west virginia department of environmental protection

Division of Air Quality
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Charleston, WV 25304
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Austin Caperton, Cabinet Secretary
www.dep.wv.gov

ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:	R13-2562D
Plant ID No.:	069-00084
Applicant:	Tekni-Plex, Inc. dba Tri-Seal
Facility Name:	Packing Converting Facility
Location:	Triadelphia, Ohio County, WV
NAICS Code:	322222 – Coated and Laminated Paper Manufacturing
Application Type:	Modification
Received Date:	September 18, 2017; resubmitted Feburary 9, 2018
Engineer Assigned:	John Legg
Fee Amount:	$1,000.00
Date Received:	September 19, 2017
Complete Date:	February 9, 2018
Due Date:	May 9, 2018
Applicant Ad Date:	September 22, 2017
Newspaper:	*Wheeling News Register*
UTM's:	Easting: 537.13 Northing: 4,434.9 Zone: 17
Description:	Addition of a printer (P1S;P1E) along with increases in permit limits for existing permitted equipment.

SUMMARY

This modification permit documents the (after-the-fact) addition of a printer (P1S; P1E). Also, it documents for the first time equipment-cleaning emissions for Laminators 3 and 5 estimated by the company to equal 2.10 tons per year (tpy) of VOC/HAP (DEG monobutyl ether).

By incorporating the changes proposed in this modification, the writer estimates that the emissions from the facility will increase by the amounts shown in Table 1 below.

Table 1: Estimated (by DAQ Writer) Emission Increases in Going from R13-2562C to R13-2562D.			
Air Pollutant	**Before (1) R13-2562C**	**After R13-2562D**	**Delta (R13-2562D - R13-2562C)**
VOC	5.08	11.43 (2)	+6.35
NOx	0.09	0.36 (3)	+0.27
CO	0.06	0.30 (3)	+0.24
PM	0.01	0.027 (3)	+0.02

(1) Data from permit R13-2562C for Laminator 3. VOC Cleaning emissions from Laminator 3 and Laminator 5 were not included in permit R13-2562C.

(2) VOC emissions after this modification are estimated by Tri-seal to be:

11.43 tpy = 10.01 tpy from Laminator 3 + 1.05 tpy from cleaning Laminator 5 + 0.37 tpy from new Printer 1

Where:

VOC Emissions from Laminator 3 = 8.79 (coating) + 0.020 (oven) + 1.20 (cleaning) = 10.01 ton/yr

(3) Natural gas combustion emissions from Laminator 3's oven.

TIMING

September 18, 2017 - Permit application received at DAQ.

September 19, 2017 - $1,000.00 application fee received at DAQ.

September 22, 2017 - Tri-Seal's legal advertisement runs in the *Wheeling New Register.*

October 19, 2017 - E-mailed copy of Newspaper Affidavit of Publication.

October 24, 2017 - Incomplete email sent to John Brak.

October 24, 2017 - John Brak forwards incomplete email to an environmental consultant for assistance.

October 30, 2017 -	Larry Bernson sends copy of omitted (from application) Excel workbook.
October 30, 2017 -	The writer emails Larry Bernson that there is a quality issue with the application that goes beyond the calculation section of the application.
October 30, 2017 -	The writer emails John Brak a copy of a previous permit application sent by Tri Seal to the DAQ on January 12, 2012. The email uses the 2012 application as an example of what to do right. It compares the 2012 application to the deficient application received in September 18, 2017.
October 31, 2017 -	The writer emails John Brak stating that a complete application needs to be submitted in writing, that the writer does not have the time to work back and forth with Larry Bernson over the phone to come up with a complete application. The DAQ recommends that Tri Seal work with Gene Coccari of DAQ's small business group to come up with a complete application.
October 31, 2017 -	Email from Larry Bernson still trying to explain the Excel workbook and not addressing the deficiencies in the permit application.
October 31, 2017 -	Email from Beverly McKeone to Larry Bernson clarifying that the requested information be submitted in writing, that it is not sufficient to "explain" what the spreadsheet means.
October 31, 2017 -	Clark Baubles thanks Bev for the clarification and agrees to provide the addition information and formatting changes that were requested.
November 16, 2017 -	Clark Bauble emails the writer with amended or additional information that was requested.
November 16, 2017 -	The writer emails Clark Bauble that the DAQ must be sent a hard copy of the amended permit application approved/signed by Tekni-Plex's Responsible Official.

November 24, 2017 - Email from Larry Bernson to Gene Coccari thanking Gene for reviewing revisions and commending on Tri Seals permit application.

November 29, 2017 - Email from Gene Coccari to Larry Bernson with comments on Tri Seals revised application.

November 30, 2017 - Email from the writer to Gene Coccari thanking Gene for reviewing Tri Seal's application and for pointing out areas that need clarification/revision. Also voices concern that the calculation revisions could result in Tri-Seal needing to re-run their legal ad due to originally under-estimating emissions.

December 1, 2017 - Email from Larry Bernson to Gene Coccari thanking Gene for the time and effort provided in reviewing the application. Also, concerns are shared with Gene about his understanding of how Tri Seal documented VOC emissions.

December 5, 2017 - Letter from the writer thanking Gene Coccari for working with Tri Seal.

January 4, 2018 - Email from the writer to Gene Coccari stating that Tekni-Plex (Tri-Seal Products) had not sent in the revised application.

January 12, 2018 - Email from the writer to Clark Baubles asking that a hard copy of the corrected application be submitted.

February 9, 2018 - Hard copy of the revised Tekni-Plex application received at the DAQ.

April 4, 2018 - Draft permit sent via email to Tekni-Plex's John Brak for comment.

DESCRIPTION OF PROCESS

Tri-Seal operates a flexible packaging converting facility whereby purchased raw materials (papers, plastic films and aluminum foils) are combined into a variety of laminated constructions for use by customers in packaging applications. In addition, some products are produced by applying molten paraffin wax to papers and lamination, in line with laminating operations.

Tri-Seal also operates several auxiliary processes including slitting, rewinding, wrapping, packaging and palletizing.

Maintenance items are also utilized, such as lubricating oils and greases, shop towels, repair and replacement items, etc. General office supplies are also brought onto the site.

L1 Laminator/ Waxer: Laminator #1 is used to apply adhesives and waxes in laminating pulp board to a variety of facing materials, including paper, plastic films and aluminum foils. Water-based adhesives are exclusively employed. Only hot water is needed for cleaning the laminator.

In: First Web - Paper;
Second Web - Paper (Pulp); and Adhesive.

Out: Laminated (& waxed) roll stock.

Emissions occur from the evaporation of volatile organic compounds (VOCs) contained within the adhesives/waxes. No emissions are associated with cleaning operations.

Emissions are exhausted into Stack L1E.

Exhaust Point - L1E; Coating Application: VOC

L3 Printer/ Laminator: Laminator #3 is used to apply ink and/or adhesives to a variety of substrates. A natural gas fired oven is employed for several products produced within this laminator. In addition, various cleaning materials are employed.

In: First Web - Paper, Aluminum Foil; Polyethylene; Polyester; Other raw materials.
Second Web - Paper; Aluminum Foil; Polyethylene; Polyester; Other raw materials.

Natural Gas. Ink and Adhesive.

Out: Printed or Laminated roll stock; Paper/Al Foil; Paper/Polyethylene; Paper/Polyester Etc.

Emissions occur from the volatilization of volatile organic compounds (VOCs) and trace concentrations of hazardous air pollutants (HAPs) contained within the adhesives, inks and

cleaning materials; along with combustion products associated with the utilization of the natural gas-fired oven.

Emissions are exhausted into Stack L3E.

L4 Hot-Melt Coater: Laminator #4 is utilized to apply hotmelt adhesives and waxes to a variety of substrates. No cleaning operations are conducted.

In: First Web - Paper, Aluminum Foil; Polyethylene; Polyester; Other raw materials.

Second Web - Paper; Aluminum Foil; Polyethylene; Polyester; Other raw materials.

Hotmelt Adhesive.

Out: Laminated roll stock; Paper/Al Foil; Paper/Polyester; Polyethylene/Foil Etc.

No emissions are associated with the coating operation as all coatings exhibit 0% VOC.

No dedicated stack for this equipment is employed.

L5 Solventless Laminator: Laminator #5 is used to apply solvent-less adhesives to a variety of substrates, as well as laminate secondary substrates. Various materials are employed to clean this laminator.

In: First Web - Paper, Aluminum Foil; Polyethylene; Polyester; Other raw materials.

Second Web: - Paper; Aluminum Foil; Polyethylene; Polyester; Other raw materials.

Solventless Adhesive.

Out: Laminated roll stock; Paper/Al Foil; Paper/Polyester; Polyethylene/Foil Etc.

Negligable emissions are associated with the lamination operation, as all adhesives exhibit 0% VOC and trace concentrations of hazardous air pollutants (HAPs). However, emissions occur from the evaporation of VOCs and HAPs contained within the cleaning materials.

Emissions are exhausted into the general building area.

No dedicated stack for this equipment is employed.

P1 Printer: Printer #1 will be used to apply ink to a variety of substrates.

In: First Web - Aluminum Foil; Polyethylene; Polyester; Other raw materials.

Second Web - Paper; Aluminum Foil; Polyethylene; Polyester; Other raw materials.

Ink.

Out: Printed roll stock; Paper/Al Foil; Paper/Polyethylene; Paper/Polyester Etc.

Emissions occur from the evaporation of volatile organic compounds (VOCs) contained within the printing inks and cleaning materials.

Emissions are exhausted into Stack P1E.

Table 2: Emissions Unit Data Sheet General for New Printer (P1S; P1E) (Attachment L in Permit Application).	
Name or type and model of proposed affected source.	RG Engineering Tech-Seal 53013 Printer
Name(s) and maximum amount of proposed process material(s) charged per hour.	Ink: 184.2 lb/hr Cleaning: 1.4 lb/hr
Name(s) and maximum amount of proposed material produced per hour:	Printed Rollstock - 1,800 ft/min
Projected amount of pollutants that would be emitted from this affected source if no control device were used;	VOCs 6.05 lb/hr
Monitoring	None Proposed
Recordkeeping	Mass of ink, additives and cleaning material employed based on purchase records.
Reporting	Annual
Testing	VOC and HAP content based on supplier Data Sheets.

After the finished product has been manufactured in large rolls, they are slit to narrower and/or shorter rolls, wrapped, palletized and shrink wrapped.

This application is designed to permit a newly installed printer, increase certain permit limits to allow for increased machine efficiency and line speeds, and account for equipment cleaning activities that were not documented within the existing permit.

Changes to the Table 3 are shown is red.

Table 3: Emission Points Data Sheet.

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified	Design Capacity	Type and Date of Change	Control Device
L1S	L1E (Stack)	Laminator L1 / #1 (Water-based Adhesives; Waxes; Hot Water Cleaning)	1999	--	--	None
L3S	L3E (Stack)	Laminator L3 / #3 ~~(solventless)~~ (Ink and/or Adhesives; Uses Cleaning Products; NG-fired Oven)	2003	--	--	None
L4S	~~L4E~~ NA (No Stack)	Laminator L4 / #4 ~~(Hotmelt Coater)~~ (Hot-Melt Adhesive and Waxes; 0% VOC coating; no Cleaning Operations)	2007	--	--	None
L5S	~~None~~ NA (No Stack)	Laminator L5 / #5 (Solvent-less Adhesives, at 100% solids and 0% VOC; Uses Cleaning Products)	2010	--	--	None
~~E1S~~	~~E1C~~	~~Polyethylene Extruder~~	~~1999~~			~~None~~
P1S	P1E (Stack)	Printer #1 (Ink and Cleaning Products)	2016		New	None

Table 4: Hourly and Annual Amounts of Coating and Cleaning Material Used.

Equipment	Coating Material		Cleaning Material	
	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Laminator 1	975.9	38.36	Hot Water	Hot Water
Laminator 3	370.8	125.97	10.0	24.49
Laminator 4	681.3	94.40	No Cleaning	No Cleaning
Laminator 5	370.8	90.18	10.0	24.23
Printer 1	184.2	4.99	1.4	0.27

SITE INSPECTION

The writer did not visit the site for this modification permit. Al Carducci, Enforcement Inspector out of DAQ's Northern Panhandle Regional Office in Wheeling is Tri-Seal's inspector. Al conducted a full on-site inspection on April 18, 2017 and found the new printer had been installed without a permit. The facility was found not to be in compliance because of the printer installation and was given the compliance code of 10.

Directions: Traveling west on I-70 West: Take Exit 11 (Dallas Pile). Turn right on to Dallas Pike Road. At approximately 50 yards, turn left onto Technology Drive. Approximately 1/4 mile, the facility is on the left.

MSDS's

Tri-Seal submitted (in Attachment H to the permit application) 26 MSDS's under 4 different groupings (6 - Adhesives; 5 - Coatings; 13 - Inks; and 2 - Waxes). These MSDS are listed by name only below. For additional information, please refer to the permit application.

Adhesives	Coatings
- Flextra PWF-1532 - Loctite Liofol LA 1150-52 - LOCTITE LIOFOL LA 1142-13 - TYCEL 7283 BULK - Aquence LA 1551 ULT Control - LOCITE LIOFOL LA 6029	- Cross Linable Vinyl Lacquer - 8018/8091 - Novacote SF-693 - Vannapas 426 - 8231 - PHF-0975-NB3
Inks - LABELSTAR DENSE BALCK (Doc #2) - LABELSTAR PMS 288C BLUE (Doc #3) - LABELSTAR REFLEX BLUE (Doc #4) - FG20803 VERSATECH 100 TS9903 342C GREEN (Doc #5) - FLEXO PMS 187U RED (Doc #6) - AQUA –GW Cool Gray 3C (Doc #7) - LABELSTAR PMS 361C Green (Doc #8) - SPECIAL 80% 348C GREEN (Doc #9) - LABELSTAR PMS 288C BLUE (Doc #10) - TKS BW8 OPAQUE WHITE 11# (Doc #11) - TKS BW4 TECH SEAL 032 RED 9# (Doc #14) - TKS BW8 SWOP PROCESS Black 9# (Doc #15) - LABELSTAR SPECIAL COOL GRAY (Doc #16)	**WAXES** - 8000 SERIES PRODUCTS (Doc #70) - 4700 SERIES PRODUCTS (Doc #71)

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

The writer reviewed the emissions calculations submitted by Tri-Seal (see Attachment 3 to this evaluation) and believes the estimates in Table 5 to be logical and accurate. Tri-Seal

Table 5: Annual (lb/yr) Emission Rates from Tri-Seal's Flexible Packaging Converting Plant, Triadelphi, Ohio County, WV.

Air Pollutant	Laminator L1 (Coating)	Laminator L3 (Coating, Oven, (Cleaning)	Laminator L4 (Coating)	Laminator L5 (Coating, Cleaning)	Printer 1 (Coating, Cleaning)	Total (ton/yr)
VOC	0.00079	10.00 (4)	0.00	1.05	0.37 (6)	11.43
NOx	---	0.36 (5)	---	---	---	0.36
CO	---	0.30 (5)	---	---	---	0.30
PM	---	0.027 (5)	---	---	---	0.027
SO2	---	0.0021 (5)	---	---	---	0.0021
Pb	---	1.79×10^{-6} (5)	---	---	---	1.79×10^{-6}
CAS# 111-46-6 (1)	---	6.09×10^{-8} (Coating)	---	5.07×10^{-8} (Coating)	---	1.12×10^{-7}
CAS# 101-68-8 (2)	---	5.3×10^{-9} (Coating)	---	8.66×10^{-9} (Coating)	---	1.40×10^{-8}
CAS#112-34-5 (3)	---	1.05 (Cleaning)	---	1.05 (Cleaning)	---	2.10

(1) Glycol ether
(2) Methylene diphenyl diisocyanate (MDI)
(3) Glycol ether
(4) VOC = 8.79 (coating) + 0.020 (oven) + 1.20 (cleaning) = 10.01 ton/yr
(5) Oven emissions.
(6) VOC = 0.23 (coating) + 0.15 (Cleaning) = 0.38 ton/yr

Table 6: Hourly (lb/hr) Emission Rates from Tri-Seal's Flexible Packaging Converting Plant, Triadelphi, Ohio County, WV.						
Air Pollutant	**Laminator L1 (Coating)**	**Laminator L3 (Coating, Oven, Cleaning)**	**Laminator L4 (Coating)**	**Laminator L5 (Coating, Cleaning)**	**Printer 1 (Coating, Cleaning)**	**Total (lb/hr)**
VOC	1.58	171.42 (4)	0.00	5.00 (Cleaning)	7.09 (6)	185.09
NOx	---	0.082 (5)	---	---	---	0.082
CO	---	0.069 (5)	---	---	---	0.069
PM	---	0.0062 (5)	---	---	---	0.0062
SO2	---	0.00049 (5)	---	---	---	0.00049
Pb	---	4.08×10^{-7} (5)	---	---	---	4.08×10^{-7}
CAS# 111-46-6 (1)	---	2.21×10^{-7} (Coating)	---	2.21×10^{-7} (Coating)	---	4.42×10^{-7}
CAS# 101-68-8 (2)	---	4.02×10^{-8} (Coating)	---	2.83×10^{-8} (Coating)	---	6.85×10^{-8}
CAS#112-34-5 (3)	---	5.00 (Cleaning)	---	5.00 (Cleaning)	---	10.00

(1) Glycol ether
(2) Methylene diphenyl diisocyanate (MDI)
(3) Glycol ether
(4) VOC = 166.41 (coating) + 0.0045 (oven) + 5.00 (cleaning) = 171.42 lb/hr
(5) Oven emissions.
(6) VOC = 6.05 (coating) + 1.04 (Cleaning) = 7.09 lb/hr

REGULATORY APPLICABILITY

45CSR13 Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits, and Procedures for Evaluation

Tri-Seal's modification application was first received at the DAQ on September 18, 2017. The $1,000.00 application fee was paid the following day. On September 22, 2017, Tri-Seals legal advertisement ran in *The Wheeling Register*. The application was determined to be incomplete by the writer on

October 24, 2017, was revised with input from DAQ's Small Business Group's Gene Coccari, and was re-submitted on February 9, 2017. The revised permit application upon later review was deemed complete on the day it was first received (2/9/18).

A draft permit was sent to Tri-Seal for comment on April 4, 2018. Any comments from Tri-Seal (where possible) will be incorporated into the draft permit. The draft permit will be given to Beverly McKeone on April 11, 2018 for review/comment. Upon approval of the draft permit, the DAQ's legal advertisement will run in *The Wheeling Register* sometime the week of April 15, 2018. At the end of DAQ's 30-day public comment period, if no comments are received, the draft permit will be approved by the Air Director. The anticipated approval/issuance date for the permit is estimated to be May 20, 2018.

45CSR22 Air Quality Management Fee Program

This modification permit does not affect the facility's status under Rule 22 or trigger any other applicable state rules or federal regulations.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

Approximately 2.1 tons per year of DEG monobuyl ether [2-(2-Butoxyethoxyl) ethanol] are estimated to be emitted from the equipment cleaning of Laminators 3 and 5.

2-(2-Butoxyethoxyl) ethanol is a glycol ether solvent which is a clear liquid having a very low odor and high boiling point. It serves as a solvent for paints and varnishes, in the chemical industry, household detergents, brewing chemicals and textile processing. Also, this substance is used as a raw material in the chemical synthesis.

AIR QUALITY IMPACT ANALYSIS

There was no air quality impact analysis study done for this modification permit because emissions from this source are considered to be small, i.e., the source is a minor source of pollution.

MONITORING OF OPERATIONS

The same monitoring requires that applied last time still apply to the permitted equipment which now includes the newly added Printer 1.

4.2. Monitoring Requirements

4.2.1. For the purposes of demonstrating compliance with the emission and material usage limits in section 4.1. of this permit, the permittee shall maintain daily, monthly, and yearly records of

the amount of wax emulsions, hotmelts, adhesives, coatings, and inks used by each equipment piece, the VOC and/or HAP content of the coatings used by each equipment piece, and the hours of operation for each equipment piece. Also, the permittee shall maintain monthly records of the amount of natural gas consumed at the facility. Compliance with the hourly hotmelts, adhesives, coatings, and inks usage rates shall be determined by average hourly usage rates determined on a daily basis. Compliance with the annual usage rate limits shall be determined using 12-month rolling totals. A 12-month rolling total shall mean the sum of hotmelts, adhesives, coatings, and inks used by an equipment piece at any given time for the previous twelve (12) calendar months. Said records shall be maintained in accordance with 3.4.1.

CHANGES TO PERMIT R13-2562C

The changes made to permit R13-2562C to arrive at permit R13-2562D are shown in a compare file which is given in Attachment A to this evaluation.

RECOMMENDATION TO DIRECTOR

The writer reviewed permit application R13-2562D and believes that compliance with all applicable regulations can be achieved. Therefore, the writer recommends that Permit R13-2562D be granted to Tri-Seal for the modification of a flexible packaging converting facility at Triadelphia, Ohio County, WV.

John Legg
Permit Writer

April 19, 2018

April 19, 2018

Attachment A

Modification Permit R13-2562D

Compare File Showing

Changes Made to R13-2562C to Arrived at R13-2562D

Tekniplex, Inc. aba Tri-Seal

Triadelphia, Ohio County, WV

WordPerfect Document Compare Summary

Original document: Q:\AIR_QUALITY\J_LEGG\Tri-Seal\069-00084_PERM_13-2562C.wpd
Revised document: Q:\AIR_QUALITY\J_LEGG\Tri-Seal\069-00084_PERM_13-2562D.wpd
Deletions are shown with the following attributes and color:
~~Strikeout~~, Blue RGB(0,0,255).
Deleted text is shown as full text.
Insertions are shown with the following attributes and color:
Double Underline, Redline, Red RGB(255,0,0).

The document was marked with 72 Deletions, 85 Insertions, 0 Moves.

West Virginia Department of Environmental Protection
Division of Air Quality

~~*Randy C Huffman*~~
~~*Cabinet Secretary*~~

Austin Caperton
Cabinet Secretary

Permit to ~~Update~~Modify

R13-2562~~C~~D

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45 C.S.R. 13 — Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the facility listed below is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:
~~Tech Seal Products~~Tekni-Plex, Inc. dbaTri-Seal
Triadelphia
069-00084

~~John A~~William F. ~~Benedict~~Durham
Director, Division of Air Quality

Issued: ~~February 28, 2012~~ * ~~*Effective:* February 28, 2012~~DRAFT

This permit will supercede and replace Permit R13-2562~~B~~C.

Facility Location:	Triadelphia, Ohio County, West Virginia
Mailing Address:	~~941 Plum Grove Road~~599 Technology Drive Triadelphia, ~~Suite C~~ ~~Schaumburg, IL 60173~~WV 26059
Facility Description:	Packing converting facility
~~SIC~~NAICS Code~~s~~:	~~2671~~322222 - Coated and Laminated Paper Manufacturing
UTM Coordinates:	537.3 km Easting • 4,434.9 km Northing • Zone 17
Permit Type:	~~Class II Administrative Update~~Modification
Description of Change:	Add ~~Laminator L5 which uses solventless adhesives, at 100% solids and 0% VOC. Remove Laminator L2 and Printers P1 and P2 which have already been shut down and removed from the facility~~a printer (P1S; P1E). Increase permit limits for existing permitted equipment.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

The source is not subject to 45CSR30.

Table of Contents

1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
L1S	L1E (Stack)	Laminator L1 / #1 (Water-based Adhesives; Waxes; Hot Water Cleaning)	1999		None
L3S	L3E (Stack)	Laminator L3 / #3 ~~(solventless~~ (Ink and/or Adhesives; Uses Cleaning Products; NG-fired Oven)	2003	Max. Heat Input 0.833 MM Btu/hr	None
L4S	~~L4E~~NA (No Stack)	Laminator L4 / #4 (Hot~~m~~-Melt ~~coater~~Adhesives and Waxes; 0% VOC coating; no Cleaning Operations)	2007		None
L5S	~~None~~NA (No Stack)	Laminator L5 / #5 (~~Solventless Adhesives;~~Adhesive applied as a Liquid Resin at 100% solids and 0% VOC; Uses Cleaning Products)	2010		None
~~E1S~~P1S	~~E1C~~P1E (Stack)	~~Polyethylene extruder~~Printer #1 (Ink and Cleaning Products)	~~1999~~2016		None

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45 CSR § 30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	**NO_x**	Nitrogen Oxides
CBI	Confidential Business Information	**NSPS**	New Source Performance Standards
CEM	Continuous Emission Monitor	**PM**	Particulate Matter
CES	Certified Emission Statement	**$PM_{2.5}$**	Particulate Matter less than 2.5μm in diameter
C.F.R. *or* CFR	Code of Federal Regulations		
CO	Carbon Monoxide	**PM_{10}**	Particulate Matter less than 10μm in diameter
C.S.R. *or* CSR	Codes of State Rules		
DAQ	Division of Air Quality	**Ppb**	Pounds per Batch
DEP	Department of Environmental Protection	**pph**	Pounds per Hour
		ppm	Parts per Million
dscm	Dry Standard Cubic Meter	**Ppmv or ppmv**	Parts per million by volume
FOIA	Freedom of Information Act		
HAP	Hazardous Air Pollutant	**PSD**	Prevention of Significant Deterioration
HON	Hazardous Organic NESHAP		
HP	Horsepower	**psi**	Pounds per Square Inch
lbs/hr	Pounds per Hour	**SIC**	Standard Industrial Classification
LDAR	Leak Detection and Repair		
M	Thousand	**SIP**	State Implementation Plan
MACT	Maximum Achievable Control Technology	**SO_2**	Sulfur Dioxide
		TAP	Toxic Air Pollutant
MDHI	Maximum Design Heat Input	**TPY**	Tons per Year
MM	Million	**TRS**	Total Reduced Sulfur
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour	**TSP**	Total Suspended Particulate
		USEPA	United States Environmental Protection Agency
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour		
		UTM	Universal Transverse Mercator
NA	Not Applicable		
NAAQS	National Ambient Air Quality Standards	**VEE**	Visual Emissions Evaluation
		VOC	Volatile Organic Compounds
NESHAPS	National Emissions Standards for Hazardous Air Pollutants	**VOL**	Volatile Organic Liquids

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Law W.Va. Code §§22-5-1 et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;*

2.4. Term and Renewal

2.4.1. This permit supercedes and replaces previously issued Permit R13-2562~~B~~C. This permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any applicable legislative rule.

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2562A, R13-2562B, R13-2562C, R13-2562D and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to; **[45CSR§§13-5.11 and 13-10.3]**

2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;

2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;

2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses and/or approvals from other agencies; i.e., local, state and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10. Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission

limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are not met.

2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and,

d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

2.12.5. The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. **[45CSR§13-10.1]**

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§15]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45 C.S.R. 11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized

representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

    1. The permit or rule evaluated, with the citation number and language;
    2. The result of the test for each permit or rule condition; and,
    3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State-Enforceable only.*]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by email as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

~~If to the~~ DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304-2345

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

~~If to the USEPA~~US EPA:

Associate Director
Office of Air Enforcement and ~~Permits Review~~
Compliance Assistance
(~~3AP12~~3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

[1]For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status Reports, Initial Notifications, etc.

3.5.4. **Operating Fee.**

3.5.4.1. In accordance with 45CSR22 – Air Quality Management Fee Program, the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first obtaining and having in current effect a Certificate to Operate (CTO). Such Certificate to Operate (CTO) shall be renewed annually, shall be maintained on the premises for which the certificate has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. ~~The Laminator 1 (Equipment ID No. L1) shall not use vinyl acetate monomer that exceed a maximum content of 0.99% by weight and shall use wax emulsions that have a maximum VOC content of 1.0% by weight.~~

~~4.1.2. Laminator 1 (Equipment ID No. L1) shall be operated in accordance with the following table.~~ VOC emissions from Laminator L1 (L1S; L1E) shall not exceed 1.58 lb/hr and 0.01 ton/yr.

4.1.2. Only hot water shall be used during the cleaning operation for Laminator L1.

4.1.3. Emissions from Laminator L3 (L3S; L3E) shall not exceed the limits given below:

Source ID	Emission Point ID	~~Maximum Charge Rate of Vinyl Acetate Emulsionslb/hrlb/yrL1L1E200.0360,000Maximum Charge Rate of Wax Emulsions100.0100,000 4.1.3.The Hotmelt Coater/Laminator (Equipment ID No. L2) shall be disconnected and permanently removed from lb/hrlb/yr.~~ ~~4.1.4.*Reserved*.~~ ~~4.1.5.The Solventless Adhesive Laminator (Equipment ID No. L3) shall not use inks that exceed a maximum VOC content of 24.0% by weight and shall use adhesives that have a maximum VOC content of 0.99% by weight.~~	Maximum Emission Limit	
			lb/hr	ton/yr

~~42,390~~ ~~L3~~L3S	L3E	VOC	166.42 (1)	~~101.9~~10.01 ~~(2)~~
		NOx	0.0~~5~~9	0.~~09SO$_2$,trace~~ ~~trace~~36
		CO	0.0~~4~~7	0.~~06~~30
		PM_{10}	0.01	0.0~~1~~3
(1) The maximum VOC~~24.55.08~~ emission rate (lb/hr) from Coating. (2) VOC (ton/yr) = 8.79 ton/yr (Coating) + 0.02 ton/yr (Oven) + 1.20 ton/yr (Cleaning)				

4.1.~~7~~4. The Hot~~m~~-Melt Coater/Laminator ~~(Equipment ID No.~~ L4 (L4S) shall not use ~~hotmelt~~ coatings that ~~exceed a maximum VOC content of 3.5% by weight.~~

~~4.1.8. The Hotmelt Coater/Laminator (Equipment ID No. L4) shall be operated and maintained in accordance with the following table.~~

~~Source~~ emit VOCs.

4.1.5. Laminator L5 (L5S) shall apply only soventless adhesives that do not emit VOCs.

~~IDEmission Point IDMaximum Charge Rate of Hotmelt Coatingslb/hrlb/yrL4SL4E200.01,752,000~~

4.1.~~9~~. ~~Laminator #5 shall apply only soventless adhesives that do not emit VOCs.~~

~~4.1.10. The Flexographic Printing Press (~~6.VOC emissions from the cleaning operation for Laminator L5 shall not exceed 5.00 lb/hr and 1.05 ton/yr.

4.1.7. VOC emissions from Printer #1 (P1S; P1E) which include the coating and cleaning operations shall not exceed 6.05 lb/hr and 0.38 ton/yr.

4.1.8. The following material usage rate limits shall not be exceeded:

~~Equipment ID No. P1) shall be disconnected and permanently removed from service. 4.1.11. The Printer/Laminator (Equipment ID No. P2) shall be disconnected and permanently removed from service. 4.~~	Material	Material Usage Rate Limit	
		(lb/hr)	(ton/yr)
Laminator L1	Coating	975.9	38.36
Laminator L3	Coating	370.8	125.97
	Cleaning	10	24.49
Laminator L4	Coating	681.3	94.40
Laminator L5	Coating	370.8	94.68
	Cleaning	10.0	24.23
Printer 1	Coating	184.2	4.99
	Cleaning	1. ~~12. Reserved.~~ 4	0.27

4.1.~~13~~9. Use of any ingredient(s) containing any constituent identified in Section 112(b) of the 1990 Clean Air Act Amendments as a HAP, shall be treated in accordance with the following:

a. The permittee shall notify the Director in writing, via a permit determination, of the ingredient(s) to be used and the HAP(s) contained therein within thirty (30) days of the initial use of the ingredient Additionally, an MSDS sheet for the ingredient(s) shall be supplied at this time to the Director.

b. An estimate of emissions associated with the use of the ingredient(s) shall be determined and incorporated into the record keeping requirements contained herein.

c. The emission rate of the HAP(s) contained within the ingredient shall not equal or exceed, on a per-HAP basis, 9.4 tons per year or on an aggregate basis, 24.4 tons per year.

4.1.140. Particulate matter emissions from auxiliary processes which include die cutting and slitting shall be vented by the trim system to the compactor. These devices shall be operated and maintained as a closed system and in a manner consistent with good engineering practices and in accordance with manufacturers' specifications in order to achieve the lowest possible rate of fugitive particulate matter.

4.1.151. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

4.2. Monitoring Requirements

4.2.1. For the purposes of demonstrating compliance with the emission ~~limits~~ and material usage ~~rate~~ limits in section 4.1. of this permit, the permittee shall maintain daily, monthly, and yearly records of the amount of wax emulsions, hotmelts, adhesives, coatings, and inks used ~~in~~by each ~~piece of~~ equipment piece, the VOC and/or HAP content of the coatings used ~~in~~by each ~~piece of~~ equipment piece, and the hours of operation ~~of~~for each ~~piece of~~ equipment piece. Also, the permittee shall maintain monthly records of the amount of natural gas consumed at the facility. Compliance with the hourly hotmelts, adhesives, coatings, and inks usage rates shall be determined by ~~the~~ average hourly usage rates determined on a daily basis. Compliance with the annual usage rate limits shall be determined using ~~a~~ 12-month rolling totals. A 12-month rolling total shall mean the sum of hotmelts, adhesives, coatings, and inks used by an equipment piece at any given time for the previous twelve (12) calendar months. Said records shall be maintained in accordance with 3.4.1.

4.3. Testing Requirements

[Reserved]

4.4. Recordkeeping Requirements

4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.
b. Steps taken to minimize emissions during the event.
c. The duration of the event.
d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

4.5. Reporting Requirements

[Reserved]

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] _____ _____
(please use blue ink) Responsible Official or Authorized Representative Date

Name and Title _____ _____
(please print or type) Name Title

Telephone No. _____ Fax No. _____

---

[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(I) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.