# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

June 9, 2016

PERMIT TO INSTALL 38-16

**ISSUED TO**Grandville Printing Company

4719 Ivanrest Avenue Southwest Grandville, Michigan

> IN THE COUNTY OF Kent

## STATE REGISTRATION NUMBER N1908

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:  May 19, 2016			
DATE PERMIT TO INSTALL APPROVED:  June 9, 2016	SIGNATURE:		
DATE PERMIT VOIDED:	SIGNATURE:		
DATE PERMIT REVOKED:	SIGNATURE:		

## **PERMIT TO INSTALL**

## **Table of Contents**

Section	Page
Alphabetical Listing of Common Abbreviations / Acronyms	2
General Conditions	3
Special Conditions	5
Emission Unit Summary Table	5
Flexible Group Summary Table	7
Special Conditions for FG-Heatset	8
Flexible Group Summary Table	13
Special Conditions for FG-Facility	14

## **Common Abbreviations / Acronyms**

	Common Acronyms		Pollutant / Measurement Abbreviations			
AQD	Air Quality Division	acfm	Actual cubic feet per minute			
BACT	Best Available Control Technology	BTU	British Thermal Unit			
CAA	Clean Air Act	°C	Degrees Celsius			
CAM	Compliance Assurance Monitoring	СО	Carbon Monoxide			
CEM	Continuous Emission Monitoring	CO <sub>2</sub> e	Carbon Dioxide Equivalent			
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot			
СОМ	Continuous Opacity Monitoring	dscm	Dry standard cubic meter			
Department/	Michigan Department of Environmental	°F	Degrees Fahrenheit			
department	Quality	gr	Grains			
EU	Emission Unit	HAP	Hazardous Air Pollutant			
FG	Flexible Group	Hg	Mercury			
GACS	Gallons of Applied Coating Solids	hr	Hour			
GC	General Condition	HP	Horsepower			
GHGs	Greenhouse Gases	H <sub>2</sub> S	Hydrogen Sulfide			
HVLP	High Volume Low Pressure*	kW	Kilowatt			
ID	Identification	lb	Pound			
IRSL	Initial Risk Screening Level	m	Meter			
ITSL	Initial Threshold Screening Level	mg	Milligram			
LAER	Lowest Achievable Emission Rate	mm	Millimeter			
MACT	Maximum Achievable Control Technology	MM	Million			
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts			
MAP	Malfunction Abatement Plan	NMOC	Non-methane Organic Compounds			
MDEQ	Michigan Department of Environmental	NO <sub>x</sub>	Oxides of Nitrogen			
MODO	Quality  Material Cafety Pate Chapt	ng	Nanogram National Nat			
MSDS NA	Material Safety Data Sheet Not Applicable	PM	Particulate Matter			
NAAQS	National Ambient Air Quality Standards	PM10	Particulate Matter equal to or less than 10 microns in diameter			
NESHAP	National Emission Standard for Hazardous		Particulate Matter equal to or less than 2.5			
	Air Pollutants	PM2.5	microns in diameter			
NSPS	New Source Performance Standards	pph	Pounds per hour			
NSR	New Source Review	ppm	Parts per million			
PS	Performance Specification	ppmv	Parts per million by volume			
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight			
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute			
PTI	Permit to Install	psig	Pounds per square inch gauge			
RACT	Reasonable Available Control Technology	scf	Standard cubic feet			
ROP	Renewable Operating Permit	sec	Seconds			
SC	Special Condition	SO <sub>2</sub>	Sulfur Dioxide			
SCR	Selective Catalytic Reduction	TAC	Toxic Air Contaminant			
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature			
SRN	State Registration Number	THC	Total Hydrocarbons			
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year			
USEPA/EPA	United States Environmental Protection Agency	μg	Microgram			
VE	Visible Emissions	μm VOC	Micrometer or Micron			
V L	VISIDIC LITIISSIUTS	yr	Volatile Organic Compounds Year			
*For HVI P applicators, the pressure measured at the gun air can shall not exceed 10 psig						

<sup>\*</sup>For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

#### **GENERAL CONDITIONS**

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301)
  - A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
- 12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. (R 336.2001)

## **SPECIAL CONDITIONS**

## **EMISSION UNIT SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-613	Heatset Webfed Offset Lithographic Printing Press No. 1: The VOC emissions from inks / coatings, fountain solutions, and blanket / roller washes (material) will be exhausted to the atmosphere via one of the two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-01 or SV-RTO-02). Manual/uncontrolled wash practice. Make: Goss, Model: C500, Web-width: 40 inches	04-01-1990	FG-Heatset, Facility
EU-614	Heatset Webfed Offset Lithographic Printing Press No. 2: The VOC emissions from inks / coatings, fountain solutions, and blanket / roller washes (material) will be exhausted to the atmosphere via one of the two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-01 or SV-RTO-02). Manual/uncontrolled wash practice. Make: Goss, Model: C500, Web-width: 40 inches	08-01-1990	FG-Heatset, Facility
EU-451	Heatset Webfed Offset Lithographic Printing Press No. 3: The VOC emissions from inks / coatings, fountain solutions, and blanket / roller washes (material) will be exhausted to the atmosphere via one of the two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-01 or SV-RTO-02). Manual/uncontrolled wash practice. Make: Goss, Model: C450, Web-width: 46 inches	06-01-1993	FG-Heatset, Facility
EU-452	Heatset Webfed Offset Lithographic Printing Press No. 4: The VOC emissions from inks / coatings, fountain solutions, and blanket / roller washes (material) will be exhausted to the atmosphere via one of the two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-01 or SV-RTO-02). Manual/uncontrolled wash practice. Make: Goss, Model: C450, Web-width: 46 inches	06-01-1993	FG-Heatset, Facility
EU-453	Heatset Webfed Offset Lithographic Printing Press No. 5: The VOC emissions from inks / coatings, fountain solutions, and blanket / roller washes (material) will be exhausted to the atmosphere via one of the two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-01 or SV-RTO-02). Manual/uncontrolled wash practice. Make: Goss, Model: C450, Web-width: 46 inches	04-01-1995	FG-Heatset, Facility
EU-454	Heatset Webfed Offset Lithographic Printing Press No. 6: The VOC emissions from inks / coatings, fountain solutions, and blanket / roller washes (material) will be exhausted to the atmosphere via one of the two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-01 or SV-RTO-02). Manual/uncontrolled wash practice. Make: Goss, Model: C450, Web-width: 46 inches	10-01-1996	FG-Heatset, Facility

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-455	Heatset Webfed Offset Lithographic Printing Press No. 7: The VOC emissions from inks / coatings, fountain solutions, and blanket / roller washes (material) will be exhausted to the atmosphere via one of the two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-01 or SV-RTO-02). Manual/uncontrolled wash practice. Make: Goss, Model: C450, Web-width: 46 inches	03-01-1997	FG-Heatset, Facility
EU-456	Heatset Webfed Offset Lithographic Printing Press No. 8: The VOC emissions from inks / coatings, fountain solutions, and blanket / roller washes (material) will be exhausted to the atmosphere via one of the two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-01 or SV-RTO-02). Manual/uncontrolled wash practice. Make: Goss, Model: C450, Web-width: 46 inches	09-01-1998	FG-Heatset, Facility
EU-457	Heatset Webfed Offset Lithographic Printing Press No. 9: The VOC emissions from inks / coatings, fountain solutions, and blanket / roller washes (material) will be exhausted to the atmosphere via one of the two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-01 or SV-RTO-02). Manual/uncontrolled wash practice. Make: Goss, Model: C450, Web-width: 46 inches	03-01-2009	FG-Heatset, Facility
EU-458	Heatset Webfed Offset Lithographic Printing Press No. 10: The VOC emissions from inks / coatings, fountain solutions, and blanket / roller washes (material) will be exhausted to the atmosphere via one of the two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-01 or SV-RTO-02). Manual/uncontrolled wash practice. Make: Goss, Model: C450, Web-width: 46 inches	05-01-2009	FG-Heatset, Facility
EU-459	Heatset Webfed Offset Lithographic Printing Press No. 11: The VOC emissions from inks / coatings, fountain solutions, and blanket / roller washes (material) will be exhausted to the atmosphere via one of the two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-01 or SV-RTO-02). Manual/uncontrolled wash practice. Make: Goss, Model: C450, Web-width: 46 inches	01-01-2010	FG-Heatset, Facility
EU-460	Heatset Webfed Offset Lithographic Printing Press No. 12: The VOC emissions from inks / coatings, fountain solutions, and blanket / roller washes (material) will be exhausted to the atmosphere via one of the two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-01 or SV-RTO-02). Manual/uncontrolled wash practice. Make: Goss, Model: C450, Web-width: 46 inches	11-01-2010	FG-Heatset, Facility
EU-461	Heatset Webfed Offset Lithographic Printing Press No. 13: The VOC emissions from inks / coatings, fountain solutions, and blanket / roller washes (material) will be exhausted to the atmosphere via one of the two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-01 or SV-RTO-02). Manual/uncontrolled wash practice. Make: Goss, Model: C450, Web-width: 46 inches	02-01-2014	FG-Heatset, Facility

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.

## **FLEXIBLE GROUP SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-Heatset	Thirteen (13) Heatset Webfed Offset Lithographic Printing Presses:	EU-613,
	The VOC emissions from inks / coatings, fountain solutions, and	EU-614,
	blanket / roller washes (material) will be exhausted to the atmosphere	EU-451,
	via one of two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-	EU-452,
	01 or SV-RTO-02). Each press with manual/uncontrolled wash	EU-453,
	practice.	EU-454,
		EU-455,
		EU-456,
		EU-457,
		EU-458,
		EU-459,
		EU-460,
		EU-461
FG-Facility	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	NA

## The following conditions apply to: FG-Heatset

<u>DESCRIPTION</u>: Thirteen (13) Heatset Webfed Offset Lithographic Printing Presses: The VOC emissions from inks, fountain solutions, and blanket/press wash (material) will be exhausted to the atmosphere via one of the two Regenerative Thermal Oxidizer (RTO) stacks (SV-RTO-01 or SV-RTO-02). Each press has manual wash/uncontrolled practice.

**Emission Unit ID:** EU-613, EU-614, EU-451, EU-452, EU-453, EU-454, EU-455, EU-456, EU-457, EU-458, EU-459, EU-460, EU-461

<u>POLLUTION CONTROL EQUIPMENT</u>: One primary Regenerative Thermal Oxidizer (RTO No. 1) and one back-up Regenerative Thermal Oxidizer (RTO No. 2)

#### I. EMISSION LIMITS

	Pollutant	Limit	Time Period / Operating Scenario	Equipment		Underlying Applicable Requirements
1.	VOC	50.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-Heatset	SC VI.3	R 336.1205, R 336.1225, R 336.1702(a)
2.	Kerosene, Hydrodesulfurized (CAS No. 64742-81-0)	20.8 tpy	12-month rolling time period as determined at the end of each calendar month	FG-Heatset	SC VI.4	R 336.1225(1)

## II. MATERIAL LIMITS

1. All printing press-related blanket and roller washes (cleaning solvents) shall have VOC composite partial vapor pressures that do not exceed 10 mmHg @ 20°C (68°F) or contain less than 70 percent VOC by weight. (R 336.1702(a))

#### III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall capture all waste inks/coatings, fountain solutions, and cleaning solvents, *etc.* (materials) and store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a))
- The permittee shall handle all ink and wash VOC and HAP containing materials, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. (R 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))
- 3. The permittee shall not operate any press portions of FG-Heatset unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted within 60 days of issuance of this permit, and is implemented and maintained for RTO No. 1 and RTO No. 2. The MAP shall, at a minimum, specify the following:
  - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
  - d) A description of the procedures to capture, handle, and disposes of all materials to minimize the generation of fugitive emissions per SC numbers III.2 and III.3.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. (R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)

#### IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall not operate FG-Heatset unless each dryer is installed, maintained and operated in a satisfactory manner. Satisfactory operation requires that each dryer is operating at a pressure lower than all adjacent areas so that air flows into the dryer through natural draft openings at all times. This shall be achieved by using the existing built-in interlock system that will automatically shut off the appropriate press if the dryer is not operating under negative pressure. (R 336.1225, R 336.1702(a), R 336.1910)
- 2. The permittee shall not operate more than 8 presses simultaneously while using the back-up RTO. (R 336.1225)

- 3. The permittee shall not operate any press of FG-Heatset unless one of the Regenerative Thermal Oxidizers (RTO) is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the RTO includes a minimum VOC destruction efficiency of 95 percent (by weight), maintaining a minimum combustion temperature of 1525°F, and a minimum retention time of 0.5 seconds. (R 336.1205(1)(a)(ii), R 336.1225, R 336.1702(a), R 336.1910)
- 4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device in the combustion chamber of each RTO to monitor and record the temperature on a continuous basis, when any press in FG-Heatset is in operation. (R 336.1205(1)(a)(ii), R 336.1225, R 336.1702(a), R 336.1910)
- 5. The permittee shall implement the following listed pollution prevention exercise for FG-Heatset:
  - a) Collected solvents and solvent saturated towels or wipes shall be managed in a manner that minimizes emissions and will be disposed in accordance with applicable regulations.

The permittee shall keep the records using format acceptable to the AQD District Supervisor and keep all records on file and make them available to the Department upon request. (R 336.1225, R 336.1702(a))

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall determine the VOC content of any ink and coating, as received and as applied, using federal Reference Test Method 24 or 24A pursuant to Rule 1040(5). Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 or 24A and the formulation values should differ, the permittee shall use the Method 24 or 24A results to determine compliance. (R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))
- 2. The permittee shall annually test and certify the built-in interlock system for each dryer in FG-Heatset to show compliance with SC IV.1. (R 336.1225, R 336.1702(a), R 336.1910)
- 3. Within 180 days from issuance of this permit, the permittee shall verify the destruction efficiency of RTO No. 1 and RTO No. 2, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of destruction efficiency includes the submittal of a complete report of the test results to the AQD within 30 days following the last date of the test. (R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1225, R 336.1702(a))
- 2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702)

- 3. The permittee shall keep the following information on a calendar month basis for the FG-Heatset:
  - a) The Emission Unit (EU) ID of each press running, total number of EUs operating simultaneously, and the RTO ID in use (RTO No. 1 or RTO No. 2)
  - b) The type of each VOC containing material used and reclaimed in pounds or gallons (inks, coatings, fountain solutions, blanket wash / roller wash (cleaning solvents), *etc.*).
  - c) The VOC content of each material, with water (in percent by weight or pounds per gallon), as applied.
  - d) VOC mass emission calculations determining the monthly emission rate in tons per calendar month. (Retention factors from Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, EPA-453/R-06-002, September 2006 may be used or an alternate factor approved by the AQD District Supervisor)
  - e) VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month. (Retention factors from Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing, EPA-453/R-06-002, September 2006 may be used or an alternate factor approved by the AQD District Supervisor)
  - f) Appropriate records to show compliance with SC IV.5.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a)(ii), R 336.1225, R 336.1702(a))

- 4. The permittee shall keep the following information on a calendar month basis for FG-Heatset:
  - Gallons (with water) of each kerosene / hydrodesulfurized (CAS No. 6474-28-10) containing material used.
  - b) Where applicable, gallons (with water) of each kerosene / hydrodesulfurized (CAS No. 6474-28-10) containing material reclaimed.
  - c) The kerosene / hydrodesulfurized (CAS No. 6474-28-10) content (with water) in pounds per gallon of each material used.
  - d) Kerosene / hydrodesulfurized (CAS No. 6474-28-10) mass emission calculations determining the monthly emission rate in tons per calendar month.
  - e) Kerosene / hydrodesulfurized (CAS No. 6474-28-10) mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.<sup>1</sup> (R 336.1225(1))

- For each press dryer, the permittee shall keep annual testing and certification records to show compliance with SC V.2 via a method approved by the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1702(a))
- 6. The permittee shall monitor and record, in a satisfactory manner, the temperature in the combustion chamber of the RTO (in use) on a continuous basis, during operation of each press of FG-Heatset. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a)(ii), R 336.1225, R 336.1702)

## VII. <u>REPORTING</u>

## VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

	Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SV-RTO-01 (RTO No. 1)	32 x 56 (rectangle)	52	R 336.1225, 40 CFR 52.21(c) & (d)
2.	SV-RTO-02 (RTO No. 2)	44	50	R 336.1225, 40 CFR 52.21(c) & (d)

## IX. OTHER REQUIREMENTS

1. Within 30 days of issuance of this permit, the permittee shall label each emission unit and associated control equipment according to a method acceptable to the AQD District Supervisor. Within seven days of completing the labeling, the permittee shall notify the AQD District Supervisor, in writing, as to the date the labeling was completed. (R 336.1201)

#### Footnotes:

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

## FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-Facility	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	NA

## The following conditions apply Source-Wide to: FG-Facility

**<u>DESCRIPTION</u>**: All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

**Emission Unit ID: NA** 

**POLLUTION CONTROL EQUIPMENT:** A RTO for FG-Heatset

#### I. EMISSION LIMITS

	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1.	Each Individual HAP	Less than 9.0 tpy *	12-month rolling time period as determined at the end of each calendar month	FG-Facility	SC VI.2	R 336.1205(3)
2.	Aggregate HAPs	Less than 22.5 tpy *	12-month rolling time period as determined at the end of each calendar month	FG-Facility	SC VI.2	R 336.1205(3)
3.	VOC	Less than 90.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-Facility	SC VI.3	R 336.1205(3)

<sup>\*</sup> Beginning on issuance date of this permit, and continuing for the first 12 calendar months, this limit applies to the cumulative total HAP emissions. Thereafter, the limit shall become a 12-month rolling limit.

#### II. MATERIAL LIMITS

NA

## III. PROCESS/OPERATIONAL RESTRICTIONS

NA

#### IV. DESIGN/EQUIPMENT PARAMETERS

NA

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall determine the HAP content of any material as applied, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311. (R 336.1205(3))

2. The permittee shall determine the VOC content of any ink and coating, as received and as applied, using federal Reference Test Method 24 or 24A pursuant to Rule 1040(5). Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 or 24A and the formulation values should differ, the permittee shall use the Method 24 or 24A results to determine compliance. (R 336.1205(3))

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(3))
- 2. The permittee shall keep the following information on a calendar month basis for FG-Facility:
  - a) Gallons or pounds of each HAP containing material used.
  - b) Where applicable, gallons or pounds of each HAP containing material reclaimed.
  - c) HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.
  - d) Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
  - e) Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month. For the first month following permit issuance, the calculations shall include the summation of emissions from the 11-month period immediately preceding the issuance date. For each month thereafter, calculations shall include the summation of emissions for the appropriate number of months prior to permit issuance plus the months following permit issuance for a total of 12 consecutive months.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(3))

- 3. The permittee shall keep the following information on a calendar month basis for FG-Facility:
  - a) Gallons or pounds of each VOC containing material used.
  - b) Where applicable, gallons or pounds of each VOC containing material reclaimed.
  - c) VOC content, in pounds per gallon or pounds per pound, of each VOC containing material used.
  - d) VOC emission calculations determining the monthly emission rate in tons per calendar month.
  - e) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(3))

#### VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

#### IX. OTHER REQUIREMENTS

NA