Louisville Metro Air Pollution Control District
850 Barret Avenue
Louisville, Kentucky 40204-1745

Title V Operating Permit

Permit No.: 148-97-TV (R3) Plant ID: 0015

Effective Date: 1/31/2012 Expiration Date: 1/31/2017

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

LLFlex, LLC
Louisville Laminating Plant
1225 W. Burnett Ave.
Louisville, KY 40210

The applicable procedures of District Regulation 2.16 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Application Number: 34346 Application Received: 2/14/2012

Permit Writer: Chris Gerstle

Administratively Complete: 2/14/2012

Air Pollution Control Officer

Public Notice Date: 2/18/2012 March 20, 2012

Date of Proposed Permit: N/A

Table of Contents

Title V Permit Revisions/Changes 3

Abbreviations and Acronyms 4

Preamble 5

General Conditions 6

Emission Unit U1: Laminator #12 14
- U1 Applicable Regulations 14
- U1 Equipment 15
- U1 Control Device 15
- U1 Specific Conditions 16
- U1 Comments 20

Emission Unit U2: Seven (7) Laminators & One (1) Coater 22
- U2 Applicable Regulations 22
- U2 Equipment 23
- U2 Control Device 23
- U2 Specific Conditions 24
- U2 Comments 26

Emission Unit U3: Storage Vessels 28
- U3 Applicable Regulations 28
- U3 Equipment 28
- U3 Control Device 28
- U3 Specific Conditions 29
- U3 Comments 30

Emission Unit U4: Two (2) Heating Boilers 31
- U4 Applicable Regulations 31
- U4 Equipment 31
- U4 Control Device 31
- U4 Specific Conditions 32
- U4 Comments 33

Permit Shield 34

Off-Permit Documents 34

Alternative Operating Scenario 34

Insignificant Activities 34

Title V Permit Revisions/Changes

Revision No.	Issue Date	Public Notice Date	Type	Attachment No./ Page No.	Description
N/A	09/28/2001	12/10/2000	Initial	Entire Permit	Initial Permit Issuance
R1	11/05/2002	N/A	Admin.	U-2/35	Administrative change to correct a typo
R2	12/15/2011	10/29/2011	Renewal	Entire Permit	Significant Changes; Name and Responsible Official Change; Correct the applicable boiler regulation from 6.07 to 7.06; Incorporate CAM Plan
R3	03/20/2012	02/17/2012	Admin	Cover Page	Ownership/Name Change; see Administrative Change Document for list of corrections.

Application #	Date	Type
27663	10/1/2010	TV Appl (updated)
	5/31/2006	TV Renewal
28613	3/21/2008	Ownership Change
28614	6/06/2008	RO Change
28615	3/6/2009	112j Application part 1 of 2
28616	5/6/2009	112j Application part 2 of 2
34346	2/14/2012	Ownership Change/Name Change

Abbreviations and Acronyms

AFS	-	AIRS Facility Subsystem
AIRS	-	Aerometric Information Retrieval System
atm	-	Atmosphere
BACT	-	Best Available Control Technology
Btu	-	British Thermal Unit
CEMS	-	Continuous Emission Monitoring System
CAAA	-	Clean Air Act Amendments (15 November 1990)
HAP	-	Hazardous Air Pollutant
hr	-	hour
l	-	Liter
lb	-	Pound
LMAPCD	-	Louisville Metro Air Pollution Control District
MACT	-	Maximum Achievable Control Technology
m	-	Meter
mg	-	Milligram
mm	-	Millimeter
MM	-	Million
MOCS	-	Management of Change System
NAICS	-	North American Industry Classification System
NSR	-	New Source Review
NO_x	-	Nitrogen oxides
NSPS	-	New Source Performance Standards
PM	-	Particulate Matter
PM_{10}	-	Particulate matter less than 10 microns
ppm	-	Parts per million
PSD	-	Prevention of Significant Deterioration
PMP	-	Preventive Maintenance Plan
psia	-	Pounds per square inch absolute
RACT	-	Reasonably Available Control Technology
SIC	-	Standard Industrial Classification
SIP	-	State Implementation Plan
SO_2	-	Sulfur dioxide
TAC	-	Toxic Air Contaminant
tpy	-	Tons per year
VOC	-	Volatile Organic Compound

Preamble

Title V of the Clean Air Act Amendments of 1990 required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Louisville Metro Air Pollution Control District (LMAPCD) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations".

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit General Conditions define requirements which are generally applicable to all Title V companies under the jurisdiction of LMAPCD. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the general conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The General Conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The source's Title V permit may include a current table of "insignificant activities."

Insignificant activities are defined in District Regulation 2.16 section 1.23, as of the date the permit was proposed for review by U.S. EPA, Region 4.

Insignificant activities identified in District Regulation 2.02, Section 2 may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.

Insignificant activities identified in District Regulation 2.02, Section 2 shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.

General Conditions

1. **Compliance** - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. (Regulation 2.16, sections 4.1.3, 4.1.13.1 and 4.1.13.7)

2. **Compliance Certification** - The owner or operator shall certify, annually or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification directly to the following address as well as to the District, as set forth in Regulation 2.16, section 4.3.5.4:

   US EPA - Region IV
   Air Enforcement Branch
   Atlanta Federal Center
   61 Forsyth Street
   Atlanta, GA 30303-8960

3. **Compliance Schedule** - A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:

   a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.

   b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.

4. **Duty to Supplement or Correct Application** - If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, it shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

5. **Emergency Provision**

a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

i. An emergency occurred and that the owner or operator can identify the cause of the emergency.

ii. The permitted facility was at the time being properly operated.

iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.

iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.

c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. (Regulation 2.16, sections 4.7.1 through 4.7.4)

6. **Emission Fees Payment Requirements** - The owner or operator shall pay annual emission fees in accordance with Regulation 2.08, section 1.3. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. (Regulation 2.08, section 1.6)

7. **Emission Offset Requirements** - The owner or operator shall comply with the requirements of Regulation 2.04.

8. **Enforceability Requirements** - Except for the conditions that are specifically designated as “District Only Enforceable Conditions”, all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. (Regulation 2.16, sections 4.2.1 and 4.2.2)

9. **Enforcement Action Defense**

a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation. (Regulation 2.16, sections 4.1.13.2 and 4.1.13.3)

10. **Hazardous Air Pollutants and Sources Categories** - The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.

11. **Information Requests** - The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. (Regulation 2.16, section 4.1.13.6)

    If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA. (Regulation 2.07, section 10.2)

12. **Insignificant Activities** - The owner or operator shall:

    a. Notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. (Regulation 2.16, section 5)

    b. Submit a current list of insignificant activities by April 15 of each year with the annual compliance certification, including an identification of the additions and removals of insignificant activities that occurred during the preceding year. (Regulation 2.16, section 4.3.5.3.6)

13. **Inspection and Entry** - Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:

    a. Enter the premises to inspect any emissions-related activity or records required in this permit.

    b. Have access to and copy records required by this permit.

    c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.

    d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements. (Regulation 2.16, section 4.3.2)

14. **Monitoring and Related Record Keeping and Reporting Requirement** - The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be January 1st through June 30th and July 1st through December 31st of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. If surrogate operating parameters are monitored and recorded in lieu of

emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement. All semi-annual compliance reports shall include the following certification statement per Regulation 2.16.

- "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete".
- Signature and title of company responsible official.

If a change in the "Responsible Official" (RO) occurs during the term of this permit, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days following the date a change in the designated RO occurs for this facility.

The semi-annual compliance reports are due on or before the following dates of each calendar year:

Reporting Period	Report Due Date
January 1st through June 30th	August 29th
July 1st through December 31st	March 1st [1]

[1]Note: The date for leap years is February 29.

15. **Off-permit Documents** - Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, Section 5. (Regulation 2.16, section 4.1.5)

16. **Operational Flexibility** - The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.

17. **Permit Amendments (Administrative)** - This permit can be administratively amended by the District in accordance with Regulation 2.16, sections 2.3 and 5.4.

18. **Permit Application Submittal** - The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.

19. **Permit Duration** - This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.

20. **Permit Renewal, Expiration and Application** - Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16,

sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.

21. **Permit Revisions** - No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. (Regulation 2.16, section 4.1.16)

22. **Permit Revision Procedures (Minor)** - Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.

23. **Permit Revision Procedures (Significant)** - A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and Permit renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.

24. **Permit Revocation and Termination by the District** - The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1 through 5.11.6. For purposes of Section 5.11.1, substantial or unresolved noncompliance includes, but is not limited to:

    a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment.

    b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District.

    c. Knowingly making any false statement in any permit application.

    d. Noncompliance with Regulation 1.07, section 4.2; or

    e. Noncompliance with KRS Chapter 77.

25. **Permit Shield** - The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.

26. **Prevention of Significant Deterioration of Air Quality** - The owner or operator shall comply with the requirements of Regulation 2.05.

27. **Property Rights** - This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.

28. **Public Participation** - Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, section 1; and 2.16, sections 5.1.1.2 and 5.5.4.

29. **Reopening For Cause** - This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.

30. **Reopening for Cause by EPA** - This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16, section 5.10.

31. **Risk Management Plan (112(r))** - For each process subject to Section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.

32. **Severability Clause** - The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected. (Regulation 2.16, section 4.1.12)

33. **Stack Height Considerations** - The owner or operator shall comply with the requirements of Regulation 2.10.

34. **Startups, Shutdowns, and Upset Conditions Requirements** - The owner or operator shall comply with the requirements of Regulation 1.07.

35. **Submittal of Reports, Data, Notifications, and Applications**

    a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.3, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.12 shall be submitted to:

    Louisville Metro Air Pollution Control District
    850 Barret Ave
    Louisville, KY 40204-1745

    b. Documents which are specifically required to be submitted to EPA as set forth in Regulation 2.16 sections 3.3, and 5.8.5 shall be mailed to EPA at the following address:

    US EPA - Region IV
    APTMD - 12th floor
    Atlanta Federal Center
    61 Forsyth Street
    Atlanta, GA 30303-3104

36. **Other Applicable Regulations** - The owner or operator shall comply with all applicable requirements of the following:

Regulation	Title
1.01	General Provisions
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance with Emissions Standards and Maintenance Requirements
1.06	Source Self-Monitoring, Emissions Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning

Regulation	Title
1.14	Control of Fugitive Particulate Emissions
2.01	General Application
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/Renovation Permits
2.07	Public Notification for Title V, PSD, and Other Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.16	Title V Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)

District Only Enforceable:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors in the Ambient Air
2.08	Fees (Emission Fee, Permit Fees and Permit Renewal Procedures)
5.01	General Provisions
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants

37. **Stratospheric Ozone Protection Requirements** - Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:

    a. Any facility having any refrigeration equipment normally containing fifty (50) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added according to 40 CFR 82.166;

    b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided

in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;

c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;

d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;

e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;

f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;

g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40 CFR 82 Subpart A, Production and Consumption Controls. (Regulation 2.16, section 4.1.5)

Emission Unit U1: Laminator #12 - A laminator equipped with a rotogravure printing (or coating) station, and a drying oven. The rotogravure station has the ability to apply water-based and solvent-based inks and coating. The laminator's emissions are controlled by a thermal oxidizer.

U1 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 2, 3, 4, 4.1.1, and 5
6.29	Standard of Performance for Existing Graphic Arts Facilities Using Rotogravure and Flexography	1, 1.8.1, 1.8.2, 1.8.5, 1.8.6, 2, 3.1.4.2, 3.2,
40 CFR 63 Subpart A	General Provisions	63.1 through 63.16
40 CFR 63 Subpart KK	National Emission Standards for the Printing and Publishing Industry	63.820, 821, 825, 825, 829, 830
40 CFR 64	Compliance Assurance Monitoring for Major Stationary Sources	64.1 through 64.10

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
5.02	Federal Emission Standards for Hazardous Air Pollutants Incorporated by Reference	3.1, 3.32, and 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U1 Equipment				
Emission Point	**Description**	**Applicable Regulation**	**Control ID**	**Stack ID**
E-1	Laminator #12 [Inta-Roto Inc., Model # GM-2000-M-201] Lacquer Mixing Room. See Comment 1.	6.29 40 CFR 63 Subpart KK	C-1	N/A
E-1a	Oven #12 [7.50 MMBtu/hr]		N/A	S-1

U1 Control Device			
Control ID	**Description**	**Performance Indicator**	**Stack ID**
C-1	One Thermal Oxidizer, Inta-Roto Inc., Model No.7 HFP-GOL-P. [6.00 MMBtu/hr] [Controls Emission Point E-1]	See U1 Specific Conditions [Temperature is measured in the oxidizer combustion chamber]	S-1

U1 Specific Conditions

S1. **Standards (Regulation 2.16, section 4.1.1)**

a. **VOC**

i. The owner or operator shall not cause or allow the emission of VOC from any affected facility unless at least one of the following requirements is met: (Regulation 6.29, section 3)

1) The volatile fraction of all water based inks and coatings, as applied to the substrate, used on the affected facility shall contain no more than 25% VOC by volume, (section 3.1.1)
2) The non-volatile fraction, minus water and exempt solvents, of all water based inks and coatings, as applied to the substrate, used on the affected facility shall be at least 60% by volume, (section 3.1.2)
3) All water based inks and coatings, as applied to the substrate, used on the affected facility shall contain no more than 0.5 pound of VOC per pound of solids, (section 3.1.3) or
4) For packaging rotogravure printing or specialty rotogravure printing, when using solvent based inks and coatings, the owner or operator shall not cause or allow the emission of VOC from any affected facility to exceed 35% by weight of the VOC net input into the affected facility. (section 3.1.4.2)

ii. The owner or operator shall operate and maintain the thermal oxidizer at a minimum combustion temperature of 1400 °F (until a performance test is conducted and approved that demonstrates compliance with >65% destruction efficiency) averaged over a three hour period, when using solvent based inks and coatings to reduce the rotogravure printing ink and solvent VOC emissions by 65%. (Regulation 6.29, section 3) (See U1 Comment 2)

iii. Compliance with the requirements shall be based upon the inks and coatings, as applied, used by the affected facility during a calendar-day averaging period. (Regulation 1.05, section 4.1 and 6.29, section 3.2)

b. **HAP (40 CFR 60 Subpart KK)**

Each product and packaging rotogravure printing affected source shall limit organic HAP emissions to no more than 4 percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month. (§63.825(b)(4)) (See U1 Comment 3)

c. **TAC**

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.01 and 5.21) (See U1 Comment 6)

S2. **Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)**

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

i. The owner or operator of an affected facility subject to Regulation 6.29 shall maintain daily records for the most recent five-year period. The records shall be made available to the District, the Cabinet, and the EPA upon request. The records shall include, but not be limited to, the following: (Regulation 1.05, section 4.1 and 6.29, section 6.1)

1) The regulation and section number applicable to the affected facility for which the records are being maintained, (section 6.1.1)
2) The application method and substrate type (metal, plastic, paper, etc.), (section 6.1.2)
3) The amount and type of each ink, coating, and solvent used at each point of application, including exempt compounds, per day, (section 6.1.3)
4) The VOC content as applied in each ink, coating, and solvent, (section 6.1.4)
5) The date for each application of each ink, coating, and solvent, and (section 6.1.5)
6) Oven temperature (section 6.1.6)

ii. The owner or operator shall maintain daily records of the thermal oxidizer combustion chamber temperature when Laminator #12 is using solvent based coatings. The temperature shall be monitored continuously (i.e., at least every 15 minutes), and the temperature recorded at least every 15 minutes (minimum of four equally-spaced readings per hour). The three-hour average temperature shall be calculated as the average of the readings (except that an average need only be calculated if readings occur below the specified temperature level).

iii. During solvent coating operations, any three-hour period during which the average combustion chamber temperature is more than 50 °F below the operating temperature of 1400 °F, or the combustion chamber temperature established during the most recent performance test that demonstrated compliance with >65% destruction efficiency, shall be classified as a period of excess emissions for reporting purposes. To manage this requirement, the plant shall consider temperature measurements below 1375 °F to be "action levels". Temperature measurements below 1350 °F are considered an excursion. (Regulation 6.29, sections 6.2 and 6.2.1, 40 CFR 64) (See U1 Comment 4)

iv. The owner or operator shall maintain daily records that show the percent reduction of VOC emissions when using solvent based inks and coatings. (Regulation 1.05, section 4.1.1) (See U1 Comment 2)

b. **HAP (40 CFR 60 Subpart KK)**

i. The owner or operator of each product and packaging rotogravure printing affected source shall demonstrate compliance with U1 S1.b following the proposed procedure: Demonstrate that the monthly average as-applied organic HAP content, H_L, of all materials applied is less than 0.04 kg HAP per kg of material applied, as determined by Equation 6 from 40 CFR 60 Subpart KK. (§63.825(b)(4)) (See U1 Comment 3)

ii. Each owner or operator of an affected source subject to this subpart shall maintain, on a monthly basis, the records of all measurements needed to demonstrate compliance with this standard, such as material usage, HAP usage, volatile matter usage, and solids usage that support data that the source is required to report. (§63.829(b)(1))

c. **TAC**

i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.

ii. If a new TAC is introduced or the content of a TAC in a raw material increases, the owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions.

S3. **Reporting (Regulation 2.16, section 4.1.9.3)**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for:

a. **VOC**

i. Identification of all periods of excursions during the reporting period. Excursion is defined as any departure from an established control device performance indicator range (i.e., temperature drops more than 50 °F below either a minimum combustion chamber temperature of 1400 °F or the combustion chamber temperature established during the most recent performance test that demonstrated compliance with >65% destruction efficiency for more than 3 hours).

ii. Identification of all periods when the VOC emissions exceeded 35% by weight of the VOC net input into the affected facility. If there were no periods of exceedance during a reporting period, the owner or operator shall submit a negative declaration for the reporting period.

b. **HAP (40 CFR 60 Subpart KK)**

Exceedances of the standards in S1.b. (§63.830(b)(6)(i))

c. **TAC**

Within 6 months of a change that impacts the demonstration of environmental acceptability, the owner or operator shall submit the re-evaluated EA demonstration to the District.

S4. **Testing (Regulation 1.04, section 2.1)**

VOC

a. The owner or operator shall perform an EPA Reference Method 25 or 25A performance test within 180 days after the effective date of the permit on the inlet and outlet of the control device and once every five years thereafter to determine the destruction efficiency of the thermal oxidizer. The test shall be performed at maximum capacity, or at a level of capacity which results in the greatest emissions and is representative of the operations. Failure to perform the test at these conditions may necessitate a re-test or necessitate a revision of the allowable/permitted capacity of the process equipment. In lieu of the control

efficiency test, the owner or operator may submit a signature guarantee from the control device manufacturer stating the control device efficiency.

b. The owner or operator shall perform a capture efficiency test for the thermal oxidizer using EPA guidelines within 180 days after the effective date of the permit. In lieu of performing a capture efficiency test, the owner or operator may submit a reasonable estimate of capture efficiency with thorough justification subject to approval by the District.

c. The owner or operator shall submit written compliance test plans (protocol) for the control efficiency and capture efficiency. They shall include the EPA test methods that will be used for stack testing, the process operating parameters (e.g., press production rate, identification of raw materials applied during testing, etc.) that will be monitored during the stack test, and the control device operating parameters (e.g., minimum combustion chamber temperature, volumetric air flow rate, etc.) that will be monitored during the performance test. The compliance test plans shall be furnished to the District at least 30 days prior to the actual date of the performance test.

d. The stack tests shall include sampling of the inlet and outlet gas streams of the thermal oxidizer to determine the control efficiency for VOC. The stack test shall establish the minimum combustion chamber temperature necessary to achieve the required 65% destruction efficiency.

e. The owner or operator shall provide the District at least 10 days prior notice of any performance test to afford the District the opportunity to have an observer present.

f. The owner or operator shall furnish the District with a written report of the results of the performance test within 60 days following the actual date of the performance test. The stack test report shall include, at a minimum, the inlet and outlet lb/hr VOC emissions, VOC destruction and capture efficiencies, Federal Test Methods used during testing, volumetric air flow rate, volumetric flow sampling location (location of traverse points), stack diameter, % O_2, and % moisture.

U1 Comments

1. The following equipment is covered in Regulation 6.29, section 1.8.1: Lacquer mixing room containing three submerged-fill arms for fillings drums with solvent, one mixer, and one soak tank. This equipment is utilized in the operation of Emission Units U1 and U2.

2. Uncontrolled VOC emissions may be calculated according to the following methodology:
   VOC (lb) = Coating used (gal) × Density (lb/gal) × VOC content (%)
   or
   VOC (lb) = Coating used (gal) × VOC content (lb/gal)

   Controlled VOC emissions may be calculated according to the following methodology:
   VOC (lb) = Coating used (gal) × Density (lb/gal) × VOC content (%) ×
   [100 – (Capture Efficiency (%) × Destruction Efficiency (%))]
   or
   VOC (lb) = Coating used (gal) × VOC content (lb/gal) ×
   [100 – (Capture Efficiency (%) × Destruction Efficiency (%))]

   An example of a methodology to determine compliance is as follows:

$$\frac{Total\ Solvent\ Based\ Controlled\ VOC\ Emissions}{Total\ Solvent\ Based\ Uncontrolled\ VOC\ Emissions} \times 100\% < 35\%$$

3. In a letter dated January 9, 2001, Reynolds submitted their Notification of Compliance Status to the District and proposed to follow the compliance option §63.825(b)(4). To demonstrate compliance with §63.825(b)(4), the following equation is used:

$$H_L = \frac{\sum_{i=1}^{p} M_i C_{hi} + \sum_{j=1}^{q} M_j C_{hj}}{\sum_{i=1}^{p} M_i + \sum_{j=1}^{q} M_j}$$

   C_{hi} = the organic HAP content of ink or other solids-containing material, i, expressed as a weight-fraction, kg/kg.
   C_{hj} = the organic HAP content of solvent j, expressed as a weight-fraction, kg/kg.
   H_L = the monthly average, as-applied, organic HAP content of all solids-containing materials applied at less than 0.04 kg organic HAP per kg of material applied, kg/kg.
   M_i = the mass of ink or other material, i, applied in a month, kg.
   M_j = the mass of solvent, thinner, reducer, diluent, or other non-solids-containing material, j, applied in a month, kg.
   p = the number of different inks, coatings, varnishes, adhesives, primers, and other materials applied in a month.
   q = the number of different solvents, thinners, reducers, diluents, or other non-solids-containing materials applied in a month.

4. The oxidizer combustion chamber temperature is monitored with an electronic thermocouple and the emission control system has an interlock system incorporated into the oxidizer control that shuts down the laminator if the average oxidizer temperature falls more than 25 °F below either a minimum combustion chamber temperature of 1400 °F or the combustion chamber temperature established during the most recent performance test that demonstrated compliance with >65% destruction efficiency for one hour. The functionality of the interlock / automatic shut down system is tested annually.

5. *HAP applied* means the organic HAP content of all inks, coatings, varnishes, adhesives, primers, solvent, and other materials applied to a substrate by a packaging rotogravure printing affected source.

6. LMAPCD approved the STAR EA Compliance Demonstration for Category 1 and 2 TACs on October 6, 2008. All processes were below the de minimis levels for all Category 1 and 2 TACs by MSDS, Trivial and Insignificant Activities and natural gas combustion. Therefore, there are no additional permitting or compliance plan requirements.

7. The TAC emissions from the combustion of natural gas are considered to be "de minimis emissions" by the District. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include the other emissions from a process or process equipment that are not the products of the combustion of natural gas.

8. Regulation 1.05, applies because the source is a Control Technique Guidance source which emits VOCs in quantities of 25 tons or more per year and is subject to Regulation 6.29.

9. Laminator #12 was not included in the SIP Revision Application (Federal Register, May 16, 1990 and January 13, 1998, 40 CFR Part 52, Subpart S, 52.920).

10. The glue used in the glue station has 0% VOC, therefore Regulation 6.24 does not apply.

Emission Unit U2: Seven (7) Laminators & One (1) Coater Laminators #6, #7, #8, #9, #10, #11, & #14, Coater #15

U2 Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 2, 3, 4, and 5
2.04	Construction or Modification of Major Sources in or Impacting upon Non-Attainment Areas (Emission Offset Requirements)	1 through 10
6.29	Standard of Performance for Existing Graphic Arts Facilities Using Rotogravure and Flexography	1, 2, 3.1.4.2, 3.2,
40 CFR Subpart A	General Provisions	§63.1 - 16
40 CFR 63 Subpart KK	National Emission Standards for the Printing and Publishing Industry	§63.820, 821, 825, 825, 829, 830

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
5.02	Federal Emission Standards for Hazardous Air Pollutants Incorporated by Reference	2.1, 2.31, 3, 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U2 Equipment				
Emission Point	**Description**	**Applicable Regulation**	**Control ID**	**Stack ID**
E-2	Laminator #6 [Inta-Roto Inc., Model # GM-1000]	2.04 6.29 40 CFR 63 Subpart KK	N/A	S-2
E-2a	Oven #6 [4.00 MMBtu/hr]			
E-3	Laminator #7 [Schmutz Mfg, Model # 2768]	6.29 40 CFR 63 Subpart KK		S-3
E-3a	Oven #7 [3.60 MMBtu/hr]			
E-4	Laminator #8 [Miesel Press Co]			S-4, S-5, S-6
E-4a	Oven #8 [5.40 MMBtu/hr]			
E-5	Laminator #9 [Miesel Press Co]			S-7, S-8, S-9
E-5a	Oven #9 [3.60 MMBtu/hr]			
E-6	Laminator #10 [Schmutz Mfg, Model # 2769]			S-10
E-6a	Oven #10 [3.60 MMBtu/hr]			
E-7	Laminator #11 [Anaconda & Fisher Klosterman, Model # MUCT-609-48-(60)]			S-11
E-7a	Oven #11 [3.60 MMBtu/hr]			
E-8	Laminator #14 [Inta-Roto Inc., Model # GM-1000]			S-12
E-8a	Oven #14 [3.60 MMBtu/hr]			
E-9	Coater #15 [Waldron, Model # K4479] See U2 Comment 1			S-13, S-14, S-15
E-9a	Oven #15 [8.16 MMBtu/hr]			

U2 Control Device: There are no control devices associated with Emission Unit U2.

U2 Specific Conditions

S1. **Standards (Regulation 2.16, section 4.1.1)**

a. **VOC**

i. For Laminator #6 (E-2), the owner or operator shall not allow or cause the VOC emissions to exceed 40.689 tons per year. (Regulation 2.04, section 1.1; Permit 103-74-C, dated 1993) (See U2 Comment 2)

ii. The owner or operator shall not cause or allow the emissions of VOC from any affected facility unless at least one of the following requirements is met: (Regulation 6.29, section 3.1) (See U2 Comment 4)

1) The volatile fraction of all inks and coatings, as applied to the substrate, used on the affected facility shall contain no more than 25% VOC by volume, (section 3.1.1)
2) The non-volatile fraction, minus water and exempt solvents, of all inks and coatings, as applied to the substrate, used on the affected facility shall be at least 60% by volume, (section 3.1.2)
3) All inks and coatings, as applied to the substrate, used on the affected facility shall contain no more than 0.5 pound of VOC per pound of solids, or (section 3.1.3)
4) The VOC emissions shall not exceed 35% by weight of the VOC net input into the affected facility for packaging rotogravure printing (section 3.1.4.2).

iii. Compliance with the requirements of U2 Specific Condition S1.a.i shall be based upon the inks and coatings, as applied, used by the affected facility during a calendar-day averaging period. (Regulation 6.29, section 3.2)

b. **HAP (40 CFR 60 Subpart KK)**

Each product and packaging rotogravure printing affected source shall limit organic HAP emissions to no more than 4 percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month. (§63.825(b)(4)) (See U2 Comment 5)

c. **TAC**

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.01 and 5.21)

S2. **Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)**

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

i. The owner or operator shall monthly calculate and record the monthly consecutive 12-month total VOC emissions each calendar month to show compliance with the 40.689 ton per year limit on Laminator #6 (E-2).

ii. The owner or operator of an affected facility subject to Regulation 6.29 shall maintain daily records of operations for the most recent five-year period. The records shall be made available to the District, the Cabinet, and the EPA upon request. The records shall include, but not be limited to, the following: (Regulation 6.29, section 6.1)

1) The regulation and section number applicable to the affected facility for which the records are being maintained, (section 6.1.1)
2) The application method and substrate type (metal, plastic, paper, etc.), (section 6.1.2)
3) The amount and type of each ink, coating, and solvent used at each point of application, including exempt compounds, per day, (section 6.1.3)
4) The VOC content as applied in each ink, coating, and solvent, (section 6.1.4)
5) The date for each application of each ink, coating, and solvent, and (section 6.1.5)
6) Oven temperature. (section 6.1.6)

b. **HAP (40 CFR 63 Subpart KK)**

i. The owner or operator of each product and packaging rotogravure printing affected source shall demonstrate compliance with U2 S1.b following the proposed procedure: Demonstrate that the monthly average as-applied organic HAP content, H_L, of all materials applied is less than 0.04 kg HAP per kg of material applied, as determined by Equation 6 from 40 CFR 60 Subpart KK. (§63.825(b)(4))
(See U2 Comment 5)

ii. Each owner or operator of an affected source subject to this subpart shall maintain, on a monthly basis, the records of all measurements needed to demonstrate compliance with this standard, such as material usage, HAP usage, volatile matter usage, and solids usage that support data that the source is required to report. (§63.829(b)(1))

c. **TAC**

i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.

ii. If a new TAC is introduced or the content of a TAC in a raw material increases, the owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions.

S3. **Reporting (Regulation 2.16, section 4.1.9.3)**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for:

a. **VOC**

i. For Laminator #6 (E-2), the monthly and consecutive 12-month total VOC emissions (in tons) for each calendar month in the reporting period

ii. Identification and description of any deviation of a permit term or condition specified in this permit or a negative declaration stating that no permit deviations occurred during the reporting period.

b. **HAP (40 CFR 63 Subpart KK)**

Exceedances of the standards in U2 S1.b. (§63.830(b)(6)(i))

c. **TAC**

Within 6 months of a change that impacts the demonstration of environmental acceptability, the owner or operator shall submit the re-evaluated EA demonstration to the District.

U2 Comments

1. Coater #16 was dismantled and removed in July 2009. The Waldron Coater (Emission Point E-9 – Coater #15) thermally laminates film to an aluminum or steel sheet to produce coated cable wrap for the telecommunications industry. The metal sheet is first heated by electric induction rolls and then nipped with the film on one or both sides. The laminated substrate is then sent through a gas oven.

2. The 40.689 tons per year VOC limit was established to avoid PSD/NSR because in 1993 a physical change was made to Laminator #6 increasing the machine speed. The 1991/1992 average emission rate was 0.69 tons per year. [(40.689 – 0.69) = 39.999]
This is less than the significant level of 40 tons specified in District Regulation 2.04, Appendix A.

3. The TAC emissions from the combustion of natural gas are considered to be "de minimis emissions" by the District. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include the other emissions from a process or process equipment that are not the products of the combustion of natural gas. (Regulation 5.01, section 1.6.7)

4. This emission unit was previously covered by a source-specific State Implementation Plan Revision. The printing/coating machines were treated as one affected facility with a pound per day and ton per year VOC emission limit. The source can now comply with District Regulation 6.29, section 3 material composition limits.

5. In a letter dated January 9, 2001, Reynolds submitted their Notification of Compliance Status to the District and proposed to follow the compliance option §63.825(b)(4). To demonstrate compliance with §63.825(b)(4), the following equation is used:

$$H_L = \frac{\sum_{i=1}^{p} M_i C_{hi} + \sum_{j=1}^{q} M_j C_{hj}}{\sum_{i=1}^{p} M_i + \sum_{j=1}^{q} M_j}$$

C_{hi} = the organic HAP content of ink or other solids-containing material, i, expressed as a weight-fraction, kg/kg.
C_{hj} = the organic HAP content of solvent j, expressed as a weight-fraction, kg/kg.

H_L = the monthly average, as-applied, organic HAP content of all solids-containing materials applied at less than 0.04 kg organic HAP per kg of material applied, kg/kg.
M_i = the mass of ink or other material, i, applied in a month, kg.
M_j = the mass of solvent, thinner, reducer, diluent, or other non-solids-containing material, j, applied in a month, kg.
p = the number of different inks, coatings, varnishes, adhesives, primers, and other materials applied in a month.
q = the number of different solvents, thinners, reducers, diluents, or other non-solids-containing materials applied in a month.

6. *HAP applied* means the organic HAP content of all inks, coatings, varnishes, adhesives, primers, solvent, and other materials applied to a substrate by a packaging rotogravure printing affected source.

7. Regulation 1.05, applies because the source is a Control Technique Guidance source which emits VOCs in quantities of 25 tons or more per year and is subject to Regulation 6.29.

8. The glue used in the glue stations has 0% VOC, therefore Regulation 6.24 does not apply.

Emission Unit U3: Storage Vessels

U3 Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 2, 3, 4, and 5
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	1 through 5, 7 and 8

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U3 Equipment		
Emission Point	**Description**	**Applicable Regulation**
E-11	Tank #3, One (1) 1,000 gallon printing solvents tank (Installed 1988) [T47 solvent (50% toluene and 50% MEK)]	7.12
E-12	Tank #2, One (1) 2,000 gallon printing solvents tank (Installed 1988) [T151 solvent (mixture of ethyl acetate and isopropyl acetate)]	
E-13	Tank #1, One (1) 1,000 gallon printing solvents tank (Installed 1988) [T28 solvent, isopropyl alcohol]	
E-13A	Tank #4, One (1) 10,000 gallon water-based coatings tank (Installed 1998) [Bendel, for storing polyester coatings]	
E-13B	Portable Tote Tanks, (~350 gallons, ~50 on site) raw material shipment of solvent-based coatings	

U3 Control Device: There are no control devices or stacks associated with Emission Unit U3. Tanks #1, #2, and #3 are each equipped with a submerged fill pipe. Tank #4 is equipped with a 4 inch conservation vent but does not have a submerged fill pipe.

U3 Specific Conditions

S1. **Standards (Regulation 2.16, section 4.1.1)**

a. **VOC**

The owner or operator shall not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia in Tank #4, unless the tank is equipped with a permanent submerged fill pipe. (Regulation 7.12, section 3) (See U3 Comment 1)

b. **TAC**

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.01 and 5.21) (See U3 Comment 2)

S2. **Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1, 4.1.9.2)**

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

The owner or operator of the storage vessels shall maintain records of the material stored in Tank #4 and if the contents of the storage vessel are changed a record shall be made of the new contents, the new vapor pressure, and the date of the change in order to demonstrate compliance with U3 Specific Condition S1.a.

b. **TAC**

i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.

ii. If a new TAC is introduced or the content of a TAC in a raw material increases, the owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions.

S3. **Reporting (Regulation 2.16, section 4.1.9.3)**

The owner or operator shall timely report abnormal conditions or operational changes which may cause excess emissions.

a. **VOC**

The owner or operator shall submit notification to the District if any materials are stored in Tank #4 which exceed the vapor pressure limit specified in U3 Specific Condition S1.a.

b. **TAC**

Within 6 months of a change that impacts the demonstration of environmental acceptability, the owner or operator shall submit the re-evaluated EA demonstration to the District.

U3 Comments

1. For Tank #4, Regulation 7.12 applies due to the size of the tank, but since the vapor pressure as stored is less than 1.5 psia there are no applicable standards in the regulation.
2. A one-time compliance demonstration was performed for TACs on July 14, 2009 and the de minimis levels cannot be exceeded uncontrolled.
3. The Federal Regulation, 40 CFR 60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, was amended by EPA on October 15, 2003. The amendment excluded storage vessels that contain a liquid with a maximum true vapor pressure below 3.5 kilopascals (26.2 mm Hg). Due to the tank sizes, they are not subject to 40 CFR 60 Subpart Kb.
4. Portable tote tanks (~350 gallons) are for raw material shipment of solvent-based coatings. They are not filled on-site, rather are shipped off when empty.
5. The glue room contains one storage tank (8,000 gallons) and three mixing day tanks (500 gallons). The glue currently stored in this tank has 0.00%VOC by weight, therefore Regulation 7.12 does not apply. If the source wants to store glue which contains VOC in the storage tank then a permit application must be submitted to the District and Regulation 7.12 conditions will be applied. Additionally, Regulation 6.24 would apply to the mixing day tanks.

Emission Unit U4: Two (2) Heating Boilers

U4 Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
7.06	Standards of Performance for New Indirect Heat Exchangers	1 through 5

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U4 Equipment				
Emission Point	**Description**	**Applicable Regulation**	**Control ID**	**Stack ID**
E-14	One (1) 16.737 MMBtu/hr natural gas boiler, Whirlpower (Boiler #2, West), model #301-L-400, installed in 1974	7.06	N/A	S-18
E-15	One (1) 16.737 MMBtu/hr natural gas boiler, Whirlpower (Boiler #1, East), model #301-L-400, installed in 1974	7.06	N/A	S-19

U4 Control Device: There are no control devices associated with Emission Unit U4.

U4 Specific Conditions

S1. **Standards (Regulation 2.16, section 4.1.1)**

a. **SO_2**

The owner or operator shall not allow the emission of SO_2 to exceed 1.0 lb/MMBtu on a 24 hour average basis. (Regulation 7.06, Section 5.1.1) (See U4 Comment 1)

b. **PM**

The owner or operator shall not allow the emission of PM to exceed 0.42 lb/MMBtu on a 24 hour average basis. (Regulation 7.06, Section 4.1.4) (See U4 Comment 1)

c. **Opacity**

The owner or operator shall not cause the emission into the open air of particulate matter from any indirect heat exchanger which is greater than 20%.

d. **TAC**

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.01 and 5.21) (See U4 Comment 3)

S2. **Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)**

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **SO_2**

There are no monitoring or record keeping requirements for SO_2 compliance. (See U4 Comment 1)

b. **PM**

There are no monitoring or record keeping requirements for PM compliance. (See U4 Comment 1)

c. **Opacity**

There are no monitoring or record keeping requirements for Opacity compliance. (See U4 Comment 2)

d. **TAC**

See U4 Comment 3.

S3. **Reporting (Regulation 2.16, section 4.1.9.3)**

a. **SO_2**

There are no compliance reporting requirements for this equipment.

b. **PM**

There are no compliance reporting requirements for this equipment.

c. **Opacity**

There are no compliance reporting requirements for this equipment.

d. **TAC**

See U4 Comment 3.

U4 Comments

1. A one-time PM and SO_2 compliance demonstration has been performed for the boilers, using AP-42 emission factors and combusting natural gas, and the emission standards cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements for these boilers with respect to PM and SO_2 emission limits.
2. The District has determined that using a natural gas fired boiler will inherently meet the 20% opacity standard. Therefore, the company is not required to perform periodic monitoring to demonstrate compliance with the opacity standard.
3. The TAC emissions from the combustion of natural gas are considered to be "de minimis emissions." This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include the other emissions from a process or process equipment that are not the products of the combustion of natural gas. (Regulation 5.01, section 1.6.7)
4. These boilers were previously permitted incorrectly under Regulation 6.07.
5. The federal regulation 40 CFR 63, Subpart DDDDD was stayed May 18, 2011; therefore, the District has not included the boiler MACT requirements in this permit. The company has submitted the Part 1 and 2 112j permit application for the stayed boiler MACT (40 CFR 63 Subpart DDDDD), which was received March 6, 2009 and May 6, 2009 respectively. The District is evaluating how to implement this requirement.

Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

Off-Permit Documents

Document	Date
SIP Revision, approved and published in the Federal Register, 40 CFR Part 52, Subpart S, 52.920	16 May 1990 and 13 January 1998
1.18 Rule Effectiveness Plan	20 September 1994
1.18 Rule Effectiveness Plan (Revised)	30 January 1995
Rule Effectiveness Improvement Measures	27 April 1995
Risk Management Plan	16 June 1999

Reynolds Laminating intends to comply with Regulation 6.29, Standard of Performance for Graphic Arts Facilities Using Rotogravure or Flexographic Printing for all laminators. The District is proposing a SIP Revision in concurrence with the issuance of the Title V Permit.

Alternative Operating Scenario

The owner or operator requested an alternative operating scenario in its Title V permit application that would allow Laminator #12 to operate without the thermal oxidizer when water based inks and coatings are being used.

Insignificant Activities

Equipment	Quantity	PTE (tpy)	Basis for Exemption
Internal Combustion Engines (Forklifts)	4	0.14 NO_x	Regulation 2.02, 2.2
Brazing, Soldering or Welding Equipment	1 fixed/ 1 portable	0.02 PM	Regulation 2.02, 2.3.4
Woodworking, Not Including Conveying, Hogging or Burning of Sawdust	1	0.03 PM	Regulation 2.02, 2.3.5
Emergency Relief Vents and Ventilating Systems (Not Otherwise Regulated)	Various	0	Regulation 2.02, 2.3.10
Laboratory Ventilating	1	0.03 VOC	Regulation 2.02, 2.3.11
Dust or Particulate Collectors that are Located In-Doors, Vent Directly Indoors Into the Work Space	Various	0.03 PM	Regulation 2.02, 2.3.21
Cold solvent parts cleaners equipped with a functional secondary reservoir	1	0.01 VOC	Regulation 2.02, 2.3.22 See Note 6)
Cooling Towers	2	0.01 PM	Regulation 2.16, 1.22
Process Scrap conveying systems	2	4.15 PM	See Note 7)
Shot blast cabinet	1	4.68 PM	See Note 7)

1) Insignificant activities identified in District Regulation 2.02 section 2 may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.

2) Insignificant activities identified in District Regulation 2.02 section 2 shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.

3) The District has determined pursuant to Regulation 2.16 section 4.1.9.4 that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed.

4) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.

5) The owner or operator shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16 section 4.3.5.3.6.

6) This equipment has an applicable regulation, but meets the definition of an insignificant activity in Regulation 2.16, section 1.23.1.2. Regulation 6.18 applies, with standards in sections 4.1.1 through 4.1.4, 4.1.6, 4.1.8; 4.2.1 through 4.2.7 and 4.3.2. Record keeping requirements are in sections 4.4.2 and 4.4.3.

7) This equipment has an applicable regulation, but meets the definition of an insignificant activity in Regulation 2.16, section 1.23.1.2. Regulation 7.08 applies, with a standard of 2.34 lb/hr, but the equipment cannot exceed the standard uncontrolled so there are no monitoring or record keeping requirements. The emissions shall be reported on the annual emission inventory.