacturing Facility

Facility Name:	Pacific Southwest Container	Date:	May 23, 2016
Mailing Address:	4530 Leckron Rd Modesto, CA 95357	Engineer:	James Harader
		Lead Engineer:	Nick Peirce
Contact Person:	Mac McCullough		
Telephone:	(209) 526-0444		
ATC Application #'s:	N-3606-34-0		
ATC Project #:	N-1160858		
Deemed Complete:	March 15, 2016		

I. PROPOSAL

Pacific Southwest Container submitted Authority to Construct applications for the installation of a new carton manufacturing operation with a folder/gluer that will be used to make wine totes. Only VOC emissions are emitted by the proposed operation, and the facility is requesting to retain their 73,403 lb/year facility-wide VOC emission limit.

Pacific Southwest Container operates under a Title V Permit. 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. Pacific Southwest Container must apply to administratively amend their Title V permit.

II. APPLICABLE RULES

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2410	Prevention of Significant Deterioration (6/16/11, effective 11/16/12)
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 4623	Storage of Organic Liquids (5/19/05)
Rule 4653	Adhesives and Sealants (9/16/10)
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 4530 Leckron Road in Modesto, CA. The District has verified that the equipment will not be 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

This project is for the installation of a carton folder/gluer that will be used to manufacture cartons for the wine industry. Carton board is fed into the Cartonpack GT automatic packer. The cartonboard is folded and glued 14 times in the automatic packer. The end product, wine cartons for wine bottles, exits the cartonpack GT machine. The unit only emits VOC emissions, from the use of adhesives.

The machine can manufacture up to 25,000 cartons per hour and will operate up to 24 hr/day and 365 days/year.

V. EQUIPMENT LISTING

Pre-Project Equipment Description:

This is a new unit.

Post-Project Equipment Description:

N-7464-34-0: MASTERFOLD 110 GNB CARTONPACK GT FOLDER GLUER WITH A MASTER EASYFEEDER GT AUTOMATIC CARTON FEEDER, USED FOR THE MANUFACTURING OF WINE CARTONS AND SIMILAR PRODUCTS

VI. EMISSION CONTROL TECHNOLOGY EVALUATION

Only VOC emissions are emitted by the carton manufacturing operation. VOC emissions are controlled through the use of low-VOC adhesives.

VII. GENERAL CALCULATIONS

A. Assumptions

- Only VOC emissions are emitted by the adhesives operation
- The maximum quantity of adhesives that will be applied is 714 lb/day and 214,200 lb/year.
- The existing facility-wide VOC limit of 73,403 lb/year on a rolling 12-month basis will be retained.

B. Emission Factors

The facility originally proposed the use of one of three adhesives for the operation, Aquence FB 9080MTUV, Aquence FB 9080H, or Aquence FB 41007. However, the facility's engineering department later confirmed that the use of Aquence FB41007 will be required for this unit, due to the complexity involved with manufacturing wine cartons (14 folds are required) and the speed at which this unit will operate (up to 600,000 cartons manufactured/day).

Product	Density (lb/gal)	VOC Content (% by weight)	Maximum Usage Rate (lb/day)	Maximum Usage Rate (lb/year)
Aquence FB 41007	8.9	2.0	714	214,200

C. Calculations

1. Pre-Project Potential to Emit (PE1)

This is a new emission unit. Therefore, PE1 = 0 for all pollutants.

2. Post Project Potential to Emit (PE2)

N-7464-1-1: Printing Operation

PE2 VOC = 714 lb-adhesive/day x 0.02 lb-VOC/lb-adhesive
PE2 VOC = 14.3 lb-VOC/day

PE2 VOC = 214,200 lb-adhesive/year x 0.02 lb-VOC/lb-adhesive
PE2 VOC = 4,284 lb-VOC/year

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

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

The following emission data was obtained from the engineering evaluation for District Project N-1152756.

Permit Number	Pollutants (lb/yr)				
	NO_X	SO_X	PM_{10}	CO	VOC
N-3606-3-7	0	0	0	0	
N-3606-4-6	0	0	183	0	
N-3606-11-9	0	0	0	0	
N-3606-13-7	0	0	0	0	
N-3606-14-7	0	0	0	0	
N-3606-15-7	0	0	0	0	
N-3606-16-7	0	0	0	0	
N-3606-19-5	0	0	0	0	
N-3606-21-5	0	0	0	0	
N-3606-23-6	0	0	0	0	73,403
N-3606-24-5	0	0	0	0	
N-3606-25-3	0	0	0	0	
N-3606-26-6	0	0	0	0	
N-3606-27-4	0	0	0	0	
N-3606-29-1	0	0	0	0	
N-3606-30-1	1,430	509	1,358	6,612	
N-3606-31-2	0	0	0	0	
N-3606-32-0	0	0	0	0	
ERC	0	0	0	0	0
SSPE1	**1,430**	**509**	**1,541**	**6,612**	**73,403**

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

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

Permit Number	Pollutants (lb/yr)				
	NO_X	SO_X	PM_{10}	CO	VOC
N-3606-3-7	0	0	0	0	
N-3606-4-6	0	0	183	0	
N-3606-11-9	0	0	0	0	
N-3606-13-7	0	0	0	0	
N-3606-14-7	0	0	0	0	
N-3606-15-7	0	0	0	0	
N-3606-16-7	0	0	0	0	
N-3606-19-5	0	0	0	0	
N-3606-21-5	0	0	0	0	
N-3606-23-6	0	0	0	0	73,403
N-3606-24-5	0	0	0	0	
N-3606-25-3	0	0	0	0	
N-3606-26-6	0	0	0	0	
N-3606-27-4	0	0	0	0	
N-3606-29-1	0	0	0	0	
N-3606-30-1	1,430	509	1,358	6,612	
N-3606-31-2	0	0	0	0	
N-3606-32-0	0	0	0	0	
N-3606-34-0	0	0	0	0	
ERC	0	0	0	0	0
SSPE1	**1,430**	**509**	**1,541**	**6,612**	**73,403**

5. 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)						
	NO_X	SO_X	PM_{10}	$PM_{2.5}$	CO	VOC
SSPE1	1,430	509	1,541	1,541	6,612	73,403
SSPE2	1,430	509	1,541	1,541	6,612	73,403
Major Source Threshold	20,000	140,000	140,000	200,000	200,000	20,000
Major Source?	No	No	No	No	No	Yes

Note: PM2.5 assumed to be equal to PM10

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

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(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	0.7	36.7	0.3	3.3	0.8	0.8
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

The unit in this project only emits VOCs. Since the current permits include a facility-wide limit for VOC emissions, a clean emission unit analysis for all of the existing units must be performed for VOC emissions.

The following table shows the applicable BACT guideline number, the Achieved-in-Practice BACT requirement and whether or not the unit is a Clean Emission Unit (Achieved-in-Practice BACT was met).

Permit	Description	BACT Guideline	Achieved-in-Practice BACT Requirement	Permit Limit	Clean Emission Unit
N-3306-3-7 N-3306-11-9 N-3306-19-5 N-3306-21-5 N-3306-25-3 N-3306-27-4 N-3306-31-2	Corrugated Box/Board Manufacturing	4.9.12	Adhesive with 0.44 lb VOC/gal or less	VOC = 0.021 lb/gal VOC = 0.021 lb/gal VOC = 0.021 lb/gal VOC = 0.021 lb/gal VOC = 0.021 lb/gal VOC = 0.021 lb/gal VOC = 0.015 lb/gal	Yes Yes Yes Yes Yes Yes Yes
N-3306-4-6	Corrugated Board Manufacturing And Corrugated Board Laminating	4.9.12 4.11.3	Adhesive with 0.44 lb VOC/gal or less Adhesive with 0.021 lb VOC/gal or less	VOC = 0.021 lb/gal VOC = 0.021 lb/gal	Yes
N-3306-13-7 N-3306-14-7 N-3306-15-7	Flexographic Printer (low-end graphics) And Gluer	4.7.15 4.9.12	Ink with 0.3 lb VOC/gal or less Adhesive with 0.44 lb VOC/gal or less	VOC = 0.3 lb/gal VOC = 0.021 lb/gal	Yes Yes Yes
N-3306-16-7 N-3306-23-6 N-3306-26-6 N-3306-32-1	Offset lithographic printing operations	4.7.2	Inks: <5% by wt. or 30% by weight for high end graphics Fountain Solution: <5% by vol. for coldest offset lithographic and sheet-fed lithographic greater than 11 x 17 inches Or 8% by volume for high end graphics	Inks with < 5% VOC by wt. Fountain solutions with < 5% VOC by vol. for high-end graphics and < 5% by vol. for non-high-end graphics	Yes Yes Yes Yes

Permit	Description	BACT Guideline	Achieved-in-Practice BACT Requirement	Permit Limit	Clean Emission Unit
N-3306-24-5 N-3306-33-0* Unit 33-0 is a proposed unit	Offset lithographic printing operation	4.7.2	Inks: <5% by wt. or 30% by weight for high end graphics Fountain Solution: <5% by vol. for coldest offset lithographic and sheet-fed lithographic greater than 11 x 17 inches Or 8% by volume for high end graphics	Inks with < 5% VOC by wt. < 6% by volume for high-end graphics and <5% by volume for non-high-end graphics	Yes
N-3306-29-1	N/A. This unit does not emit VOC.				
N-3306-30-1	Boiler	--	Use of natural gas with LPG or propane as back fuel	Requires the use of natural gas	Yes

As shown above, all of the existing units at the facility are clean for VOC emissions.

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."

Since this source is not included in the 28 specific source categories specified in 40 CFR 51.165, the, increases in fugitive emissions are not included in the SB 288 Major Modification calculation.

Since this facility is a major source for VOCs, the project's PE2 is compared to the SB 288 Major Modification Threshold 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	4,284	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

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.

For new emissions units, the increase in emissions is equal to the PE2 for each new unit included in this project. The proposed emission unit only emits VOCs. Therefore, a Federal Major Modification may only be triggered for VOCs.

Federal Major Modification Thresholds for Emission Increases			
Pollutant	**Total Emissions Increases (lb/yr)**	**Thresholds (lb/yr)**	**Federal Major Modification?**
VOC	4,284	0	**Yes**

Since there is an increase in VOC emissions, this project constitutes 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-3606-34-0	0	4,284	4,284
		Net Emission Change (lb/year):	4,284
		Federal Offset Quantity: (NEC * 1.5)	**6,426**

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. This project will only emit VOC emissions, for which there is no PSD significance emission increase threshold. Therfore, this project is not subject to the requirements of Rule 2410 and no further discussion 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 V.

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 2.0 pounds per day,
b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding 2.0 pounds per day,
c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding 2.0 pounds per day, and/or
d. Any new or modified emissions unit, in a stationary source project, which results in a Major Modification.

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

Only VOC emissions are emitted by the proposed wine carton manufacturing operation. Since post-project VOC emissions are greater than 2.0 lb/day, BACT is triggered for VOC emissions.

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

There are no emissions units being relocated from one stationary source to another; therefore BACT is not triggered for the relocation of any emission units.

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

No existing units are being modified in this project.

d. Major Modification

As discussed in Section VII.C.7 above, this project triggers Federal Major Modification for VOC emissions; therefore, BACT is triggered for VOC emissions as a result of a Major Modification.

In summary, BACT is triggered for VOC emissions from the proposed wine carton manufacturing operation.

2. BACT Guideline

Existing BACT Guideline 4.9.6, attached in Appendix II, is applicable to the paper carton manufacturing operation.

3. Top-Down BACT Analysis

Pursuant to the top-down BACT analysis for VOC in Appendix II, BACT for the paper carton manufacturing operation is the following:

VOC: Use of adhesives with a VOC content of 4.04 lb/gal, or less (less water and exempt compounds)

The applicant is proposing the use of adhesives with less than 2% VOC's by weight (less water and exempt compounds), equivalent to 0.18 lb-VOC/gal (less water and exempt compunds) at a typical adhesive density of 9.0 lb/gal. Therefore, the applicant is proposing to meet BACT requirements.

B. Offsets

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to 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)					
	NO_X	SO_X	PM_{10}	CO	VOC
SSPE2	1,430	509	1,541	6,612	73,403
Offset Threshold	20,000	54,750	29,200	200,000	20,000
Offset Triggered?	No	No	No	No	Yes

As discussed in Section VII.D.4 of this document, the facility is an existing Major Source for VOC and the SSPE2 is greater than the offset thresholds. 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) = (Σ[PE2 – BE] + ICCE) x 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

There are no increases in Cargo Carrier emissions as a result of this project. Thus,

Offsets Required = Σ (PE2 – BE) x DOR

For projects with unit in an SLC, the equation becomes:

Offsets Required = Σ ($PE2_{SLC}$ – BE_{SLC}) x DOR

As shown in Section VII.D.5 of this document, all permit units at this facility meet the District's determination of achieved-in-practice BACT (and are thus Clean Emission Units). Therefore the pre project BE emissions are equal to the pre project PE emissions (BE_{SLC} = $PE1_{SLC}$).

For this project, $PE2_{SLC}$ is equal to $PE1_{SLC}$. Thus,

Offsets Required = Σ ($PE2_{SLC}$ – BE_{SLC}) x DOR

Offsets Required = ($PE2_{SLC}$ – $PE1_{SLC}$) x DOR
= (73,403 lb-VOC/yr – 73,403 lb-VOC/yr) x DOR
= 0 lb-VOC/yr

Offsets are not required for this project.

C. Public Notification

1. Applicability

Public noticing is required for:
a. Any new Major Source, 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

This facility is not a new facility that is a Major Source.

b. Major Modification

As demonstrated in Section VII.C.7 above, this project triggers a Federal Major Modification. Therefore a public notice is required.

c. PE > 100 lb/day

Applications which include a new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include a new emissions unit that has daily emissions greater than 100 lb/day for any pollutant.

d. Offset Threshold

The following table compares the SSPE1 with the SSPE2 in order to determine if any offset thresholds have been surpassed with this project.

Offset Threshold				
Pollutant	**SSPE1 (lb/year)**	**SSPE2 (lb/year)**	**Offset Threshold**	**Public Notice Required?**
NO_X	1,430	1,430	20,000 lb/year	No
SO_X	509	509	54,750 lb/year	No
PM_{10}	1,541	1,541	29,200 lb/year	No
CO	6,612	6,612	200,000 lb/year	No
VOC	73,403	73,403	20,000 lb/year	No

No offset thresholds will be surpassed in this project; therefore public noticing is not required for offset purposes.

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 difference between SSPE2 and SSPE1, i.e. SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table:

Stationary Source Increase in Permitted Emissions [SSIPE] – Public Notice					
Pollutant	**SSPE2 (lb/year)**	**SSPE1 (lb/year)**	**SSIPE (lb/year)**	**SSIPE Public Notice Threshold**	**Public Notice Required?**
NO_x	1,430	1,430	0	20,000 lb/year	No
SO_x	509	509	0	20,000 lb/year	No
PM_{10}	1,541	1,541	0	20,000 lb/year	No
CO	6,612	6,612	0	20,000 lb/year	No
VOC	73,403	73,403	0	20,000 lb/year	No

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

2. Public Notice Action

As discussed above, public notice is required for this project for triggering Federal Major Modification. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and US Environmental Protection Agency (US EPA) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC for the equipment.

D. Daily Emission Limits (DELs)

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 permits.

- *The VOC emissions from this operation shall not exceed 14.3 pounds in any one day. [District Rule 2201]*
- *The VOC emissions from this operation shall not exceed 4,284 lb in any one year. [District Rule 2201]*
- *The VOC content of the adhesives applied shall not exceed 2.0 percent by weight, less water and exempt compounds. [District Rules 2201 and 4653]*
- *The facility-wide VOC emissions shall not exceed 73,403 pounds on a rolling 12-month basis. [District Rule 2201]*

E. Compliance Assurance

1. Source Testing

The VOC emissions from this unit are based on the adhesive properties supplied by the manufacture and the maximum usage rates supplied by the applicant. Source testing is not necessary for this proposal.

2. Monitoring

Monitoring is not required to demonstrate compliance with District Rule 2201.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201, where applicable. The following conditions will be included on the Authority to Construct permits:

- *Permittee shall maintain records of the daily VOC emissions from the adhesive operation. [District Rule 2201]*

- *Permittee shall maintain records of the annual VOC emissions from the adhesive operation. This record shall be updated on at least a monthly basis. [District Rule 2201]*

- *The facility shall keep a record of the cumulative facility-wide VOC emissions on a rolling 12-month basis. The record shall be updated at least monthly. [District Rule 2201]*

- *All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 2201 and 4653]*

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

An AAQA is 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. Since this project only results in VOC emissions and there is no ambient air quality standard for VOC emissions, an ambient air quality analysis is not required for this project.

G. Compliance Certification

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Title I 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 facility is a new major source and this project does constitute a Title I modification, therefore this requirement is applicable. Pacific Southwest Container's compliance certification is included in Appendix IV.

H. Alternate Siting Analysis

The applicant is proposing to install a carton manufacturing operation at their existing facility. Alternative sites would involve the relocation and/or construction of various support structures on a much greater scale, and would therefore result in a much greater impact. Therefore, the use of the existing site will result in the least possible impact from the project.

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 this project triggers a Federal Major Modification, the project does not qualify as a minor permit modification or administrative amendment; therefore, this project is a Significant Modification to the Title V permit. A public notice will be performed prior to issuing the Authority to Construct permit.

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 NSPS standards applicable to the proposed operation.

Rule 4002 New Emission Standards for Hazardous Air Pollutants (NESHAP)

There are no NSPS standards applicable to the proposed operation.

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 on the Authority to Construct permit:

- *{4383} No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin County)]*

Rule 4102 Nuisance

Rule 4102 states that no air contaminant shall be released into the atmosphere which causes a public nuisance. Section 4.0 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 this operation, provided the equipment is well maintained. Therefore, compliance with this rule is expected. Therefore, the following condition will be listed on the Authority to Construct permit:

- *{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 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. Therefore pursuant to the policy, a Risk Management Review (RMR) has been performed for this project to analyze the impact of toxic emissions. The RMR results are summarized in the following table.

RMR Summary (see full summary in Appendix III)			
Categories	**Box Manufacturing (Unit 34-0)**	**Project Totals**	**Facility Totals**
Prioritization Score	N/A*	N/A*	> 1
Acute Hazard Index	N/A	N/A	0.00
Chronic Hazard Index	N/A	N/A	0.15
Maximum Individual Cancer Risk	N/A	N/A	2.48E-06
T-BACT Required?	No		
Special Permit Conditions?	No		

* A prioritization was not performed after determining no Toxic Air Contaminants (TACs) are associated with this project. No further analysis was required

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

Section 2.0 states that this rule is applicable to any graphics art operation. A graphics arts printing operations is defined as "those operations employing conventional printing operations, or any coating or laminating process associated with conventional printing to produced published products and packages". Graphics arts coating is the application of a uniform layer of material across the entire width of the substrate.

The proposed unit is not a printing or laminating operation. While adhesive is applied to the cartons, the adhesive is not applied across the entire width of the substrate. Therefore, the proposed operation is also not a graphic arts coating operation.

The proposed unit is not subject to the requirements of District Rule 4607.

Rule 4653 Adhesives and Sealants

The carton manufacturing operation (N-3606-34-0) may be subject to the requirements of this rule. Pursuant to Section 4.1.2, the use of adhesive products and sealant products containing les than 20 grams VOC/liter (0.17 lb/gal) is not subject to the requirements of rule 4653. The proposed adhesive has a worst-case VOC content of 2.0% by weight, and a density of 8.9 lb/gal. Thus,

VOC Content = 8.9 lb/gal x 0.02 lb-VOC/lb-adhesive = 0.18 lb-VOC/gallon

Since the worst-case VOC content is greater than 0.17 lb/gal, the carton manufacturing operation is subject to the requirements of District Rule 4653.

Pursuant to District Rule 4653, Table 2, the VOC content of contact adhesives must not exceed 80 grams/liter, exclusing water and exempt compounds. The proposed adhesive has a VOC content of 0.18 lb/gallon, equivalent to approximately 20 grams/liter. Therefore, the proposed adhesive is compliant with the VOC content limit of Rule 4653.

Section 5.2 states that an operator shall only use the following equipment to apply adhesives:

1. Electrostatic Application
2. Flow Coater
3. Roll Coater
4. Dip Coater
5. Hand Application Methods
6. Airless Spray
7. HVLP Spray

The applicant is not proposing to spray the adhesive onto the cartons. The following condition will be included on the Authority to Construct:

- *Adhesives shall be applied only utilizing flow coating, roll coating, dip coating, hand application, or other non-atomizing application techniques. [District Rules 2201 and 4653]*

Section 5.3 states the work practice requirments for adhesive products. The following conditions will be included on the Authority to Construct:

- *The operator shall store and dispose of adhesive products and spent solvents and waste solvent 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 the containers are empty. [District Rule 4653]*

- *The operator shall minimize spills of VOC-containing adhesive products and process related waste materials. [District Rule 4653]*

Section 5.5 lists organic solvent VOC limits for solvents used in cleaning operations. The following conditions will be included on the Authority to Construct:

- *No owner or operator shall use organic solvents for cleaning operations that exceed the VOC content limits specified as follows: A) Product cleaning during manufacturing process or surface preparation for adhesive application, 25 g/l (0.21 lb/gal); B) repair and maintenance cleaning, 25 g/l (0.21 lb/gal); C) cleaning of adhesive application equipment, 25 g/l (0.21 lb/gal). [District Rule 4653]*

Section 6.1.1 requires the applicant to maintain records of the VOC content, in grams VOC per liter, of all adhesive materials used and stored at the stationary source, and to keep records of the VOC content of all solvents used and stored at the stationary source. Section 6.1.4 lists solvent cleaning record requirements for the operation. Section 6.1.5 states that records must be kept for a period of five years. The following conditions will be included on the Authority to Construct:

- *Records of the VOC content, in grams/liter, of all adhesives, all solvents, and all other VOC containing materials used and stored at the stationary source shall be kept. [District Rule 4653]*

- *{2893} Permittee shall keep the following records for solvent cleaning activities: manufacturer's product data sheet or MSDS of solvents used, VOC content of solvents in g/l or lb/gal, and the type of cleaning activity for which each solvent is used. [District Rule 4653]*

- *All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 2201 and 4653]*

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)

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

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

Greenhouse Gas (GHG) Significance Determination

The District is the Lead Agency for this project.

This equipment does not emit greenhouse gas pollutants. The District therefore concludes that the project will have a less than cumulatively significant impact on global climate change.

District CEQA Findings

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 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)).

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 letter of credit may be required. The decision to require an indemnity agreement and/or letter of credit are 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 proposed project has been determined to have a less than significant environmental impact. In addition, the project does not trigger school notice. Finally, there is no known public concern for cardboard manufacturing facilities. Therefore, the District has determined that there is minimal potential for litigation risk for this ATC permitting project, and as such, an Indemnification Agreement and Letter of Credit are not required for this project.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue ATC N-3606-34-0 subject to the permit conditions on the attached draft ATC in Appendix I.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Previous Fee Schedule
N-3606-34-0	3020-01-D	134 electric HP	None

Appendices

I: Draft Authority to Construct Permit
II: BACT Guideline 4.9.6 and Top-Down BACT Analysis
III: Health Risk Assessment Results Summary
IV: Compliance Certification
V: Quarterly Net Emissions Change Calculations

APPENDIX I

Draft Authority to Construct Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-3606-34-0

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: PACIFIC SOUTHWEST CONTAINER
MAILING ADDRESS: ATTN: SR VICE PRESIDENT OF QUALITY & ENVIRONMENTAL MNGT
4530 LECKRON RD
MODESTO, CA 95357

LOCATION: 4530 LECKRON RD
MODESTO, CA 95357

EQUIPMENT DESCRIPTION:
MASTERFOLD 110 GNB CARTONPACK GT FOLDER GLUER WITH A MASTER EASYFEEDER GT AUTOMATIC CARTON FEEDER, USED FOR THE MANUFACTURING OF WINE CARTONS AND SIMILAR PRODUCTS

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {4383} No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
3. The VOC emissions from this operation shall not exceed 14.3 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The VOC emissions from this operation shall not exceed 4,284 lb in any one year. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The VOC content of the adhesives applied shall not exceed 2.0 percent by weight, less water and exempt compounds. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The facility-wide VOC emissions shall not exceed 73,403 pounds on a rolling 12-month basis. [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

Arnaud Marjollet, Director of Permit Services

7. The operator shall store and dispose of adhesive products and spent solvents and waste solvent 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 the containers are empty. [District Rule 4653] Federally Enforceable Through Title V Permit

8. The operator shall minimize spills of VOC-containing adhesive products and process related waste materials. [District Rule 4653] Federally Enforceable Through Title V Permit

9. No owner or operator shall use organic solvents for cleaning operations that exceed the VOC content limits specified as follows: A) Product cleaning during manufacturing process or surface preparation for adhesive application, 25 g/l (0.21 lb/gal); B) repair and maintenance cleaning, 25 g/l (0.21 lb/gal); C) cleaning of adhesive application equipment, 25 g/l (0.21 lb/gal). [District Rule 4653] Federally Enforceable Through Title V Permit

10. Records of the VOC content, in grams/liter, of all adhesives, all solvents, and all other VOC containing materials used and stored at the stationary source shall be kept. [District Rule 4653] Federally Enforceable Through Title V Permit

11. Permittee shall keep the following records for solvent cleaning activities: manufacturers product data sheet or MSDS of solvents used, VOC content of solvents in g/l or lb/gal, and the type of cleaning activity for which each solvent is used. [District Rule 4653] Federally Enforceable Through Title V Permit

12. Permittee shall maintain records of the daily VOC emissions from the adhesive operation. [District Rule 2201] Federally Enforceable Through Title V Permit

13. Permittee shall maintain records of the annual VOC emissions from the adhesive operation. This record shall be updated on at least a monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit

14. The facility shall keep a record of the cumulative facility-wide VOC emissions on a rolling 12-month basis. The record shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

15. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 2201 and 4653] Federally Enforceable Through Title V Permit

APPENDIX II

BACT Guideline 4.9.6 and Top-Down BACT Analysis

Per » B A C T » Bact Guideline.asp?category Level1=4&category Level2=9&category Level3=6&last Update=11 » 28 :

Back

Best Available Control Technology (BACT) Guideline 4.9.6
Last Update: 11/28/2000

Paper Carton Manufacturing - Printing and Adhesive Application

Pollutant	Achieved in Practice or in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	1. Adhesive with a VOC content of = or < 5.7 lb/gal (excluding water and exempt compounds) and Inks with a VOC content of = or < 2.5 lb/gal (excluding water and exempt compounds)	1. Capture and thermal incineration. 2. Capture and carbon adsorption. 3. Adhesive with a VOC content of = or < 4.04 lb/gal (excluding water and exempt compounds) and Inks with a VOC content of = or < 2.4 lb/gal (excluding water and exempt compounds)	

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 for VOC Emissions from N-3606-34-0

The wine carton manufacuring operation is subject to the requirements of BACT Guideline 4.9.6, "Paper Carton Manfacturing – Printing and Adhesive Application", and triggers BACT for VOC emissions from the use of adhesives.

I. Step 1 - Identify All Possible Control Technologies

The BACT options for VOC emissions for adhesives use are shown below.

Option 1: Adhesive with a VOC content ≤ 5.7 lb/gal (less water and exempt compunds) - Achieved in Practice

Option 2: Capture of VOCs and thermal oxidation – Technologically Feasible

Option 3: Capture of VOCs and carbon adsorption - Technologically Feasible

Option 4: Adhesive with a VOC content ≤ 4.04 lb/gal (less water and exempt compunds) - Technologically Feasible

II. Step 2 - Eliminate Technologically Infeasible Options

None of the above control options are infeasible.

III. Step 3 - Rank Technologies

Control Technology	Rank	Technology Classification for BACT
Thermal Oxidation (98% overall VOC Control)	1	Technologically Feasible
Carbon Adsorption (95% overall VOC Control)	2	Technologically Feasible
Adhesive with VOC Content ≤ 4.04 lb/gal (less water and exempt compunds)	3	Technologically Feasible
Adhesive with VOC Content ≤ 5.7 lb/gal (less water and exempt compunds)	4	Achieved in Practice

IV. Step 4 - Cost Effectiveness Analyses

Pursuant to the District's BACT policy, a cost-analysis must be performed to determine whether technologically feasible control options are cost effective. If cost-effective, the use of a technologically feasible control option is required. A VOC control option is cost effective if the cost per ton of VOC reductions from industry standard is equal to or less than $17,500.

Cost Effectiveness Analysis: Regenerative Thermal/Catalytic Oxidizer

Industry Standard Emissions

Industry standard emissions for the adhesive will be based on the rule 4653 limit of 80 grams-VOC/liter (0.67 lb-VOC/gallon).

Usage Rate = 214,200 lb-adhesive/year ÷ 8.9 lb-adhesive/gal
Usage Rate = 24,067 gallons adhesive/year

Industry Standard Emissions = 24,067 gal/year x 0.67 lb-VOC/gal
Industry Standard Emissions = 16,125 lb-VOC/year

Emission Reductions

Assuming 100% capture, a thermal or catalytic oxidizer would control 98% of VOC emissions. Therefore, the quantity of emissions reduced is:

Emission Reductions = Industry Standard Emissions x 0.98
Emission Reductions = 16,125 lb-VOC/year x 0.98
Emission Reductions = 15,803 lb/year (7.9 tons/year)

Capital Cost Regenerative Thermal/Catalytic Oxidizer

Pursuant to discussion between the District and the sales representative for Branch Environmental Engineering, a regenerative thermal/catalytic oxidizer manufacturer, the approximate capital cost of a regenerative oxidizer to control a single carton manufacturing operation would range from $100,000 to 150,000 and the minimum burner heat input would be approximately 3 MMBtu/hr.

The current sales tax rate for Stockton, CA is 7.625%. Thus,

Total Capital Cost = $100,000 x 1.07625
Total Capital Cost = $107,625

Annualized Capital Cost

Annualized Cost = $107,625 × 0.1 × $1.1^{10} \div (1.1^{10} - 1)$
Annualized Cost = $17,515/year

Annual Fuel Cost

As stated earlier, a 3 MMBtu/hr burner would be required for the regenerative oxidizer. Using this information, the annual heat input to operate the oxidizer is:

Annual Heat Input = 3 MMBtu/hr x 8,760 hr/year
Annual Heat Input = 26,280 MMBtu/year

The heat content of the waste stream must be subtracted from the above value to determine the quantity of supplemental fuel required. It is assumed that the VOC's in the waste stream have similar properties to styrene, which has a heat content of 17,600 Btu/lb. Thus,

Waste Stream Heat Content = 16,125 lb-VOC burned/yr x 0.0176 MMBtu/lb
Waste Stream Heat Content = 284 MMBtu/year

Supplemental Fuel Use = (26,280 MMBtu/year – 284 MMBtu/year) x 1000 scf/MMBtu
Supplemental Fuel Use = 25,996,000 scf/year

The average natural gas price during the past 12 months of data available from Energy Information Administration's database is $6.25 per 1000 scf of natural gas[1].

Annual Natural Gas Cost = 25,996,000 SCF/year x $6.25/1000 scf
Annual Natural Gas Cost = $162,475/year

Cost/ton of Reduction

Cost/ton = (Annualized Capital Cost + Annual Fuel Cost) ÷ Emissions Reduced
Cost/ton = ($17,515 + $162,475) ÷ 7.90 tons-VOC reduced
Cost/ton = $22,784/ton

Since the cost/ton is greater than the cost effectiveness threshold of $17,500/ton, use of an RTO/RCO is not cost effective. This cost analysis did not include the cost of a capture system and ducting. Therefore, the analysis is sufficiently conservative.

Cost Effectiveness Analysis: Carbon Adsorption

Industry Standard Emissions

The industry standard emissions were calculated earlier in this document.

Industry Standard Emissions = 16,125 lb-VOC/year

Emission Reductions

A carbon adsorption system is expected to control 95% of VOC emissions. Therefore, the quantity of emissions reduced is:

Emission Reductions = Industry Standard Emissions x 0.95
Emission Reductions = 16,125 lb-VOC/year x 0.95
Emission Reductions = 15,319 lb/year (7.7 tons/year)

[1] Obtained from the Feb 2016 through Jan 2016 monthly industrial natural gas price data for California, per http://tonto.eia.doe.gov/dnav/ng/hist/n3035ca3m.htm

Carbon Replacement/Disposal Cost

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. Assuming that the carbon will absorb 20% of its weight in VOCs, and a VOC control efficiency of 95%, the total amount of carbon required per year can be determined as follows:

VOCs Adsorbed = 16,125 lb-VOC/yr x 0.95 = 15,319 lb/year

Carbon Required = 15,319 lb-VOC/year 1 lb-Carbon/0.2 lb-VOC
Carbon Required = 76,595 lb-Carbon/year

Kurt Keefer of EAS Corp, (916) 967-9007, recently quoted a Carbon disposal/replacement cost range of $2/lb to $10/lb. $2/lb will be used to conservatively calculate the cost of replacing/disposing of the carbon.

Cost of carbon = 76,595 lb-Carbon/year x $2.00/lb = $153,190/year

Controlled Cost per ton of emissions:

Cost/ton of emissions ($/ton) = $153,190 $/year ÷ 7.7 ton-VOC/year
Cost/ton of emission = $19,895
/ton

The cost of disposing/replacing the carbon for the carbon adsorption system alone is greater than the VOC cost effectiveness threshold of $17,500 per ton (per BACT Policy). Thus, the use of a carbon adsorption system is not cost effective.

Cost Effectiveness Analysis: Adhesives with VOC Content ≤ 4.04 lb/gal (less water and exempt compunds)

The applicant is proposing this level of control. Therefore, a cost analysis is not necessary for this control option.

V. Step 5 - Select BACT

The use of add-on controls, regenerative oxidation and carbon adsorption, were determined to not be cost effective. The applicant proposed to meet the technologically feasible option of using adhesives with a VOC content equal to or less than 4.04 lb/gal (less water and exempt compounds). This is the next best control in the ranking; therefore, the applicant's proposal satisfies BACT.

APPENDIX III

Risk Management Review Summary

San Joaquin Valley Air Pollution Control District
Risk Management Review

To:	James Harader – Permit Services
From:	Tadeh Issakhanian – Technical Services
Date:	March 23, 2016
Facility Name:	Pacific Southwest Container
Location:	4530 Leckron Ave. Modesto
Application #(s):	N-3606-34-0
Project #:	N-1160858

A. RMR SUMMARY

RMR Summary			
Categories	**Box Manufacturing (Unit 34-0)**	**Project Totals**	**Facility Totals**
Prioritization Score	**N/A***	N/A*	>1
Acute Hazard Index	N/A	N/A	0.00
Chronic Hazard Index	N/A	N/A	0.15
Maximum Individual Cancer Risk	N/A	N/A	2.48E-06
T-BACT Required?	**No**		
Special Permit Conditions?	**No**		

*A prioritization was not performed after determining no Toxic Air Contaminants (TACs) are associated with this project. No further analysis was required.

I. Project Description

Technical Services received a request on March 16, 2016, to perform a Risk Management Review for the installation of a new box manufacturing operation (folder/gluer). The folder gluer will use adhesives to manufacture the box.

II. Analysis

Technical Services reviewed the submitted MSDS sheets for toxic air contaminants (TACs) with risk factors. After reviewing the MSDS sheet, it was determined that there are no TACs with risk factors present. 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

Compliance Certification

March 8, 2016

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

Subject: Compliance Statement for Pacific Southwest Container LLC

Dear Mr. Peirce:

In accordance with Rule 2201, Section 4.15, "Additional Requirements for New Major Sources and Federal Major Modifications," Pacific Southwest Container L.L.C. is pleased to provide this compliance statement regarding its Bobst Masterfold project at stationary source N-3606.

All major stationary sources in California owned or operated by Pacific Southwest Container L.L.C., or by any entity controlling, controlled by, or under common control with Pacific Southwest Container L.L.C., 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:

Facility #1: Pacific Southwest Container L.L.C.- 4530 Leckron Road- Modesto, CA 95357

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,

Mac McCullough, Senior Vice President Quality Engineering & Environmental Mgmt.
Pacific Southwest Container L.L.C.

APPENDIX V

Quarterly Net Emissions Change (QNEC)

Quarterly Net Emissions Change (QNEC)

The QNEC is entered into PAS database and subsequently reported to CARB/EPA. Since this facility has a facility-wide VOC limit, and the applicant is not proposing to modify that limit, the quarterly net emission change is equal to zero.